

ASIAN DEVELOPMENT

# Outlook 2007

**Growth amid change**

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# Foreword

The *Asian Development Outlook 2007 (ADO 2007)* is the 19th edition of the annual comprehensive economic report on the developing member countries of the Asian Development Bank.

*ADO 2007* provides an assessment of recent economic performance for 43 developing member countries, and projections for major macroeconomic indicators for 2007 and 2008. It also provides a diagnosis of macroeconomic challenges and future growth prospects for the region's economies.

The performance of developing Asia in 2006 was exceptional. Aggregate gross domestic product for the region grew at 8.3%, the fastest since 1995. Growth was aided by a highly favorable external environment, benign domestic circumstances, good economic management, and the fruits of reform efforts. Remarkable growth in the People's Republic of China and India underpinned this regional expansion, with a large number of other countries enjoying vigorous growth.

Even with exceptionally fast growth and rising oil prices, consumer price inflation did not, in general, accelerate in 2006. But this aggregate pattern disguises wide variation at the country and regional level. In some countries, evidence of overheating gathered as the year progressed. Authorities answered by raising interest rates, mopping up excess liquidity, and restraining credit growth and public spending.

The outlook for the international economy remains broadly favorable, although growth will slow in 2007. Despite production cuts by the Organization of the Petroleum Exporting Countries, crude oil prices are well off their highs of 2006 and are expected to continue stabilizing around \$57 a barrel in 2007. Some metals prices, such as copper, have also come down. Lower commodity prices will generally ease inflationary pressures and bring terms-of-trade gains, as developing Asia is a net importer.

Against this backdrop, still-robust growth of 7.6% and 7.7% for developing Asia is expected in 2007 and 2008. These projections imply that growth will move to a more sustainable footing and that overheating pressures that surfaced in 2006 will gradually ease. Growth in all subregions, except the Pacific, is seen softening in 2007. In the People's Republic of China in 2007 and 2008, softer external demand and policy curbs are expected to pull growth down gradually. In the short run, the Government is likely to restrict investment growth and cool the economy. In India, steps taken by the central bank to cool inflation are expected to slow the pace of investment and consumption spending. In other countries, such as Indonesia, growth is seen picking up in 2007 as lower interest rates and lower inflation give a boost to domestic spending. Falling prices of commodities in international markets, as well as vigilance from monetary authorities across the region, will help ease inflation in 2007. Developing Asia's current account is expected to be in surplus for 2007 and 2008.

As always, events could evolve in surprising and unexpected ways, and derail projections. Risks remain tilted down. Markets have moved to reprice risks, but calm could yet give way to less settled conditions. If asset prices get badly punctured and reversals occur, the chill would be widely felt. Although average oil prices are expected to be lower this year than last and to come down some more in 2008, they remain sensitive to supply conditions, surges in demand, and geopolitical events. In trade negotiations, time is running out for an agreement in the Doha Round, and in the developing vacuum, preferential trade agreements are gathering momentum, and calls for protection are becoming more audible. A human flu pandemic remains a threat. In many countries, elections are scheduled in the next year. Their conduct and outcomes will be important for confidence.

Over the next few decades, developing Asia's prospects will depend critically on its ability to adapt to a constantly changing environment. The theme for *ADO 2007*, growth amid change, looks at the evolutions that have been associated with successful growth experiences. Increasing technological sophistication and structural complexity are important dimensions of change. Industry and manufacturing have played a pivotal role, and in most countries, services have been an important provider of jobs. A key message is that "walking on two legs"—fostering both industry and services—is the only viable development model for many economies.

While prescriptions and priorities need to be country specific, the following elements are crucial: high investment rates that over time build, expand, and upgrade the range of economic activities; funds for infrastructure services that are vital for economies of scale and other benefits; relevant and purposeful education; markets that support labor mobility and flexibility, alongside affordable social protection; arrangements that lower risks and uncertainty for businesses, and that allow new firms to enter and old firms to exit; and removal of at- and behind-the-border impediments to integration.



HARUHIKO KURODA  
President



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## Definitions

The economies discussed in *Asian Development Outlook 2007* (ADO 2007) are classified by major analytic or geographic groupings. For purposes of ADO 2007, the following apply:

- **Association of Southeast Asian Nations (ASEAN)** comprises Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam.
- **Developing Asia** refers to 43 developing member countries of the Asian Development Bank discussed in ADO 2007.
- **Central Asia** comprises Armenia, Azerbaijan, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
- **East Asia** comprises People's Republic of China; Hong Kong, China; Republic of Korea; Mongolia; and Taipei, China.
- **South Asia** comprises Islamic Republic of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
- **Southeast Asia** comprises Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam.
- **The Pacific** comprises Cook Islands, Fiji Islands, Kiribati, Republic of the Marshall Islands, Federated States of Micronesia, Nauru, Papua New Guinea, Republic of Palau, Samoa, Solomon Islands, Democratic Republic of Timor-Leste, Tonga, Tuvalu, and Vanuatu.
- Unless otherwise specified, the symbol "\$" and the word "dollar" refer to US dollars.

The *Statistical Notes* give a detailed explanation of how data are derived.

ADO 2007 is based on data available up to 15 March 2007.

## Acronyms and abbreviations

ASEAN	Association of Southeast Asian Nations
CPI	consumer price index
EU	European Union
FDI	foreign direct investment
FY	fiscal year
GDP	gross domestic product
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
PRC	People's Republic of China
US	United States
VAT	value-added tax
WTO	World Trade Organization

# Highlights—ADO 2007

Developing Asia's performance in 2006 was exceptional. Strong growth of 7.6% looks set for 2007, and inflationary pressures should ebb. Managing macroeconomic stresses, moving ahead with micro reforms, and rebalancing economic growth are important challenges. Asia also needs to do better at creating jobs.

## Synopsis

- Developing Asia's expansion gathered speed in 2006. Regional GDP grew at 8.3%, faster than any year since 1995. Growth was aided by a highly favorable external environment, benign domestic circumstances, good economic management, and the fruits of reform efforts.
- But evidence of imbalances and overheating continued to gather: surging property and equity markets, fast credit expansion, and rising goods prices, particularly of foodstuffs. Authorities answered by raising interest rates, mopping up excess liquidity, and restraining credit growth and public spending. But structural responses have been slower. Widening current account surpluses as well as capital inflows contributed to a further buildup of international reserves. In trade-weighted terms, and adjusted for inflation, many regional currencies appreciated in 2006, though some remained broadly unchanged. Inequality, job creation, and environmental pressures are growing concerns.
- Although the pace of expansion is expected to ease in 2007 and 2008, growth is still set to remain brisk. Net exports' contribution to growth will soften, but strengthening domestic demand will fill part of the gap. Another year of strong performance should see GDP growth of 7.6% in 2007, with little change in tempo in 2008. In response to tightening measures and lower oil prices, inflationary pressures should start to recede. Current account surpluses will begin to narrow as a share of GDP, but slowly.

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Growth in 2006 is the fastest since 1995

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Stresses and imbalances become more visible

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Brisk expansion is expected in 2007 and 2008

## Performance in 2006

- Prodigious growth in the People's Republic of China (PRC) and India underpinned aggregate regional expansion in 2006. The share of both in regional output continued to increase.
- In the PRC, rapid expansion of exports and strong fixed asset investment spurred growth to 10.7% in 2006. To cool the economy, the authorities raised interest rates, increased bank reserve requirements, mopped up excess liquidity in the financial sector, and applied a raft of administrative controls intended to curtail or delay new projects. Fixed asset investment slowed in the second half, but export growth continued unabated, and the current account surplus swelled to 8.6% of GDP. Reserves in the PRC broke through the \$1 trillion mark. Inflation rose toward the end of the year, largely as a result of rising grains prices. Elsewhere, favorable commodity prices helped lift growth in Mongolia. Korea expanded by a robust 5%. East Asia's growth accelerated to 8.7% in 2006.
- In India, vibrant industrial growth as well as buoyant services helped growth accelerate to an estimated 9.2%. Manufacturing exports expanded at a fast clip. Employment in manufacturing also picked up. But steadily rising wholesale price inflation, booming property prices, and ballooning credit growth has prompted the Reserve Bank of India to crank up policy rates and to impose restraints on lending to the property sector. Sluggish agricultural productivity growth remains a concern as the majority of India's population still depends on agriculture for their livelihoods. Sharp rises in food prices have underlined the need for structural reforms.
- Trend growth in Bangladesh and Pakistan again accelerated in 2006, but the countries' performance on inflation was less impressive. In Bangladesh, annual inflation picked up in response to fast credit growth, pass-through to consumers and producers of oil-price rises, and higher commodity prices. In Pakistan, inflation came down from its earlier peak in 2005, but remained well above target. In the Maldives, growth in 2006 bounced back as it recovered from the devastation of the tragic tsunami. Despite hostilities, fueled by expansionary spending policies, growth accelerated in Sri Lanka. Political developments continued to dominate in Nepal, and growth remained anemic. A drought dragged down growth in Afghanistan, while Bhutan benefited from increased hydropower exports to India. For South Asia as a whole, growth of 8.7% was the fastest since 1988.
- Azerbaijan and Kazakhstan's performance benefited from high oil prices. Although oil prices drifted down in the fourth quarter, average prices in 2006 were still 20% higher than in 2005. A housing boom and heavy investments in mineral development sustained Armenia's rapid growth. In the Kyrgyz Republic, growth was slow, due to weak gold production and lingering political difficulties. Strong remittances, as well as healthy aluminum output and exports, sustained growth in Tajikistan. Uzbekistan kept up its solid growth record, helped by continued farm privatization. Central Asia's GDP grew at 12.4%.
- Southeast Asia's performance was patchy. Growth in Indonesia was lame due to weak consumption and fixed investment spending. But as monthly inflation rates eased, Bank Indonesia lowered policy rates. In the Philippines, growth edged up on a strong recovery in agriculture, but investment

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The PRC and India's weight in regional output is getting larger

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The PRC grows at a blistering 10.7%

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India consolidates fast growth

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Trend growth in Bangladesh and Pakistan accelerates

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Central Asia booms on oil price gains

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Southeast Asia shows checkered growth

stayed weak. Net exports lifted Thailand's growth, but domestic demand was crimped by earlier increases in interest rates and by gathering political uncertainty. In Malaysia, strong growth of domestic consumption helped lift growth; public investment spending accelerated. Viet Nam's impressive run of rapid growth continued: strong domestic demand growth was supported by gains in oil prices and by vibrant exports. Cambodia and the Lao People's Democratic Republic both showed healthy expansion. Aggregate growth in Southeast Asia was 6.0% in 2006.

- The Pacific islands grew at 3.1%. The two largest economies, Papua New Guinea and Fiji Islands, both enjoyed faster expansion, lifting the average. In Timor-Leste, civil disorder and security problems stymied growth of the non-oil economy. Elsewhere, performance was uneven. Overall in the Pacific, outcomes remain largely unimpressive and are constrained as much by economic mismanagement and ineffective institutions as by the disadvantages of small size and remoteness.

Growth lags in Pacific islands

## International outlook

- Prospects for the international economy remain broadly favorable. Despite production cuts by the Organization of the Petroleum Exporting Countries, crude oil prices are well off their highs of August 2006. Some metals prices, such as copper, have also come down. Lower commodity prices will generally ease inflationary pressures and bring terms-of-trade gains, as developing Asia is a net importer.
- Growth in the major industrial economies is set to slow, but growth in the euro zone and Japan is close to potential. Inflationary pressures seem to be slowly dissipating in the United States (US). Corrections in the housing market there have been sharp, but not disorderly. There is now less dissonance about the outlook, and the chances of a recession are receding (though not completely), and so far markets have absorbed risks. As investment spending pulls back, US growth is expected to slow in 2007. In Europe, the outcome in 2006 was the best in 6 years and momentum has picked up. Germany leads the way, but business and consumer confidence is more broadly strong. Growth may moderate a little in 2007. In Japan, domestic demand has come back to life after temporarily sagging in the middle of 2006. Employment growth and positive business sentiment should help support demand, and growth should nearly match 2006's performance. Although the Bank of Japan raised interest rates in February, tightening is expected to be gradual.
- With easing of industrial output growth, global trade volumes will expand less quickly than last year, but at a still-robust pace. However, there are indications that the global electronics cycle could slip a gear, and if capital spending slows more quickly than anticipated in the US, the downdraft would be felt by Asian producers.

Commodity prices are set to soften

Growth is seen moderating in G3

Growth of trade volumes will stay robust

## Prospects for developing Asia

- As output growth gently slows in industrial countries, there will be modest knock-on effects in developing Asia. Lower oil prices should help soothe inflationary pressures, as might any appreciation of regional currencies. Domestic tightening measures already taken in 2006 and followed up in 2007 will help guide down both output growth and inflation. For developing Asia, robust growth of 7.6% is projected in 2007 with inflation easing to 3.0%. With expenditure switching to domestic demand, the region's current account surplus is seen narrowing. Growth is expected to nudge up to 7.7% in 2008.
- In the PRC, efforts to restrain galloping fixed asset demands are expected to gain more traction in 2007. Recent monthly data are yet to show clear trends for industrial production and fixed asset investment. It may prove difficult for the central Government to make lasting inroads into investment spending, as this will depend on it changing the strong incentives for expansion at provincial and local levels. Concerns linger about excess liquidity in financial markets; reserve-ratio requirements for commercial banks, as well as interest rates, were raised early in 2007. Further reserves accumulation in 2007 is expected, and this will continue to exert pressures on domestic liquidity. Aggregate growth of 10.0% is forecast for 2007. Pressures for spending will ease, allowing growth to moderate to 9.8% in 2008.
- In India, the key wholesale price index of inflation hovered just below 6.5% in early 2007, well above the central bank's comfort level. The Reserve Bank of India has, in fact, lifted policy rates on four occasions since April 2006, has increased reserve-ratio requirements on commercial banks, and has imposed limits on bank lending to the property sector. Growth is expected to trim to about 8% (and inflationary pressures abate) in 2007, but accelerate a little in 2008, provided that restraints do not inadvertently choke off industrial expansion. The pace of reform momentum in India is weakening as elections approach.
- Although growth in most other countries will come off the pace set in 2006, the region's economic pulse remains strong. In some countries though, growth should accelerate. With inflationary pressures receding, and with the prospect of further interest rate reductions, growth in 2007 is expected to pick up in Indonesia, which is also showing hopeful signs of a recovery in consumption and investment spending. In the Kyrgyz Republic, growth should accelerate as the political situation settles and gold-mining operations expand. There is also some upside potential in other countries, such as Papua New Guinea, which is expected to benefit from favorable export prices and a recovery in mining.
- In a few countries, prospects are now much more uncertain. Even before the coup of December 2006, Fiji Islands faced many challenges and 2007 looked as if it would be a difficult year. But now the attrition of confidence and loss of new aid flows triggered by the coup may push the country into recession. In Thailand, consumer and business confidence is slipping and growth is expected to slow in 2007. The introduction of capital controls in December 2006 unsettled markets and fine-tuning is still going on. Clarity about future direction is yet to emerge. Bangladesh's caretaker Government will remain in power until elections are held. Early

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Developing Asia is picked to grow at 7.6% in 2007

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Gentle deceleration seen in the PRC

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India's growth, too, will ease in 2007

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Some countries, like Indonesia, are expected to accelerate

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Some countries face downside political risks—others upside risks



indications there suggest that conditions for business could improve as reform momentum is maintained and the anticorruption drive intensifies. Nepal is looking forward to elections, which, if they go well, could yield a peace dividend.

## Challenges

- Macroeconomic stabilization, structural rebalancing, and building markets and institutions to support future growth are the biggest challenges facing developing Asia. In some ways they are linked, but stabilization has to move fastest.
- Rising inflation (or pressures for credit expansion) and rapidly accumulating foreign exchange reserves suggest that adjustments would be helped both by an increase in interest rates and by an appreciation of domestic currencies. Smaller exchange rate adjustments would require larger interest rate rises to douse inflationary threats. But any capital inflows attracted by higher interest rates would add to forces for the expansion of domestic liquidity.
- In part, macro pressures reflect underlying structural impediments. Retarded agricultural development in India has contributed to rapidly rising food prices and distributional tensions over land use. Constraints on consumption spending in the PRC fan the investment boom and the ballooning external surplus.
- Closer regional integration and tighter links to the G3 are connected facets of globalization. They stress the need for strong macroeconomic policy coherence and sound prudential management, as well as for initiatives that support these aims at a global, regional, and domestic level. Evidence about the evolving nature of macroeconomic and trade relationships is examined in Part 1 (*Uncoupling Asia: Myth and reality* and *Trade and structural change in East and Southeast Asia: Implications for growth and industrialization*).
- Developing Asia can make better use of its huge international reserves, exceeding \$2 trillion at end-2006. By most measures, countries are holding reserves far in excess of those they need to cover short-term maturing foreign exchange liabilities, plus any demands that may come from internal sources. Even on conservative assumptions, redeployment of reserves could yield a substantial fiscal dividend. For example, if only 50% of developing Asia's reserves were invested in a globally diversified portfolio, attracting a yield of 500 basis points above the current return, this would generate a \$60 billion fiscal dividend, equivalent to about 0.9% of regional GDP. These additional resources could plug infrastructure gaps and increase the supply of essential public goods. Or they could be used to retire public debt, creating larger fiscal space in the years ahead.
- Some countries are already taking a more active posture. The Korean Investment Corporation (formed in 2005) has a mandate "to achieve sustainable returns on foreign currency assets." In March 2007, the PRC authorities announced their intention to more actively manage their foreign exchange reserves. But while the potential rewards are certainly

Stabilization is a key challenge

Exchange and interest rates need to adjust

Structural imbalances aggravate macro stabilization problems

Asia is integrating more deeply with itself and the world

Countries are looking for better ways to use their reserves

Korea is already moving in this direction

tempting, central banks and governments are rightfully wary of risks. If investments go bad, it could undermine confidence in government or the central bank (or both). Having an appropriately regulated “fund,” acting at arm’s length, to manage some portion of reserves may have advantages. But setting up such structures and attracting people with the right expertise to run them will take time.

- A more direct approach, recently proposed in India’s budget, is to use reserves to pay for foreign-currency costs of projects or to guarantee borrowing by special-purpose investment vehicles. The latter approach could exert pressure toward currency appreciation. Interest rates could also rise, as a consequence of sterilization operations. With no sterilization, investment guarantees that attract foreign debt inflows would imply domestic credit expansion.
- Exchange rate management issues remain to the fore. Although the yuan appreciated against the US dollar by 3.3% in 2006, its trade-weighted value barely budged. But other regional currencies, such as the baht and the peso, moved up in trade-weighted terms.
- Thailand’s controls on capital inflows introduced in December triggered a market rout. The initial rules were widely regarded as too stringent. In response, exemptions have been widened. As offshore investors do not bear the costs of any destabilizing effects of their behavior, a tax on inflows could be beneficial.
- But theory and practice can be different. First, identifying conditions that warrant a tax on capital inflows is not straightforward. Even if the Thai baht appreciated sharply in 2006 against the US dollar and reserves accumulated, it is uncertain that this threatened the economy or export businesses. In trade-weighted terms, the appreciation was unexceptional. Also, the appreciation did not deter healthy export performance, and the trade balance moved from deficit to surplus in 2006.
- Even if there is compelling evidence that the pressures directed toward speculative capital inflows need easing, there are questions of how to do this. Precisely because capital is fungible, designing regulations that are not porous is extremely difficult. If short-term capital flows threaten destabilization or longer-term structural damage, simpler approaches, perhaps based on flat withholding taxes on inflows with rebates for approved transactions, may have attractions.
- Fast economic growth can both breed complacency and slow reform efforts. But as the Asian crisis painfully illustrated, the failure of institutions and structural policies to keep pace can derail growth. It is much easier to adjust and make difficult changes in good weather.
- The challenge in the PRC is to diversify growth and spread its benefits more widely. But there are constraints. In some sense, the availability of resources has run ahead of the capacity to administer and deliver high-quality services. A crucial blockage is the banking and financial system, which is geared to lending for enterprise investment but not yet for

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Some approaches may put upward pressure on exchange rates

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Exchange rates are appreciating at different speeds

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Taxing capital inflows can make sense

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The devil is in the detail

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Simple taxes are best

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Fast growth can breed complacency

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In the PRC, bank-dominated finance is a bottleneck

household needs, including spending on durables, education, and health care. Easing constraints will require a variety of institutional and policy adjustments in the financial and fiscal arenas.

- Industrialization in India is gathering pace, having had several false starts in earlier decades. The country needs a vibrant industry sector to sustain growth and create jobs. Maintaining momentum will require attention to glaring infrastructure inadequacies, as well as to labor and other regulations that can deter investors.
- Investment appears to be struggling in some countries. The fixed investment ratio is falling in the Philippines and industry's share in output is declining. In Pakistan, fixed investment is a constraint in pushing growth to the next level and modernizing the economy. In Indonesia, the Asian crisis and a comparatively slow recovery appear to have badly dented investor confidence. In Malaysia and Thailand too, postcrisis investment rates have remained in the doldrums. Investment rates may have been too high before the crisis, but they are now too low (see Part 1, *Ten years after the crisis: The facts about investment and growth*).
- Investment shortfalls mask deeper challenges. Business investment climate surveys point to a wide array of problems that vary in nature and degree across countries. Some countries in developing Asia, such as Korea and Malaysia, do well by international standards, but many do not. Heavy and sometimes predatory regulation, corruption, onerous administrative requirements, and difficulties with contract enforcement can quickly turn profits to losses, and assets into liabilities. Central to all this is improving the policy, regulatory, and institutional environment in which businesses operate.
- Across developing Asia, complaints about poor infrastructure are heard time and again. Good infrastructure is needed to connect villages and towns to each other and to the global economy. In India, poor rural infrastructure is taking its toll on agricultural productivity growth. In the Philippines, stark infrastructure gaps have played a role in retarding industrialization and job creation. High levels of congestion, squalor, and grime in Asia's megacities are a result of years of sorely neglected infrastructure investment (and maintenance). By adding to costs, poor infrastructure services deter private investment.
- *Asian Development Outlook 2007* throws the spotlight on a variety of structural issues. Developing Asia's prospects over the next few decades will depend critically on its ability to adapt in a constantly changing environment.
- In *Growth amid change*, it is shown that those countries that have sustained fast growth have *both* successfully industrialized *and* expanded services. Successful industrialization is intimately linked to the kinds of products made and how they are made. Korea, Malaysia, and Singapore, for example, have all been successful at moving up the technological ladder. For some countries, market size and location restrict opportunities for industrialization. These countries will have to incubate approaches tailored to their own circumstances and potential. For some, outmigration and inward remittances may offer opportunities that would otherwise not be available.

India needs to sustain industrialization

Investment is struggling in some countries

Policy, regulatory, and institutional failures hinder investment

Infrastructure gaps hobble private investment

Prospects ultimately depend on capacity to change

What you make, and how you make it, matters

- “Walking on two legs”—fostering both industry and services—is the only viable development model for most countries. Services, as well as industry, offer significant potential for productivity gains. And a vibrant industry sector needs efficient services infrastructure. High-productivity tradable services can make an important contribution, but on their own they are unlikely to create sufficient jobs. Education constraints may also limit rapid expansion of high-productivity services.
- Approaches need to be country specific, but some orthodox elements are crucial: high investment rates that over time build, expand, and upgrade the range of economic activities; funds for infrastructure services vital for economies of scale and other benefits; relevant and purposeful education (discussed in *Education and structural change in four Asian countries*); markets that support labor mobility and flexibility, alongside affordable social protection; arrangements that lower risks and uncertainty for businesses, allowing them to create wealth; and integration that exposes countries to diversity as well as to new technological and institutional designs.
- Yet markets cannot accomplish everything on their own. New economic activities and the diversity that appears vital for growth may need a helping hand. But good design principles are key. Winners need to select themselves through performance, not be picked by governments.

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Services alone cannot sustain growth

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How to shift gear smoothly

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Design principles are key

## Risks

- As always, events could evolve in surprising and unexpected ways, and derail projections. Given underlying economic momentum, risks remain tilted down.
- Markets have moved to reprice risks in a calm manner so far this year. Yet this could still give way to less settled conditions—a turn of events triggered by policy mistakes, or geopolitical or other shocks. If asset prices are badly punctured, and markets decisively reverse, the chill will soon be felt.
- While any slowdown in global growth would adversely affect the volume of world trade, the failure of the Doha Round would make things worse. In this growing vacuum, preferential trade agreements would thrive further and already-audible protectionist calls would be amplified.
- The overall geopolitical and security situation remains a source of uncertainty. The price of strategic commodities, such as oil, could be hit by negative developments. In the event of a human flu pandemic, developing Asia would bear a disproportionately high cost.
- Recent developments have brought country risks to the fore. Security issues across Asia are unresolved. In some countries, important elections are scheduled, and their outcomes will be crucial for confidence.

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Risks remain tilted down

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Asset market reversals are a threat

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Protectionist calls are growing

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Geopolitical and security risks could harm prospects

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Country risks need to be watched

# Part 1



**Developing Asia and the world**







# Developing Asia and the world

## Developing Asia and the Pacific: Performance and prospects

### Performance in 2006

Developing Asia grew at its fastest pace in 11 years in 2006 (Figure 1.1.1). Steady global expansion of output and trade, moderate inflation with low real interest rates, as well as the impact of earlier reforms on productivity, were all conducive to growth. In many countries, circumstances proved unusually benign, and risks failed to materialize.

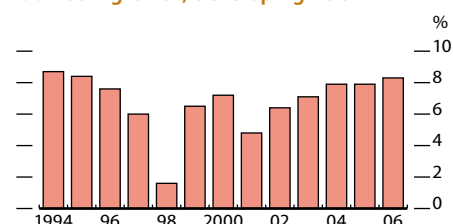
Asia's giants—the People's Republic of China (PRC) and India—alone accounted for just under 70% of the region's expansion. In 2005, the PRC accounted for 41% of regional output compared to just 35% in 2000. India's share in regional output increased by half a percentage point (Figure 1.1.2).

In both countries, fast growth coexists with stresses and imbalances. In the PRC, booming exports and fixed asset investment again propelled growth. The authorities—concerned about the pace and quality of fixed asset investment, fast credit growth in the banking sector, and rising asset prices—raised interest rates, increased reserve requirements for banks, and introduced a raft of administrative controls intended to discourage or defer new capital projects. As a consequence, the growth of fixed asset investment slowed in 2006, though it still advanced at double digits. Export growth showed no letup, and the current account surplus widened again. By December 2006, the PRC had amassed international reserves of close to \$1.1 trillion. To stem the leeching of reserves into domestic liquidity, the People's Bank of China sold additional sterilization bonds.

In India, agricultural productivity continued to languish, largely reflecting neglected infrastructure and poor rural extension services. Rising food prices contributed significantly to inflation. Tensions also surfaced as rapidly expanding industry and services activities encroached on agricultural land. Gaps continued to widen between the more prosperous coastal states and those in the interior of India—where population growth is fastest and the record on job creation weakest.

Many other countries also enjoyed vigorous growth. Azerbaijan and Kazakhstan again saw benefits from high oil prices. Favorable commodity prices helped expansion in Mongolia. Armenia's construction boom continued, and the services sector grew by 20% as rising wages and remittances bolstered private consumption. Cambodia saw double-

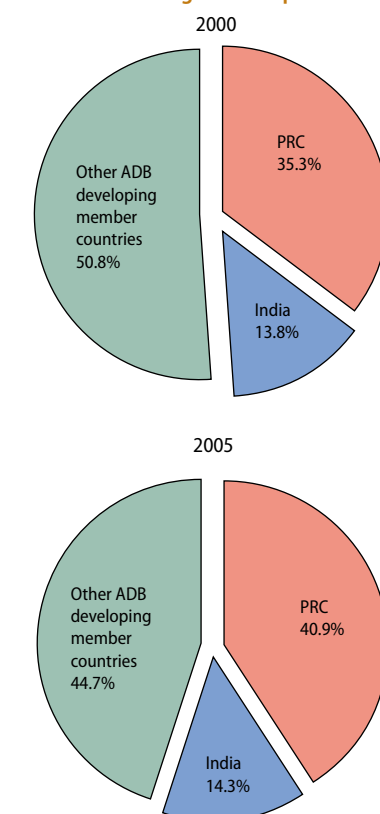
1.1.1 GDP growth, developing Asia



Source: Asian Development Outlook database.

[Click here for figure data](#)

1.1.2 Shares in regional output



Source: Asian Development Outlook database.

[Click here for figure data](#)

digit rates of expansion for the third straight year: textiles, tourism, and agriculture all performed well. Robust growth has become almost routine in Viet Nam, and 2006 was no different, with both exports and domestic demand making strong contributions. Growth in the Lao People's Democratic Republic (Lao PDR) accelerated, as large hydropower and mining projects progressed. The Maldives bounced back from the destruction of the tragic 2004 tsunami, growing at 18.2%. Although Pakistan could not repeat its record-breaking performance of 2005, growth in 2006 was above its recent pattern. Bangladesh, too, continued to see its trend up. Despite civil conflict, Sri Lanka grew at its quickest pace since 1979, buoyed by strong private sector activity and expansionary public spending. (Figure 1.1.3 gives a profile of growth in developing Asia.)

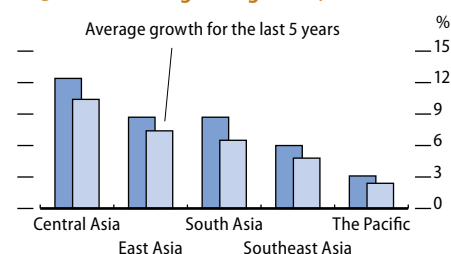
However, performance was patchy in the larger economies of Southeast Asia. High interest rates—aimed at bringing down the inflationary surge caused by the reduction of gasoline and diesel subsidies late in 2005—curtailed growth in Indonesia. Consumption and investment demand growth was insipid. In the Philippines, growth edged up from 2005, underpinned by a strong recovery in agriculture. But investment spending stayed weak. In Thailand, net exports lifted growth, but gathering political uncertainty dented domestic demand, and business and consumer confidence ebbed. Growth accelerated in Malaysia, largely primed by another year of robust consumption demand and greater public investment spending.

Growth in the Pacific countries followed a familiar sawtooth pattern, with growth accelerating in some countries but slowing in others. Growth accelerated in Fiji Islands and Papua New Guinea and, as these are the largest economies, lifted overall performance. The former benefited from a pickup in sugar production and in construction, and latter from favorable export prices.

Weak performance was seen in isolated cases. In Nepal, politics continued to dominate and growth was slow. Growth in the Kyrgyz Republic moved into positive territory, but recovery was hampered by weak gold production and by lingering political difficulties. Civil disorder in Timor-Leste caused its non-oil economy to shrink, but oil extraction activity (which is accounted for separately) was unaffected. Economic activity also contracted in the Federated States of Micronesia. Growth in the Cook Islands, Kiribati, and Tonga trailed in at less than 2%.

Despite exceptionally fast growth and rising oil prices, consumer price inflation did not, in general, accelerate in 2006. The outcome of 3.4% was less than the 4.0% projection made in *Asian Development Outlook 2006*. But this aggregate pattern disguises wide variations at the country and subregional level (Figure 1.1.4). In some countries, inflationary pressures rose as the year progressed. In India, wholesale price inflation accelerated, despite tightening measures by the Reserve Bank of India, which raised interest rates on four occasions in 2006, lifting the key policy rate from 6.25% to 7.25%. The central bank also imposed tighter reserve requirements on commercial banks and stricter conditions for lending to the property sector. In Bangladesh too, annual inflation accelerated. Fast credit growth, pass-through of earlier oil price rises, and rising prices of other commodities all contributed to inflation. Although inflation fell in Pakistan, it remained high and above the State Bank of Pakistan's target.

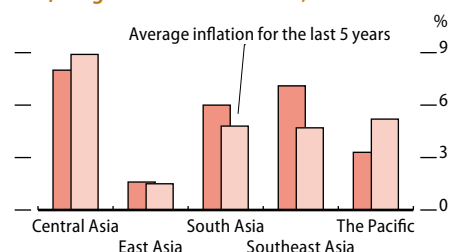
### 1.1.3 Profile of regional growth, 2006



Source: Asian Development Outlook database.

[Click here for figure data](#)

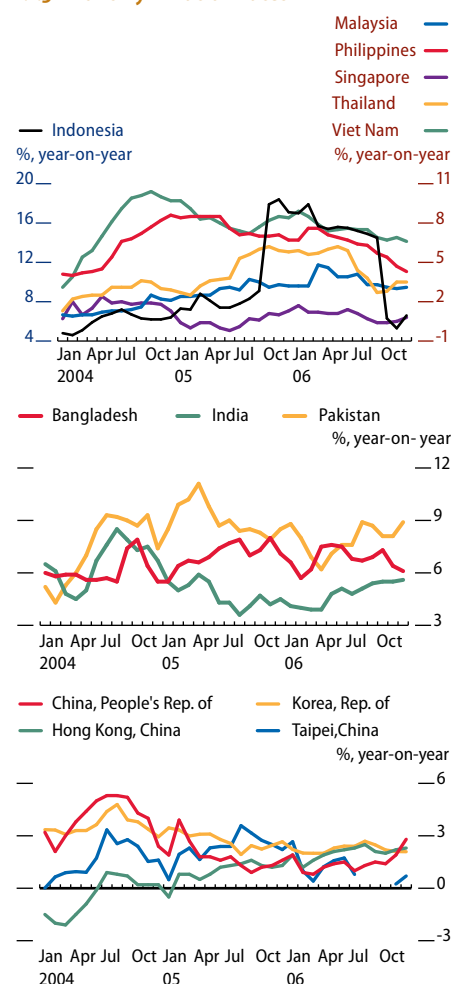
### 1.1.4 Regional inflation trend, 2006



Source: Asian Development Outlook database.

[Click here for figure data](#)

### 1.1.5 Monthly inflation rates



Sources: CEIC Data Company Ltd., International Monetary Fund, *International Financial Statistics* online database, downloaded 10 March 2007.

[Click here for figure data](#)



In Sri Lanka, inflation accelerated over the course of the year to average 9.6%. Strong domestic demand in Central Asia, fed by high oil prices, lifted inflation to 8.0%.

In the PRC, food prices climbed toward the end of the year, and although monthly inflation picked up, the annual average remained low. Highly competitive supply conditions in industry helped restrain consumer price inflation, as did falling oil prices in the later months of the year. But overheating manifested itself in other ways. In particular, bank credit remained a concern, and equity and property prices soared. In response, the central bank lifted the key policy interest rate by 54 basis points in 2006, and increased reserve requirements on commercial banks on three occasions. It subsequently raised interest rates by another 27 basis points in March 2007.

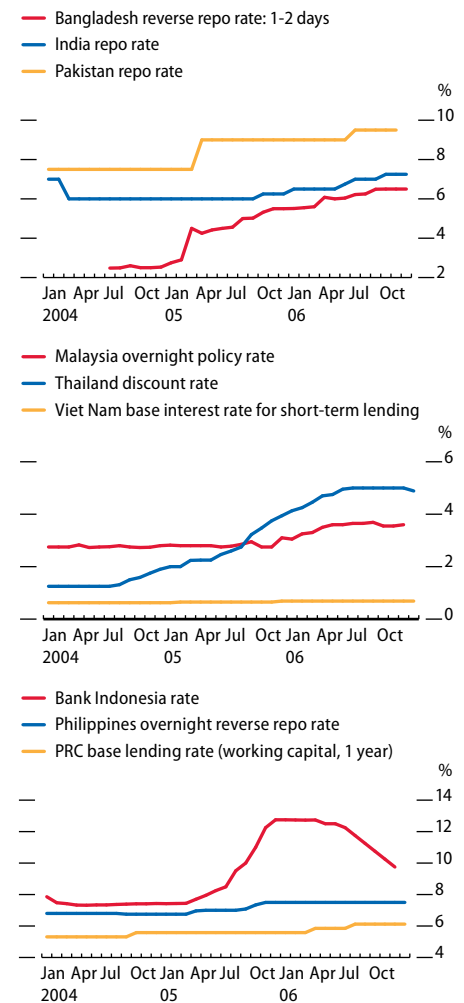
In Indonesia, Malaysia, and Thailand, annual average inflation rates rose. In large part, this reflected the effects of increases in oil prices and of reduced retail subsidies on gasoline and diesel. However, in the second half of the year monthly inflation rates began to slow, responding to tighter monetary conditions (Figure 1.1.5). Modest exchange rate appreciation also played a part. In the Philippines, where the pass-through of high oil prices was quick, annual headline inflation fell in 2006. In view of falling monthly inflation rates, a number of countries lowered policy interest rates—most notably Indonesia, where the central bank lowered its main policy rate by 300 basis points in seven steps during the year (Figure 1.1.6).

Fiscal risks were to the fore in some countries of Central Asia, as well as in Sri Lanka. Tajikistan's external debt position leaves little room for maneuver and the Kyrgyz Republic's debt indicators make it eligible for relief under the Heavily Indebted Poor Countries initiative. In Sri Lanka, rising public spending widened the deficit and was partly financed through domestic credit expansion. Pakistan also ran a sizable fiscal deficit in 2006, to support development programs and earthquake rehabilitation and reconstruction activities.

Elsewhere, deficits were generally modest, and were financed with comparative ease. Strong growth buoyed fiscal revenues. Various countries continued their efforts to bring down levels of public debt. In the Philippines, a legislative impasse in the approval for the 2006 budget led to nominal expenditures being frozen at 2005 levels. As a consequence, expenditures as a proportion of GDP fell. At the same time, revenues accrued from the newly expanded value-added tax. Reduced outlays and rising revenues cut the central Government's deficit to just 1% of GDP. In Indonesia and Malaysia too, deficits were modest in 2006 as governments sought to consolidate or reduce debt. Thailand's planned disbursements for infrastructure projects were delayed by political uncertainties.

In India, the Fiscal Responsibility Act is a centerpiece of the Government's economic stabilization and reform program. It calls for a reduction in the federal budget deficit by at least 0.3% of GDP a year, taking it to 3.0% of GDP by FY2008 (ending March 2009). In 2006, the federal budget deficit as a proportion of GDP again fell, despite rising expenditures on social programs and on rural infrastructure. Fast growth has done much to buoy revenues. Improved collection at the state level has also helped the overall fiscal position.

### 1.1.6 Policy interest rates



Sources: CEIC Data Company Ltd.; International Monetary Fund, *International Financial Statistics* online database; both downloaded 10 March 2007.

[Click here for figure data](#)

Developing Asia's trade surplus widened in 2006. Both the value of exports and imports grew quickly in United States (US) dollar terms, but as exports grew from a larger base, the trade surplus expanded. In some countries, export growth was extraordinary. In Azerbaijan, for example, it ballooned by 61% as new sources of oil and gas came on stream. Torrid growth of exports from Mongolia and Papua New Guinea reflected both higher volumes and better prices for their primary resources.

The PRC's merchandise exports again grew rapidly in 2006, barely down on 2005's expansion. Imports also grew briskly, but continued to trail export growth such that the PRC's trade surplus jumped to nearly \$200 billion dollars, or 7.4% of GDP. This pattern of strong import growth but even stronger export growth was repeated in a number of other countries. Thailand moved from a trade deficit to a trade surplus and surpluses widened in Indonesia and Singapore. In the Republic of Korea (hereafter Korea) and Malaysia, trade surpluses narrowed. In South Asia, trade deficits were again the norm, and in all countries but Bangladesh and Bhutan they widened (Figure 1.1.7). Nevertheless, they remain manageable.

Broadly, current account payments positions moved in step with trade balances. For the region as a whole, the current account surplus in 2006 was 5.3% of GDP in 2006, the largest on record. Central Asia, East Asia, and Southeast Asia all posted hefty surpluses, but South Asia's deficit stepped up to over 2% of its GDP. Pakistan's deficit is large and was partly financed through privatization receipts. Buoyant remittances provided a valuable source of foreign exchange for a range of countries in 2006. In Central Asia, remittance income climbed in the Kyrgyz Republic and Tajikistan. It is also important to many small Pacific islands. In Bangladesh, Nepal, and Philippines, inward remittances reversed trade deficits and generated current account surpluses. Remittances significantly helped the payments positions of Pakistan and Sri Lanka.

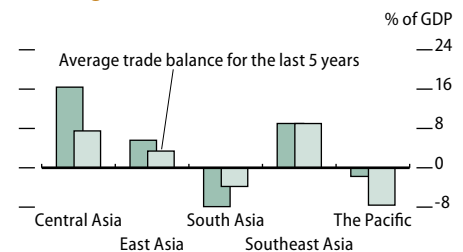
Large current account surpluses made a significant contribution to reserve accumulation (Box 1.1.1). Developing Asia's stock of foreign exchange reserves at end-2006 reached about \$2.3 trillion, up \$418 billion in a year. Although the region attracted gross capital inflows in 2006, it also invested significantly overseas, which helped stem the buildup of reserves. Of the increase in total reserves, just less than 80% was attributable to current account transactions.

## Outlook for 2007 and 2008

As usual, the outlook for developing Asia in 2007 and 2008 will hinge on prospects for the global economy. The idea that, because of its growing importance in global demand and strengthened intraregional trade linkages, developing Asia is now less susceptible to the vicissitudes of the international economy is at odds with the facts (see the chapter, *Uncoupling Asia: Myth and reality*, in Part 1).

As explained in the following section, *Prospects for the world economy in 2007 and 2008*, the outlook is broadly favorable. Although global growth is anticipated to slow, it will also become more balanced within the G3 (US, euro zone, and Japan). Growth is expected to come down in the US in 2007 before picking up in 2008, but output growth will

1.1.7 Regional trade balance trend, 2006



Source: Asian Development Outlook database.

[Click here for figure data](#)

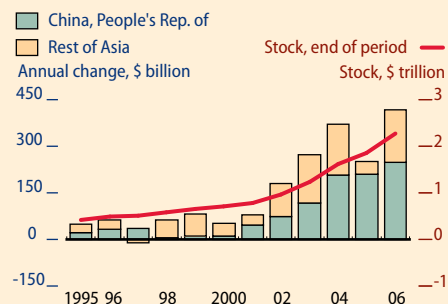
### 1.1.1 Developing Asia's foreign exchange reserves and the United States merchandise trade deficit

Developing Asia's foreign exchange reserves rose by \$417.6 billion during 2006 to \$2.28 trillion, according to preliminary data (box table). The advance was much larger than the \$250.7 billion seen in 2005 and represented a return to the pattern of steadily increasing large annual gains made by the region since 2001 (Box figure 1).

The rebound in accumulation in 2006 was mainly due to recovery from anemic increases in 2005 by some large reserve holders such as Hong Kong, China; India; Korea; and Singapore, as well as solid gains made by Kazakhstan, Malaysia, and Thailand. All countries but one appear to have increased their foreign exchange holdings in 2006.

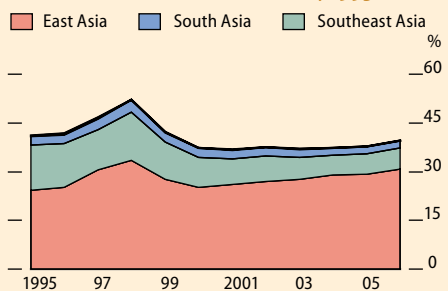
The larger increase in reserves of the People's Republic of China (PRC) in 2006 reflected a strengthening in its current account surplus during the year. At \$1.066 trillion, the PRC accounted for about 47%

#### 1 Developing Asia's foreign exchange reserves



Sources: International Monetary Fund, *International Financial Statistics* online database; Central Bank of China, available: <http://www.cbc.gov.tw>; Bank of Korea, available: <http://www.bok.or.kr>; all downloaded 8 March 2007.

#### 2 Share in total US trade deficit, 1995–2006



Source: US Census Bureau, available: [www.census.gov](http://www.census.gov), downloaded 16 February 2007.

with Southeast Asia accounted for the balance of 2006's increase.

The PRC's gain in share of the US deficits since 2000 reflects both the country's development as the lowest-cost producer of many goods, and the growth of specialization and intraregional trade, which features exports of components and supplies to the PRC for assembly into goods for export.

of developing Asia's stock of foreign exchange reserves at end-2006, up from 27% at end-2001, accumulating about 57% of the region's increase in reserves over this period (versus 59% in 2006).

Box figure 2 indicates that the region's share in the United States (US) merchandise trade deficit, which has been relatively stable since 2000, increased at a faster pace in 2006. The trade deficit with developing Asia amounted to \$323.9 billion, or 39.6% of the total trade deficit (\$818.1 billion), up by 1.8 percentage points from 2005.

In East Asia, the PRC accounted for \$232.5 billion, or 28.4% of the US deficit, up by 2.1 percentage points, while the share of other countries fell by 0.5 percentage points, to produce a net 1.6 percentage point increase for East Asia.

A deeper US trade deficit

#### Developing Asia's foreign exchange reserves (\$ billion)

	Stock end-2006	Change over the year	
		2006	2005
<b>Central Asia</b>	22.2	13.5	-2.0
Armenia	1.1	0.3	0.2
Azerbaijan	2.5	1.3	0.1
Kazakhstan	17.7	11.7	-2.4
Kyrgyz Republic	0.7	0.2	0.1
Tajikistan	0.2	0.0	0.0
<b>East Asia</b>	1,705.0	298.2	233.2
China, People's Rep. of	1,066.3	247.5	208.9
Hong Kong, China	133.2	8.9	0.7
Korea, Rep. of	238.4	28.4	11.8
Mongolia	0.9	0.5	0.2
Taipei, China	266.1	12.9	11.6
<b>South Asia</b>	190.3	42.0	6.3
Bangladesh	3.8	1.0	-0.4
Bhutan	0.5	0.0	0.1
India	170.2	39.2	5.9
Maldives	0.2	0.0	0.0
Nepal	1.6	0.1	0.0
Pakistan	11.3	1.5	0.3
Sri Lanka	2.6	0.0	0.5
<b>Southeast Asia</b>	358.1	63.3	13.3
Cambodia	1.2	0.2	0.0
Indonesia	40.7	7.9	-1.9
Lao People's Dem. Rep.	0.2	0.0	0.0
Malaysia	81.7	12.3	4.5
Myanmar	1.1	0.3	0.1
Philippines	19.9	4.1	2.8
Singapore	136.3	20.9	3.8
Thailand	65.1	14.6	2.0
Viet Nam	11.9	2.9	2.0
<b>The Pacific</b>	2.0	0.7	-0.1
Fiji Islands	0.2	-0.1	-0.2
Micronesia, Fed. States of	0.0	0.0	0.0
Papua New Guinea	1.4	0.7	0.1
Samoa	0.1	0.0	0.0
Solomon Islands	0.1	0.0	0.0
Tonga	0.0	0.0	0.0
Vanuatu	0.1	0.0	0.0
<b>Developing Asia</b>	2,277.6	417.6	250.7

Note: Foreign exchange reserves exclude gold, special drawing rights, and the reserve position in the International Monetary Fund.

Sources: International Monetary Fund, *International Financial Statistics* online database; Hong Kong Monetary Authority, available: <http://www.info.gov.hk/hkma/>; both downloaded 8 March 2007; staff estimates.

stay close to potential in both the euro zone and Japan. Global trade is expected to expand at about 7.5%, which is close to longer-term averages. Oil and other commodity prices are expected to come down in 2007, and again in 2008. But it is also possible that the global electronics cycle could turn in 2007, which would negatively affect export prospects particularly for East and Southeast Asia.

The baseline assumptions for individual economies are set out in each country chapter in Part 2. Monetary conditions are generally set to tighten in 2007 as a number of countries attempt to tame inflationary pressures. This is particularly true in South Asia but further tightening may also occur in the PRC if liquidity continues to wash through the economy. In Southeast Asia, as the pass-through effects of high oil prices come to an end, there may be scope for interest rates to come down. They have already been reduced in Indonesia and in Thailand.

Fiscal stances are tipped toward mild expansion but most countries are mindful of the costs that rising and high public debt brings. In the Philippines, a stronger fiscal position may allow some additional spending on priority programs, including infrastructure. Larger spending on infrastructure is also planned in Indonesia, Malaysia, and Thailand. In India, spending at the state level could threaten the commitments of the Fiscal Responsibility Act. Fiscal positions are more problematic in Pakistan and Sri Lanka, but it is expected that deficits will narrow in 2007. Fiscal consolidation is also needed in several Central Asian countries. In the PRC, the central Government's deficit is expected to stay below 1%, but spending for rural development and the environment may pick up.

Set against this background, robust growth is again expected in 2007 and 2008. Growth of 7.6% is projected in 2007, nudging up to 7.7% in 2008. These projections imply that growth will move onto a more sustainable footing and that overheating pressures that surfaced in 2006 will gradually abate. Table 1.1.1 summarizes projections by subregion for growth, consumer price inflation, and the current account balance (as a percentage of GDP).

Growth in all subregions, except the Pacific, is expected to slow in 2007. The biggest deceleration is likely in Central Asia, as lower oil prices work their way through to demand. The slowdown there partly reflects the removal of the one-time impact of large investment projects. Now that they are on stream, their effects register in a higher level of income, but not in a fillip to growth. In 2007, the pace of expansion is expected to moderate in Armenia, Azerbaijan, and Kazakhstan. A more stable political situation in the Kyrgyz Republic and new mining projects should help lift growth. There is also room for faster growth in Tajikistan.

In 2007, South Asia is expected to grow by 7.7%. Steps taken by the Reserve Bank of India to cool inflation are seen slowing India's pace of investment and consumption spending in 2007, and growth of 8% is forecast for 2007. But if inflation proves to be stubborn, further tightening by the central bank is likely to follow. In Pakistan growth

**1.1.1 Selected economic indicators, developing Asia, 2005–2008**

	2005	2006	2007	2008
<b>Gross domestic product (annual % change)</b>				
Developing Asia	7.9	8.3	7.6	7.7
Central Asia	11.2	12.4	10.3	9.4
East Asia	8.3	8.7	8.0	8.0
South Asia	8.7	8.7	7.7	8.0
Southeast Asia	5.6	6.0	5.6	5.9
The Pacific	2.5	3.1	4.5	2.8
<b>Consumer price index (annual % change)</b>				
Developing Asia	3.4	3.4	3.0	3.2
Central Asia	7.7	8.0	8.6	7.9
East Asia	2.0	1.6	1.9	2.2
South Asia <sup>a</sup>	5.3	6.0	5.5	5.3
Southeast Asia	6.3	7.1	4.2	4.0
The Pacific	2.4	3.3	3.5	3.3
<b>Current account balance (% of GDP)</b>				
Developing Asia	4.5	5.3	5.0	5.0
Central Asia	1.2	4.3	3.2	3.3
East Asia	6.0	7.0	6.8	6.9
South Asia	-1.2	-2.1	-2.2	-2.2
Southeast Asia	4.9	7.0	6.1	5.6
The Pacific	6.2	-2.0	-1.2	2.0

<sup>a</sup> India reports on a wholesale price index basis.

Sources: Asian Development Outlook database; staff estimates.

is expected to pick up on 2006: as stronger performance by agriculture is expected. There is also scope for expansion of the garment sector, but challenges are just over the horizon with the end of voluntary restraints on the PRC's textile and clothing exports to the US and European Union in 2008. In Bangladesh much will depend on how the interim Government performs economically, as well as on political developments. Growth in Sri Lanka will come off the record pace of 2006, but it is still expected to consolidate trend performance. If political conditions become more settled, Nepal may reap a modest dividend in 2007. Continuing recovery from the tsunami should see double-digit growth in the Maldives.

In 2007 and 2008, softer external demand and policy curbs are expected to pull growth down gradually in the PRC. But incentives for spending at the local and provincial level will remain strong in the lead-up to the Communist Party Congress later in 2007. Industrial expansion is also set to continue apace, as the PRC makes inroads into new markets and improves productivity. Growth of 10.0% is now forecast in 2007, with a further slowing to 9.8% in 2008. Outcomes have previously consistently beaten forecasts for the PRC, but if growth does not begin to slow, the authorities will most likely press harder on the brakes. Failure to moderate growth in the near and medium term would raise risks of painful adjustments later on.

Elsewhere in East Asia, growth is expected to soften in Hong Kong, China and in Taipei, China, partly because of their close economic ties to the PRC, though local factors will also play a part. Korea, too, is expected to slow as exports cool with the moderate slowdown in the US economy. Mongolia should continue to enjoy fast growth over the next 2 years as agriculture, mining output, and construction continue expanding. For East Asia as a whole, growth of 8.0% is projected in 2007 and 2008.

Overall, Southeast Asia will show little change in 2007 relative to 2006. Growth is put at 5.6%, edging up to 5.9% in 2008. But Indonesia, Southeast Asia's largest economy, is seen accelerating as lower interest rates and weaker inflation give a boost to domestic spending. Efforts to improve the investment climate may also begin to pay off. In Malaysia, growth is likely to ease a little in 2007. Electronics activity will remain susceptible to global developments and any slowing of durable goods demand in the US. The Philippines is expected to maintain steady growth of around 5.4%. The investment rate may stabilize and then pick up, and although expansion of infrastructure spending would be helpful, the benefits would unlikely be felt before 2008.

Cambodia, Lao PDR, and Viet Nam will again grow quickly in 2007 and 2008. But Cambodia will need to diversify its export base and improve productivity if it is to stand up to stiffening garments competition. In Thailand, prospects are dominated by political factors. Since the coup of September 2006, business and consumer confidence have declined. Shifts in policy and uncertainty about future direction have kept consumers and investors on the sidelines. Growth of 4.0% is penciled in for 2007, but has a larger than usual degree of uncertainty.

Growth is expected to accelerate briefly in the Pacific in 2007 before reverting to a more lackadaisical pace. The anticipated leap in growth in 2007 largely reflects the stimulus to demand provided by the deployment



of a large international force in Timor-Leste for peacekeeping and to assist in the conduct of elections. However, stronger growth in Papua New Guinea will also help lift the average. With the planned departure of peacekeepers in 2008 and slower growth in Papua New Guinea, the subregional average will drop back. A coup and the withdrawal of new aid have added to already difficult circumstances in Fiji Islands. Its economy may well contract in 2007, with growth remaining anemic in 2008.

Inflation is expected to ease in 2007 (Figure 1.1.8). Falling prices of commodities in international markets will help, as will vigilance from monetary authorities across the region. The largest reduction in inflation is expected to be in Southeast Asia: inflation will slow in nearly all subregional countries, but the largest contributor to the deceleration is likely to be Indonesia. Running at double digits in 2005 and 2006, inflation is expected to drop to 6.2% in 2007, stabilizing at about that level in 2008. Only in Singapore is inflation expected to pick up, and even then not by much.

In South Asia, falling inflation in India—prompted by slower credit growth and higher interest rates—will lead the headline figure down. Inflation in Pakistan is forecast to move closer to the State Bank of Pakistan's target, and is seen coming down to about 7% in 2007 and further to 6.5% in 2008. Despite rapid growth, inflation is expected to remain tame in the PRC. Any further currency appreciation would tend to restrain it. The main downside risk to inflation across developing Asia remains the possibility of a rebound in oil prices.

Developing Asia's current account is expected to remain firmly in surplus in 2007 and 2008 (Figure 1.1.9). In nominal US dollar terms, the surplus will widen but should steady as a share of GDP. Although some further appreciation of regional currencies is expected, both exports and imports are again likely to grow strongly. On the export side of the trade balance, productivity gains and lower unit costs will help offset impacts of any currency appreciation on prices. Remittances will stay an important source of foreign exchange for some countries. Import demand will be supported by stronger domestic spending, but lower prices for oil and other commodities will reduce import bills for some economies. The profile of the surplus is unlikely to change much, with South Asia continuing to run a deficit, and all other subregions in surplus. Southeast Asia's surplus is expected to close somewhat as expenditure switches more to domestic demand.

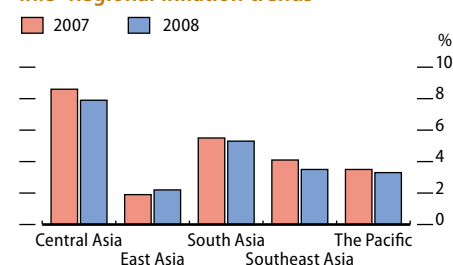
## Challenges

### Economic management

#### Macroeconomic stability

In many countries of developing Asia, “first generation reforms,” which focus on macroeconomic stability and opening markets, have progressed a lot. Achievements have contributed to favorable outcomes on inflation without damaging growth. For example, in Southeast Asia, the authorities have been quick to tame the inflationary pressures that occurred on the heels of large oil price increases. The enhanced credibility of monetary policy doused inflationary expectations and allowed many countries

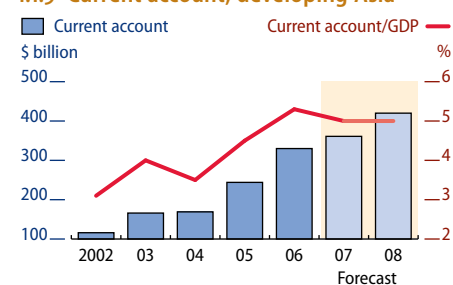
1.1.8 Regional inflation trends



Source: Staff estimates.

[Click here for figure data](#)

1.1.9 Current account, developing Asia



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

to absorb high oil prices more easily than would have been possible in the past. Equally, fiscal authorities, realizing the fiscal risks and high opportunity costs posed by rising gasoline, diesel, and kerosene subsidies, were quick to pare them back.

In South Asia, inflationary pressures have surfaced as a consequence of the pass-through of high oil prices but also because of accelerating growth. Growth has trended steadily upward in Bangladesh, India, and Pakistan. As sizable subsidies have been retained on oil products, and domestic prices remain well below international prices (*ADO 2006 Update*, Box 1.1.1), fiscal strains have been accentuated. Nevertheless, in all countries, policy frameworks governing interest rates, exchange rates, and fiscal regimes are acquiring greater clarity. The monetary authorities have set clear goals and have taken concerted measures to ease inflationary pressures. Fiscal problems and difficulties still lurk, but the overall direction is one of improvement. In Central Asia, International Monetary Fund programs have helped stabilize macroeconomic balances

But there are some countries where macroeconomic balances are more fragile. In Sri Lanka, for example, credit financing of expansionary government spending is directly stoking inflation. In Myanmar, the dual exchange rate system and monetization of government deficits keep inflation a perennial problem. In some of the small Pacific countries, an oversized government sector crowds out the space for private sector initiative and activity.

### *Foreign exchange reserves*

Since 2002, a particularly sharp buildup of foreign exchange reserves has been seen in developing Asia, largely in East and Southeast Asia, but also in India. Initially, reserve accumulation was motivated by a strong self-insurance motive and was intended to provide a buffer against speculative attacks. If the costs of a financial crisis in terms of lost GDP are large (as they appear to be), and the probability of a crisis occurring is significantly reduced by sizable reserves, then it may be worth paying a hefty insurance premium to do this (Rodrik 2006).

The need for reserves is influenced by a variety of factors, including exposure to short-term external liabilities, the nature of the exchange rate regime, country risk characteristics, and import financing requirements. A comparison of actual reserves with estimates of a broad measure of needs shows that actual reserves exceed “adequacy levels” by 50% or more (*Asia Economic Monitor*, December 2006). Although these ratios are by no means exceptional for emerging market economies, it is hardly surprising that there is now growing interest in how to make better use of international reserves. Asia’s reserves tend to be invested in short-term, secure assets that earn low yields that may be insufficient to compensate for even modest exchange rate appreciation.

The rewards from investing more actively are potentially large. For example, if just 50% of reserves were invested in a globally diversified portfolio, attracting a yield of 500 basis points above the current return, this would generate a fiscal dividend of about \$60 billion, equivalent to 0.9% of regional GDP. These additional resources could plug infrastructure gaps and increase the supply of essential public goods. Or

they could be used to retire public debt, creating larger fiscal space in the years ahead.

Some countries have already moved in the direction of more active reserves management. Capitalized by funds from the exchange equalization account, the mandate of the Korean Investment Corporation (formed in 2005) is “to achieve sustainable returns on foreign currency assets.” In March 2007, the PRC announced that it would take a more active approach to reserves management (Box 1.1.2). But while the rewards are certainly tempting, central banks and governments are rightfully wary of risks. If investments go bad, this could undermine confidence in government and/or the central bank. Having an appropriately regulated “fund,” operating at arm’s length, to manage some portion of reserves may have advantages. But setting up such an organization and attracting people with the right expertise is likely to take time.

### 1.1.2 New investment agency for reserves management in the People’s Republic of China

On the back of a surging trade surplus and rising foreign direct investment, the PRC’s foreign exchange reserves, already the world’s largest foreign reserves holding, hit \$1.07 trillion at the end of 2006, up \$247 billion from the end of 2005. All the (official) foreign reserves are now managed by the State Administration of Foreign Exchange (SAFE), an arm of the central bank.

They are conservatively invested in US treasury bonds and other government securities, and generally earn small yields. Standard Chartered Bank in Shanghai has estimated the investment return on the PRC’s reserves to be 3%, compared with, for example, an average 18% annual return for Singapore’s Temasek Holdings since it was established. In addition, the central bank may even lose from holding currency reserves in US dollars, including valuation losses as the yuan appreciates and opportunity costs due to the dollar depreciating against investment in alternative currencies.

In 2003, Central Huijin Investment Company Limited was established to be another investment arm of the central bank. It has used part of the foreign reserves to recapitalize major state banks and other state-owned financial institutions. It now holds a large proportion of state-owned financial assets. However, Central Huijin seems to be managed much like SAFE, which conservatively invests in low risk and return securities.

On 9 March 2007, the Government unveiled a plan to establish a state investment agency, to make better use of its reserves. The intention is to model operational aspects of the agency along the lines of Temasek Holdings and the Government Investment Corporation (GIC) of Singapore. Even though the proposal has not yet been finalized, it is likely that the foreign reserves will be divided into two parts—normal reserves that will continue to be managed by SAFE and others directed by the new investment

agency. The new agency is expected to manage at least \$200 billion of foreign reserves, and to adopt an asset management model in which reserves will be invested in higher-yielding products, such as stocks, corporate bonds, commodities, and technology companies abroad, in order to spread portfolio risks. It is still unclear if Central Huijin will be merged with the new agency. If it is, the new agency will be able to manage not only the currency reserves but also state-owned assets—reflecting the GIC–Temasek approach.

Temasek, one of the operational models for the new agency, was set up by the Singapore Government in 1974 to manage state-owned assets. Temasek owns stakes in many of Singapore’s largest companies, including Singapore Airlines, DBS Bank, and Singapore Power. It also holds investments in iconic Singaporean institutions like Raffles Hotel and Singapore Zoo. About half of its managed assets are held externally. As of 31 March 2006, Temasek had \$84 billion of assets under management, yielding around 24% for the year.

The Singapore Government established GIC in 1981 as another investment arm to directly manage its foreign reserves. GIC is run as a private investment company, although it is wholly owned by the Singapore Government. This arrangement allows GIC to operate as a global fund manager, while allowing the Government oversight over the management of the country’s reserves. GIC invests internationally in equities, fixed income instruments, money market paper, and real estate. It is also involved in some of Asia’s largest funds, such as the AIG Asian Infrastructure Fund, the largest private infrastructure fund in Asia.

Sources: Bloomberg 9, 10, 11 March 2007; *Financial Times*, 9 March 2007; [www.temasek.com.sg](http://www.temasek.com.sg); [www.gic.com.sg](http://www.gic.com.sg).



An alternative, more direct approach, recently proposed in India's FY2007 budget, would be to use foreign exchange to pay for the foreign currency costs of projects, or to back guarantees that would lower the costs of borrowing by special purpose investment vehicles.

Both proposals have their attractions. But in either case contingent fiscal liabilities would be likely to rise. If guarantees are used, the resulting debt inflows could exert pressure for an appreciation of the exchange rate. If inflows are sterilized, this will push interest rates up; with no sterilization, the inflows would add to credit expansion. Decisions on whether and how to put reserves to better use should be taken in the broader context of fiscal and monetary policy frameworks.

### Exchange rates

Figure 1.1.10 shows the movement of nominal exchange rates against the US dollar. Most currencies appreciated, Viet Nam's dong being an exception. The Malaysian ringgit and the PRC yuan, whose dollar pegs ended in July 2005, appreciated modestly in 2006. The appreciation of other currencies, including the Korean won, Philippine peso, and Thai baht, was more pronounced.

Changes in nominal effective (trade-weighted) exchange rates are compared with unweighted US dollar changes in Figure 1.1.11. Generally, movements of nominal effective exchange rates were smaller than their appreciation against the US dollar in 2006. This is because the currencies of most countries' major trading partners also appreciated against the US dollar. In nominal effective terms, the appreciation of the ringgit has been small. By December 2006, the Thai baht had appreciated in nominal effective terms by over 10%, and the Philippine peso by 4.5%.

Following the announcement of a near-record trade surplus in February 2007, the PRC authorities stated in March that they may now consider greater flexibility of the yuan. The sensitivity of other countries' nominal effective exchange rates to an appreciation of the yuan would be quite small (Figure 1.1.12). The main impact of its appreciation would most probably be seen in adjustments to market shares outside the region, not in terms of bilateral trade flows within. About 51% of the PRC's exports are to the US, EU, and Japan. Comparable shares for other countries range from 35% up. But these numbers may exaggerate the true extent of competition, concentrated in consumer goods industries that constitute a smaller share of total exports (Box 1.1.3). Also, firms in the PRC have already shown themselves adroit in improving productivity levels, which would help to offset any price and cost disadvantages created by a more expensive currency. There would be benefits at home. Consumers would gain from cheaper consumer goods imports, and the People's Bank of China would be better able to stem pressures on liquidity coming from rapidly accumulating foreign reserves. Pressures on the financial sector would be eased if the share of lowly remunerated reserves and sterilization bonds on their balance sheets were reduced.

### Capital controls

In December 2006, Thailand imposed controls on capital inflows with the intention of stemming the baht's appreciation. The initial rules were widely regarded as too stringent and triggered a rout in the equity

### 1.1.3 Trade and structural change in East and Southeast Asia

The chapter, *Trade and structural change in East and Southeast Asia: Implications for growth and industrialization*, in Part 1, provides an in-depth analysis of recent developments in international trade in manufactures in the region.

It shows that the rising share of the region, and especially of the PRC, in world exports and imports has been fueled by the explosive growth of intra-industry trade in parts and components in machinery sectors. Multinational enterprises are active in established production networks with a vertical division of labor leading to trade in goods in different stages of processing. The region's economies trade most intensively in the manufacturing industries that have the highest growth in world trade: electrical machinery, transportation equipment, chemicals and allied products, and precision instruments.

The region is also shown to be highly competitive in traditional labor-intensive manufactured products. Although intraregional trade is of increasing significance—with the PRC the point of assembly for final products—consumption of these final products is overwhelmingly in destinations outside the region. Final demand in the United States, Europe, and Japan and other extraregional markets is the driving force behind the rise of intraregional trade in East and Southeast Asia.

Hence, globalization is driving the process of regional integration and the processes are mutually reinforcing. So, although the region is partaking in the trend toward bilateral preferential trade agreements, it is market forces rather than tariff preferences that are more influential in determining what is produced and where it is produced.

The impact of the emergence of the PRC on industrialization and trade performance in other parts of the region, such as ASEAN, are also examined.

market (Figure 1.1.13). In response, exemptions have been widened. It has also been clarified that the aim is to eventually abandon the controls. Further relaxation of controls took place in mid-March 2007: the 30% nonremunerated reserve requirement for investors in debt securities and unit trusts, who fully hedge their investments through forward swaps of at least 3 months, was abrogated.

In principle, the case for a tax on *destabilizing* capital inflows is clear. As offshore investors do not consider or internalize the costs of any destabilizing effects of their behavior on the domestic economy, a tax on inflows could be beneficial.

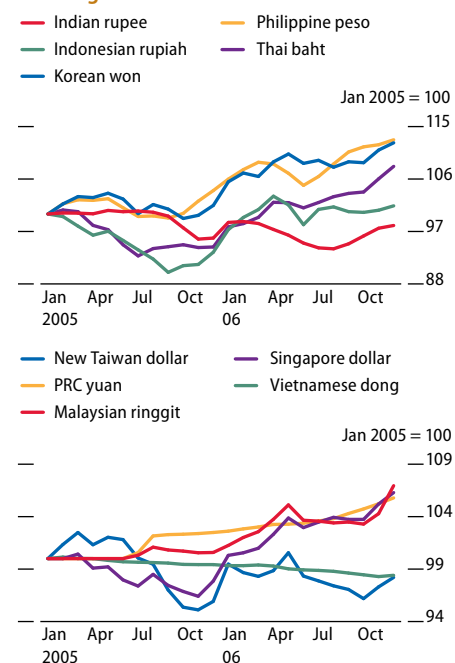
But theory and practice can differ. First, identifying conditions that warrant the imposition of a tax on capital inflows is not straightforward. Even if the Thai baht appreciated sharply against the US dollar in 2006 and reserves accumulated, it is uncertain that this threatened the economy or export businesses. The appreciation did not deter healthy export performance in 2006, and the trade balance moved from deficit to surplus.

When pressures for speculative capital inflows do need easing, the question arises of how to do this. Precisely because foreign exchange transactions are fungible, designing regulations that are not porous is extremely difficult. Simple approaches that are based on flat withholding taxes and that use existing taxation (and rebate) arrangements may have attractions (Box 1.1.4).

### Sustaining growth

Notwithstanding its considerable achievements, developing Asia still lags a long way behind rich industrial countries. Measured at market exchange rates, per capita GDP in developing Asia is estimated at US\$1,295 in 2006, compared with US\$31,230 in the OECD (Figure 1.1.14). As of 2002, there

#### 1.1.10 Nominal United States dollar exchange rate index



Sources: International Monetary Fund, *International Financial Statistics* online database; Central Bank of China, available: <http://www.cbc.gov.tw>; both downloaded 13 March 2007.

[Click here for figure data](#)

### 1.1.4 Withholding taxes on international capital flows

The idea of taxing international capital flows is not new, and was originally mooted as a way of taming the flow of “hot money” across borders. More recently, other objectives have been added, such as raising additional revenues for the provision of international public goods.

There has been extensive discussion of the “Tobin tax,” a proposed tax on all transactions entailing currency conversion. By taxing the amount of currency to be converted, the objective is to dissuade short-term capital movements. For a given tax rate, the effective burden would diminish with the horizon of the transaction. Two main criticisms have been leveled at the idea. The first is that by taxing all transactions involving currency conversions it will create distortions, and, for example, could discourage trade. The second is that the Tobin tax presents formidable coordination problems, requiring broad multilateral agreement about implementation and the use of tax proceeds.

Zee (2000) has proposed that if the goal is simply to inoculate an economy against the potential damage of speculative capital inflows, then national authorities

could impose a tax without worrying about international coordination. Zee’s proposal is to levy a withholding tax at source when inflows enter a country. Those taxes paid on current account transactions, including export receipts, would then be credited against domestic tax liabilities. By taxing inflows rather than outflows, and by refunding taxes paid on current account transactions, the idea is that capital flows would bear the burden of tax.

Spahn (2002) has observed that, like the Tobin tax, Zee’s withholding tax would entail a much smaller tax burden for long-term capital inflows. In this way it is different from the nonremunerated reserve requirements used by Chile as well as Colombia, Spain, and Slovenia. As practiced by Chile, nonremunerated reserves had the problem that they imposed a larger effective tax burden, the longer the holding period. Thailand’s arrangements allow for repatriation of nonremunerated reserves only after a year, thereby affecting short-term flows most.

Sources: Zee (2000), Spahn (2002).

were still 1.9 billion men, women, and children in developing Asia who subsisted on less than \$2 a day. Growth remains the surest means of tackling poverty and other forms of deprivation, but stresses are beginning to arise that may eventually undercut growth and worthy economic ambitions. These show up in different ways in different countries.

Asia is still not creating enough jobs for the burgeoning numbers of young workers that enter the labor market each year. Despite fast growth, open unemployment rates are rising. Today, at least 500 million workers, or about 30% of developing Asia's 1.7 billion labor force, are either unemployed or underemployed. As another 245 million workers will be added to developing Asia's labor force by 2015, 750 million new jobs will be needed if full employment is to be achieved within a decade. Developing Asia's future prosperity depends on its ability to use productively its most valuable resource—its people. Failure to create decent and productive jobs may come at high cost. If many workers get left behind, the legitimacy of growth, and, by extension, support for the reforms needed to sustain catch-up and modernization, could be threatened. The promise of developing Asia's "demographic dividend" could yet prove to be a "demographic curse."

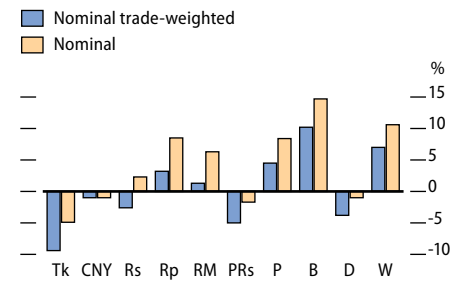
Linked to the problem of job creation is widening disparity in income distribution. Some widening of inequality may be "good" in the sense that it reflects rewards for enterprise and innovation and the incentives needed to apply resources to their most productive uses. But where widening inequality is a consequence of arrangements that restrict access to opportunity, that tolerate asset grabbing and rent seeking, and that perpetuate and widen social cleavages, it is more likely to be symptomatic of institutions that will also eventually stymie growth. The challenge is to formulate policies and to reform institutions in a way that creates and widens opportunities for those who might otherwise fail to share in the fruits of growth, without compromising on growth. *Key Indicators 2007* (ADB forthcoming) will focus on the issue of inequality.

Environmental stresses are also on the rise. Most people in developing Asia do not yet enjoy a level of affluence where they have a strong demand for improved environment quality. But failures of policy, and a lack of vision, as much as low incomes, are at the root of Asia's environmental problems. Integrating environmental objectives and concerns into broader development plans, giving a larger role to market-based instruments, and strengthening cooperation at a regional and international level, are some of the ingredients of a better approach to reconciling growth with environmental objectives.

In addition to these "macro" challenges are the "micro" challenges of building the markets and institutions needed to support growth, facilitate change, and improve social welfare.

As Asia's crisis painfully illustrated, macroeconomic stability and openness do not completely immunize countries against shocks. In East and Southeast Asia, the failure of institutions and structural policies to keep pace with fast expansion led to vulnerabilities that eventually derailed growth and caused reversals. To sustain growth, but also to improve lives, "second generation" reforms are needed. These reforms aim to develop markets and institutions that may be missing, incomplete, or inefficient. As these endeavors are necessarily shaped by political,

### 1.1.11 Movements in exchange rates, 2006

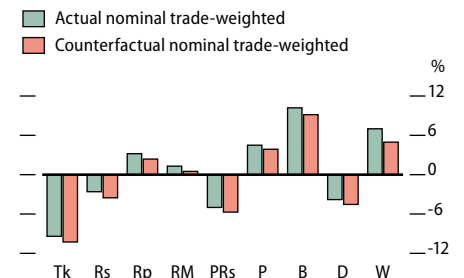


Note: Positive (appreciations)/negative (depreciations) movements computed using average rates in December 2005 and 2006.

Sources: International Monetary Fund, *International Financial Statistics* online database, downloaded 15 March 2007; staff estimates.

[Click here for figure data](#)

### 1.1.12 Actual and counterfactual movements in exchange rates, 2006



Note: Impacts are calculated assuming a counterfactual 10% appreciation of the yuan, holding all other variables constant at December 2006 values.

Sources: International Monetary Fund, *International Financial Statistics* online database, downloaded 15 March 2007; staff estimates.

[Click here for figure data](#)

### 1.1.13 Stock Exchange of Thailand equity price index



Source: CEIC Data Company Ltd., downloaded 15 March 2007.

[Click here for figure data](#)

social, and cultural factors, second generation reforms are inherently complicated and have a long time frame. Although desired outcomes are often clear—e.g., the elimination of corruption or better delivery of public services—there is much less clarity about how to achieve objectives. Priorities and sequencing are also likely to be sensitive to country context. An assortment of challenges fall within the ambit of these reforms: the building of efficient and safe financial and capital markets; the delivery of high-quality infrastructure services; improvement in the business investment climate and the development of arrangements that allow people, businesses, and countries to share risks and adapt to change. This list can easily be extended.

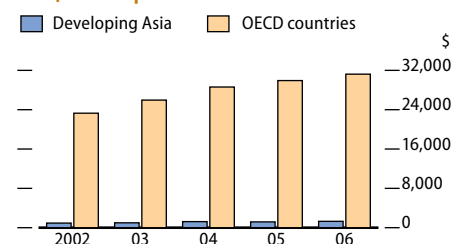
In the PRC, the Government has clearly laid out the challenges: to diversify and balance growth, spread its benefits more widely, and to “harmonize” economic and environmental objectives. But there are hard constraints. Diversifying growth will require a shift away from a bank-dominated financial system. Geared as they are for lending for enterprise investment, they do not do a good job of appraising risks or providing credit to households. Modernizing the PRC’s banking system will take time and is already drawing on foreign capital and expertise to support the extension of consumer credit and other new services.

The deepening of equity and bond markets also has a long way to go and will require significant support in terms of improved market infrastructure and better regulation. Widening access to social services, including health and education, is not simple either. In some ways, resources have run ahead of the capacity to deliver quality services. Well-trained nurses, doctors, teachers, and administrators are just as important as hardware but, in the short term, their supply is inelastic. And the solutions to the PRC’s environmental challenges do not lie with administrative measures alone. These are often blunt and can be circumvented. Markets have to be developed for environmental services and incentives appropriately geared to objectives.

In a number of countries—though not in the PRC or any longer in India—investment appears to be struggling. The ratio of fixed capital formation to income is falling in the Philippines and industry’s share in output is falling. In Pakistan, fixed investment is a constraint in pushing growth to the next level, and modernizing the economy. In Indonesia, the crisis and a comparatively slow recovery appears to have badly dented investor confidence. In Malaysia and Thailand, too, postcrisis investment rates have remained in the doldrums. Investment rates may have been too high before the crisis, but they are now too low. In important ways, low investment rates appear to be a consequence of deeply embedded regulatory and institutional difficulties that increase risks and uncertainty for potential investors. But blockages to private investment can occur in many shapes and forms (Box 1.1.5).

One factor that seems to be holding back private investment is poor delivery of infrastructure services. Across developing Asia, complaints are routinely voiced about gaps in infrastructure provision and bad service delivery. Good infrastructure is needed to connect villages and towns, to each other and to the global economy. Infrastructure is also needed to promote public health objectives, support reasonable levels of security and safety, and a decent quality of life. In India, poor

#### 1.1.14 Per capita GDP



Sources: Asian Development Outlook database; International Monetary Fund, *World Economic Outlook* September 2006 database, available: [www.imf.org](http://www.imf.org), downloaded 17 March 2007.

[Click here for figure data](#)

### 1.1.5 Ten years after the crisis: The facts about investment and growth

Ten years after Asia's crisis, an air of normality would appear to have returned and incomes in all the crisis countries now exceed their precrisis peaks. But a closer look shows that growth and investment rates have settled on a lower trajectory. On average in 2000–2006, growth in the five most directly affected countries (Indonesia, Korea, Malaysia, Philippines, and Thailand) ran some 2.5 percentage points behind performance in 1990–1996. Viewed over longer periods, performance also seems to have slipped a gear. Investment rates have tumbled. Although investment may have been too high before the crisis, on a variety of measures it now seems to be low. Slower growth and low investment rates may be linked.

A variety of possible explanations for slower growth and low investment rates are examined in *Ten years after the crisis: The facts about investment and growth* in Part 1. Different factors have been at work in different countries. Poor infrastructure may be holding investment back in Indonesia and the Philippines, and slower growth of employment and the labor force may be playing a role in Malaysia. In Korea, growth and investment may not be of such concern, given the country's high income levels and economic maturation.

An investigation of a range of possible explanations for low investment and slower growth draws out little that is concrete. Credit and loanable funds do not seem to be constraints, and capacity utilization rates appear to have returned to “normal” levels after a period of marked weakness. The idea that investment has been redirected to the People's Republic of China (PRC) is also difficult to square with the facts. As noted in several places in *ADO 2007*, the PRC and East and Southeast Asia show much complementarity in trade and investment.

The analysis then sifts through factors that might influence perceptions of risk and uncertainty. Information on risk ratings, equity prices, economic forecasts, corporate balance sheets, and the quality of governance in the crisis countries is presented. These data do not rule out the idea that, compared to the precrisis period, perceptions of risk and uncertainty in the crisis-affected countries (other than Korea) are now raised or that private sector investors have elevated precautionary motives (detering investments in hard projects, but not in more liquid assets). The analysis ends by identifying some of the things that might be done to stimulate investment, drawing on information from business investment-climate surveys.

rural infrastructure is taking its toll on agricultural productivity. In the Philippines, conspicuous infrastructure gaps have played a role in retarding industrialization and job creation. High levels of congestion, squalor, and grime in Asia's megacities are a result of years of sorely neglected infrastructure investment (and maintenance). By adding to costs, poor infrastructure services deter private investment. Indeed, the absence of upstream and downstream infrastructure can block altogether what might otherwise be lucrative private investments.

The neglect of infrastructure reflects a variety of deeper problems, including low levels of public sector revenue mobilization, misplaced public spending priorities, weak institutions, and regulatory failures. Private investors' enthusiasm for infrastructure investment, which could be detected in the early 1990s, has ebbed largely because of failures in policy and regulatory environments. By raising costs and risks and lowering expected returns, these failures have discouraged private investors. Business investment climate surveys point to a raft of impediments. These vary widely in nature and by degree across countries. Some countries, such as Malaysia, do well by international standards, but many do not. Heavy regulation, corruption, onerous and costly administrative requirements, and difficulties with contract enforcement can quickly turn profits to losses, and assets into liabilities. A stable and predictable macroeconomic environment is critical, but without complementary micro and institutional reforms, investment is unlikely to prosper.

In *Growth amid change* (Part 3), it is seen that rapid growth in developing Asia has not simply been about economies replicating



themselves on a larger scale. Countries become different as they grow, not only in terms of *what* they produce, but also *how* they produce. And the ways in which they change matter for growth. It is therefore important that countries develop systems that allow them to activate, manage, and capitalize on change. Policies for growth are policies that allow countries to learn, become more diverse, build on their successes, and, not least, put their failures behind them.

Approaches will have to be sensitive to country circumstances but some familiar ingredients will be important. High investment rates are required to build, expand, and upgrade economic activities. Support for infrastructure and a variety of other services is vital for economies of scale. Relevant and purposeful education is needed (Box 1.1.6). Labor mobility and flexibility need to be complemented by affordable social insurance and protection. As businesses create wealth, obstacles that raise costs and risks need to be removed. And economic openness is needed not just to enlarge markets, but also to increase variety and expose countries to modern technologies and new institutional designs.

Yet markets alone cannot be expected to instigate all these changes, and catalytic elements may be required. In particular, so as to remove obstacles to innovation and to the creation of new activities, partnerships between government and the private sector will be needed. Among other elements, viable operational approaches must embody learning, strong

### 1.1.6 Education and structural change in four Asian economies

Labor force surveys from India, Indonesia, Philippines, and Thailand are used to examine the linkages between rising education levels and changes in the structure of economic activity. The chapter in Part 3, *Education and structural change in four Asian economies*, documents what workers of different education levels do for a living, what they are paid for doing it, and how this has changed over time.

From an employment perspective, the importance of the “knowledge economy” is often overstated. Most workers labor in agriculture and lower-status services—activities that pay modest premiums to educated workers. While high-end services produce a rapidly growing share of GDP, especially in India, this reflects rocketing labor productivity, not a boom in their employment share. Overall, educational attainment has steamed ahead of job creation in sectors that historically hired the educated. These results are ambiguous, as they are consistent with at least two distinct views: the labor force is becoming more educated than is necessary given the jobs available; and the labor force was initially undereducated, so rapidly rising education levels are necessary to ensure competitiveness.

The correct interpretation differs across countries and is hard to pinpoint. However, a more detailed examination of the wage premiums received by educated workers in different activities is revealing. Returns to basic education have fallen over time. This is especially

true in industrial jobs, and among junior workers. This implies that if inadequate education levels have been inhibiting industrialization, the constraint has eased over time. Moreover, the least educated countries—India and Thailand—are industrializing the fastest. In contrast with findings during the “green revolution,” returns to education in agriculture are generally low, consistent with the notion that education carries returns when it facilitates the adoption of new technologies and activities. More positively, returns to basic education in services and tertiary education everywhere have typically risen.

In all jobs, Filipinos are the most educated, followed by Indonesians, and then Thais and Indians, including some in which more-educated workers do not command a premium. Such jobs are becoming more common and are employing increasingly educated workers in the Philippines, suggesting that the country is “overeducated.”

These results suggest that the benefits of schooling depend as much on conditions outside the classroom as inside it. They also leave open the possibility that raising the quality of education will carry greater benefits than increasing the quantity of workers with various levels of education. Education policy makers and development agencies are therefore strongly urged to measure the effects of education policies on quality and relevance, rather than focusing exclusively on raising attainment.

incentives, and mechanisms that minimize risks of moral hazard and rent seeking, and remove subsidies for failed experiments (Rodrik 2004).

## Risks

The outlook naturally rests on a large number of assumptions. It is always possible that events could evolve in surprising and unexpected ways, and derail projections. Given underlying economic momentum, risks remain tilted down.

Markets have moved to reprice risks so far this year in a calm manner, but this could yet give way to less settled conditions. Policy mistakes, geopolitical or other shocks, or unexpectedly bad news about economic direction could lead to a much bumpier time for markets. If asset prices get badly punctured and decisively reverse, the chill would soon be felt.

Although dissonance about the US outlook seems to be receding, the possibility of a sharper slowdown cannot be ruled out. A particular source of uncertainty is in how nonconstruction investment will hold up. If the US were to slow sharply, there would be knock-on effects on global industrial output growth and trade. Developing Asia would certainly not be insulated from such developments (Box 1.1.7). Failure of the Doha Round, too, could easily aggravate any slowdown in trade caused by slower global demand growth. In this regard, the condition of the Doha Round remains critical. Although negotiations are continuing among a small group of key members, time will finally run out at the end of June 2007, and even if an agreement can be brokered, it may not get the go ahead from the US Congress. In the growing vacuum left by any failure of Doha, preferential trade agreements would thrive further and already audible protectionist calls would be amplified.

The overall geopolitical and security situation remains a source of uncertainty. The price of strategic commodities, such as oil, could be hit by negative developments. The relief that lower prices are currently bringing to budgets, to inflationary pressures, and to import bills is welcome, but should not be counted on. In the event of a human flu pandemic, developing Asia would bear a disproportionately large cost.

Finally, recent developments have brought country risks to the fore. Security issues across Asia are largely unresolved. In some countries, important elections are scheduled and their outcomes will be crucial for confidence and prospects.

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### 1.1.7 Uncoupling Asia: Myth and reality

Is developing Asia uncoupling from the global business cycle? The chapter, *Uncoupling Asia: Myth and reality* in Part 1, presents evidence to show that the global business cycle is still important for Asia.

Recently, some commentators have argued that the fast-growing Asian economy and its potentially large spending power might represent the emergence of a powerful regional economy that can sustain its own momentum, largely independently of the business cycle in industrialized countries.

However, no evidence points to Asia's uncoupling, either structurally or cyclically. In fact, a renewed process of rapid economic growth and development has been accompanied by increasing economic integration, both intraregional within Asia and interregional with G3 (United States, European Union, and Japan).

Investigating the structure of Asian trade, the chapter demonstrates the close relationship between intra- and interregional trade, with the PRC playing the crucial role. The G3 economies are still the main export destinations for final goods leaving the region. Asia's economy is increasingly integrated both regionally and internationally. These are connected facets of globalization.

# Prospects for the world economy in 2007 and 2008

## Outlook for the major economies

### United States

The United States (US) economy grew by a solid 3.3% in 2006, reflecting an upturn in business investment and robust private consumption (Figure 1.2.1). However, quarterly GDP figures demonstrated a visible slowdown in the second half and the year ended on a less positive note. The weak spot was mainly associated with housing sector retrenchment. Residential investment contracted for five consecutive quarters from the last quarter of 2005, and both new and existing home sales fell significantly in the latter half of 2006. Although home sales are showing signs of stabilizing, housing starts and permits continue to slide (Figure 1.2.2), reflecting an excess supply of unsold homes. With falling house prices, these indicators suggest that expectations of an early resolution to the housing-induced slowdown are premature.

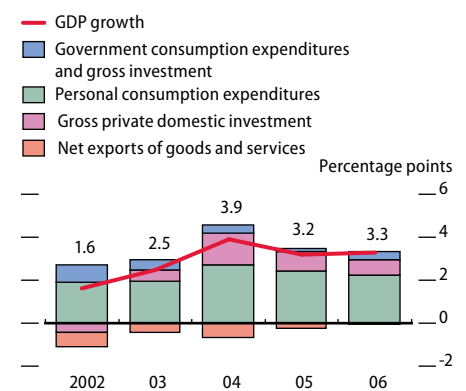
Several factors stopped the economy from going into a steep slide. Personal consumption expenditure remained buoyant and grew by 3.2% in 2006, underpinned by relatively healthy job gains and rising incomes. Household discretionary income was boosted by falling oil prices and easing inflation. Solid business investment in several quarters, on the back of strong corporate profits, was another factor.

But there are signs that the housing market trouble is spilling over into both the real economy and the financial market. Industrial production figures are slipping, with manufacturing activity slowing sharply in the last quarter. Falling orders for cars, household appliances, and construction materials could generate ripple effects. All of these added up to a contraction in business investment in the fourth quarter. The emergence of marked increases in payments delays on subprime mortgage loans since late February revealed further elements of weakness.

A pause in monetary tightening since last June has turned into a hiatus. Consumer price inflation has been ebbing, partly in reflection of the tightening, but also thanks to sharp declines in gasoline prices since the fall of 2006. Given the lessened pressure from inflation, combined with slowing economic activity, futures markets expect that the Federal Reserve may start to cut interest rates in the second half of this year. On the fiscal side, strong revenue increases reduced the 2006 US budget deficit for the second year in a row. The Congressional Budget Office projects the deficit to decline over the next 2 years.

The ongoing slowdown in US growth is expected to be moderate. The economy is projected to expand by still a respectable rate of 2.5% in 2007, followed by a quick recovery in 2008. Sustained income growth and low inflation will continue to underpin private consumption growth. A relatively benign business outlook is predicted, based on good corporate earnings and firm demand. While exports are seen maintaining recent

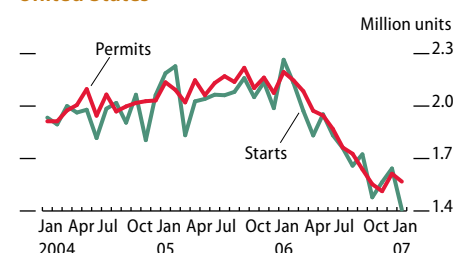
**1.2.1 Contributions to growth (demand), United States**



Source: Bureau of Economic Analysis, available: <http://www.bea.gov>, downloaded 1 March 2007.

[Click here for figure data](#)

**1.2.2 New residential construction, United States**



Source: US Census Bureau, available: <http://www.census.gov>, downloaded 15 March 2007.

[Click here for figure data](#)



gains, robust consumer spending will likely rekindle growth in imports this year. The current account is expected to deteriorate further, though the pace of growth in the trade deficit has stabilized.

### Japan

The Japanese economy continues a moderate but steady recovery, registering 2.2% growth in 2006 (Figure 1.2.3). Although the latest revisions (February 2007) reveal less than expected strength of domestic demand, it does not alter the underlying sweep. Strong exports and export-induced business investment are underpinning the recovery, since private consumption is trudging along only slowly. Exports rose by 9.5%, contributing 1.4 percentage points to growth. The pace of private consumption visibly weakened in 2006, posting only 0.9% growth. Stagnating labor market conditions and flattened wage growth contributed to a retrenchment in consumer spending, although a strong rebound in the final quarter was encouraging.

Industrial production rose substantially, pushing capacity utilization higher. Corporate profits set yet another record, offering strong impetus to business spending. Meanwhile, firms have remained cautious in both investment and hiring decisions. Despite the improved industrial activity and job conditions of the past few years, unemployment has stayed relatively high at 4.1%, reflecting firms' reluctance to hire. This picture should brighten over the forecast period, but not markedly given heightened labor productivity and continued corporate efforts to contain rising input costs. Further out, strong corporate profits and tight capacity should eventually exert a positive influence on the job market.

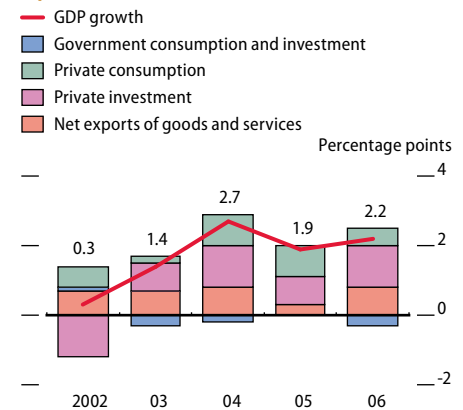
The Bank of Japan raised policy rates by another quarter point in February 2007, the second step since July 2006 in its intended move to a neutral policy stance. However, the slow pace of consumption recovery combined with weak inflation suggests little likelihood of the central bank acting aggressively, and it will probably leave the policy rate at under 1% for most of this year. Consumer price inflation barely made it into positive territory (Figure 1.2.4). If the yen strengthens and oil prices continue to fall, deflation could become a problem again.

The Japanese economy is expected to continue its modest recovery. Projected growth is 2.0% in 2007 on the ground of gradually strengthening domestic demand. Record export earnings should underpin the expansion in business capital spending, while strengthening the job market. The key to sustaining the recovery lies with consumers spending more. The country's aging demographic profile and related high pension burden continue to be a significant drag. Moreover, weakness in the domestic sector could persist, if the inevitable ending of macroeconomic stimuli over the medium term weighs down on consumer sentiment.

### Euro zone

A steady recovery is under way in the euro zone, which grew by 2.6% in 2006 on strong exports and firming domestic demand (Figure 1.2.5). Despite the sustained strength of the euro, exports surged by 8.4%. This boosted industrial production across the zone, particularly in Germany, Italy, and Spain. Business and consumer sentiment has improved (Figure 1.2.6). Strong corporate profits and cheap credit bolstered

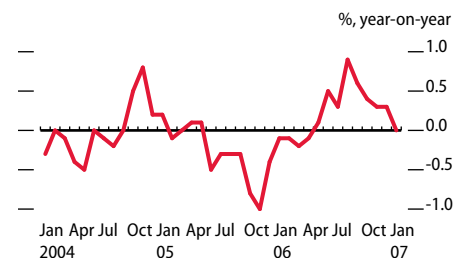
#### 1.2.3 Contributions to growth (demand), Japan



Source: Economic and Social Research Institute of Japan, available: <http://www.esri.cao.go.jp>, downloaded 12 March 2007.

[Click here for figure data](#)

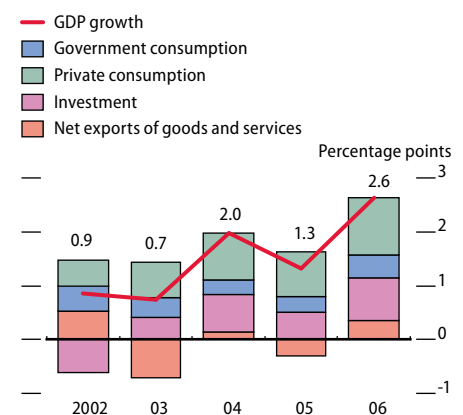
#### 1.2.4 Inflation, Japan



Source: CEIC Data Company Ltd., downloaded 13 March 2007.

[Click here for figure data](#)

#### 1.2.5 Contributions to growth (demand), euro zone



Source: Eurostat, available: <http://europa.eu.int>, downloaded 8 March 2007.

[Click here for figure data](#)

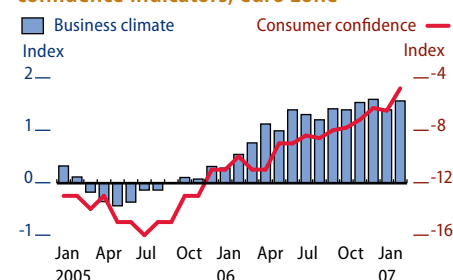
capital spending. This upward trend in turn exerted a positive influence on consumer spending, underpropping sound and balanced growth. Unemployment rates have trended down, and are now firmly under 8%.

A major downside risk is how consumers will react to tax increases. Long-term fiscal sustainability is a significant concern for the euro zone. The major economies of France, Germany, and Italy, have persistently exceeded the fiscal deficit ceiling of the stability and growth pact (3% of GDP). These economies have announced fiscal consolidation plans, combined with significant tax hikes. In both Germany and Italy, fiscal tightening is taking effect in 2007, amounting to an estimated 1% of GDP. So far, consumers appear to be relatively unswayed and their upbeat sentiment remains intact.

Although pressure is easing with falling oil prices, inflation stayed slightly above the European Central Bank (ECB) target rate of 2% in 2006. With the latest rise in March 2007 having lifted the policy rate to 3.75%, continued compression in interest rate differentials has strengthened the euro. While this curbs inflation, it may start to pinch exports. Given the improved growth outlook, ECB is expected to adopt a neutral stance after one more rate increase, perhaps in the middle of the year.

The euro zone is expected to grow by 2.2% in 2007. Prospects for exports and related business investment, as well as consumer spending, are positive. The investment outlook seems set to stay firm, reflecting the strength of corporate balance sheets and tight manufacturing capacity. A modest deceleration in world growth is not likely to seriously undermine performance of the external sector.

### 1.2.6 Business climate and consumer confidence indicators, euro zone



Source: European Commission, available: <http://ec.europa.eu>, downloaded 12 March 2007.

[Click here for figure data](#)

## World trade and commodity prices

World trade expanded rapidly in 2006, in volume terms accelerating to 9.7% from 7.7% in 2005 (according to World Bank estimates). Improved demand conditions in major industrial countries, along with firming consumer spending in Japan and the euro zone, buttressed strong industrial production both for major industrial countries and for developing Asia. Robust export performance from developing Asia also shored up world trade growth. The PRC continues to play a catalytic role in linking regional production chains with final demand from the rest of the world: regional partners' exports to the PRC again rose strongly, where they are processed and reexported to the rest of the world.

With a less buoyant economic performance slated for 2007, world trade growth is projected to moderate to 7.5% in export volume terms (Table 1.2.1). Industrial activity in major industrial countries has eased, with US industrial production slowing markedly. Japan and the euro zone are expected to take up some slack in demand

### 1.2.1 Baseline assumptions for external conditions

	2005 Actual	2006 Actual	2007 ADO 2007 projection	2008 ADO 2007 projection
<b>GDP growth (%)</b>				
Industrial countries <sup>a</sup>	2.4	2.9	2.3	2.6
United States	3.2	3.3	2.5	3.0
Japan	1.9	2.2	2.0	2.3
Euro zone	1.4	2.6	2.2	2.1
<b>Memorandum items</b>				
US Federal Funds rate (average, %)	3.2	5.0	5.1	4.9
Brent crude oil spot prices (\$ per barrel) (annual average)	54.4	65.4	57.0	54.0
Nonfuel commodity prices (% increase)	13.4	24.7	-4.5	-8.4
CPI inflation (OECD) (annual average)	2.6	2.3	2.1	2.0
World trade volume (% change)	7.7	9.7	7.5	8.0

<sup>a</sup> Growth rates for industrial countries are a GDP weighted average for the US, EU, and Japan.

Sources: US Bureau of Economic Analysis, available: <http://www.bea.gov>, downloaded 28 February 2007; Eurostat, available: <http://europa.eu.int>, downloaded 8 March 2007; Economic and Social Research Institute of Japan, available: <http://www.esri.cao.go.jp>, downloaded 12 March 2007; CEIC Data Company Ltd., downloaded 8 March 2007; World Bank, Commodity Price Data, available: <http://web.worldbank.org>, downloaded 8 March 2007; OECD Main Economic Indicators, available: <http://www.oecd.org>, downloaded 8 March 2007; World Bank, *Prospects for the Global Economy Forecast Summary*, available: <http://web.worldbank.org>, downloaded 8 March 2007.

from the anticipated moderation in the US, but much strengthening in private consumption in these two economies seems doubtful.

Even with slowing momentum though, the world economy remains relatively buoyant, given the underlying strength of the corporate sector and the gradual tightening of the labor market in most countries in the Organisation for Economic Co-operation and Development. Industrial production for the major economies may surprise to the upside if consumer spending gels this year.

The strength of the global economy in 2006 boosted global sales of consumer electronics. Worldwide semiconductor sales set another record (\$247.7 billion) in 2006, an increase of 8.9% from the previous year (Figure 1.2.7), while sales in the Asia-Pacific region registered a 13% expansion, driven by strong PRC demand. Although some slackening in economic activity has been seen in major industrial countries, a modest demand-driven expansion is expected in global high-technology industries in 2007. The Semiconductor Industry Association projects global semiconductor sales to grow by about 11% in 2007.

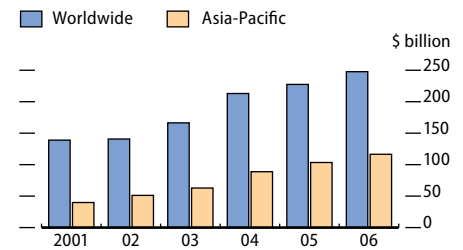
Demand for consumer electronics is partly supported by relentless global competition and falling prices. Dynamic random access memory (DRAM) prices, a proxy for global high-tech prices, have been slipping on fierce global competition and improved production capacity (Figure 1.2.8). Falling prices of popular consumer electronics have started to weigh on profit margins of the world's largest producers. Given the buoyancy of global demand, producers have maintained profits by expanding the volume of sales. But as the US economy, which is the largest market for end products, is expected to slow, further erosion of profits seems inevitable and could precipitate a downturn in the industry cycle.

The Brent crude oil price averaged \$65.4 a barrel in 2006, despite a sharp fall in the second half of the year. Global oil prices have declined by more than 20% since the peak of nearly \$80 a barrel in early August. The slump was mainly due to softening demand and rising inventories. The latest data on oil production and consumption show moderate increases in global spare capacity and inventory levels, as the supply/demand balance improves, despite lower output from the Organization of the Petroleum Exporting Countries (OPEC). However, underlying demand fundamentals remain strong, with a potential pick up in PRC demand.

On the supply side, periodic disruptions will likely continue given the political situations in major producer economies. The Brent crude oil price is expected to average about \$57 a barrel in 2007 based on futures prices adjusted for the cost of carry (Figure 1.2.9). Fundamental tightness, given the supply-demand outlook, suggests upside risks to the outlook, though.

Prices of non-oil commodities have been showing signs of stabilization since mid-2006 (Figure 1.2.10). Driven by double-digit growth in metals prices, non-oil commodity prices posted strong gains in 2006. Strong manufacturing production, particularly in the developing world, continued to support industrial demand, while supply-side difficulties persisted in production of major metals. Prices of zinc, copper, and nickel surged again in 2006 on sharp drawing-down on inventories and supply disruptions, though the combination of improving supply conditions and the prospect of slowing demand were moderating forces in the second half of the year.

### 1.2.7 Sales of semiconductors



Source: Semiconductor Industry Association, available: <http://www.sia-online.org>, downloaded 12 March 2007.

[Click here for figure data](#)

### 1.2.8 DRAM prices

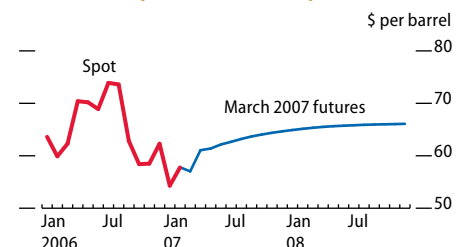


Note: US\$/256MB 333 MHz DDR (32M x 8) (Taipei, China).

Source: Bloomberg, downloaded 13 March 2007.

[Click here for figure data](#)

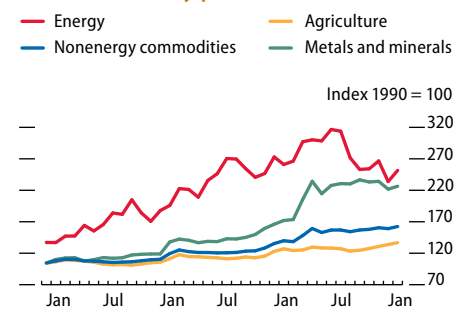
### 1.2.9 Brent spot and forward prices



Sources: Asian Development Outlook database; FutureSource.com, available: <http://www.futuresource.com>, downloaded 15 March 2007.

[Click here for figure data](#)

### 1.2.10 Commodity prices



Source: World Bank Commodity Price Data (Pink Sheets), various issues, <http://web.worldbank.org>, downloaded 13 March 2007.

[Click here for figure data](#)

Agricultural commodity prices also rallied, but not uniformly. Some agricultural food commodities enjoyed strong gains on weather-related supply shortfalls, declining stocks, and surging demand for biofuels. Sugar prices rose to a record high before moderating in the second half of 2006, while maize and wheat prices also made significant advances. Strong industrial demand bolstered by the PRC drove up prices of agricultural raw materials, including rubber.

After the spectacular rise in 2006, non-oil commodity prices are expected to stabilize. Some metals prices such as copper and zinc moved lower in early 2007 on the slower growth outlook. Although the supply-side constraints in some non-oil commodities are unlikely to disappear overnight, easing demand pressure along with gradual improvement in inventories should limit further price gains. Softer energy prices may also keep a lid on sugar and other oilseeds prices.

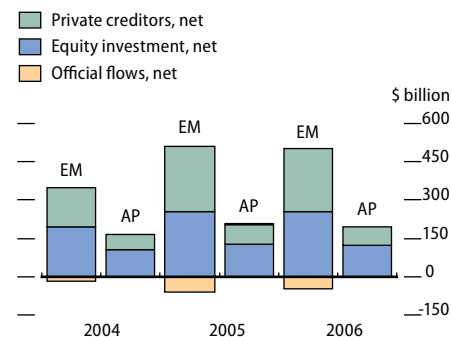
## Capital flows and financial markets

The global investment climate for developing Asia remains favorable. Despite the most recent correction in February–March, emerging market asset prices have kept their earlier large gains. In 2006, emerging market equity prices again staged a strong rally after a brief midyear sell-off. The strong performance of emerging Asian market equities partly reflected external demand and was accompanied by robust capital inflows (Figure 1.2.11). Net private capital flows to emerging Asia amounted to \$197.3 billion, only slightly down by 3.9% from the previous year, due to slightly smaller foreign direct investment flows. However, with its strong growth outlook, the region continues to be the primary recipient of private equity investment, attracting again more than 60% of net portfolio equity investment flows to emerging market economies in 2006.

Relatively low interest rates and benign liquidity conditions in capital markets have kept private credit flows generally buoyant, benefiting emerging Asian borrowers. Credit spreads remained near record lows for emerging market issuers through most of 2006 (Figure 1.2.12). While the region's strong fiscal position limited the need for new issuance of sovereign debt, corporate issuers took advantage of low funding costs. Foreign investors' Asian bond purchases (which account for a majority of private creditor nonbank flows) were boosted by expectation of currency appreciation. Although Asian corporate borrowers will have ready access to bank credit, borrowing from banks abroad is expected to slow in 2007, mainly due to government measures to curtail investment in the PRC.

Asian currencies strengthened further against the US dollar in 2006. Gains ranged from 1.9% for the Indian rupee to 13.8% for the Thai baht (Figure 1.2.13). Robust performance of both current and capital accounts underpinned the strength of most Asian currencies. Narrowing interest rates continued to weigh on the dollar, which fell by 11.7% against the euro in 2006. Significant interest rate differentials between the US and Japan limited the dollar's fall against the yen to only 0.8%. Expectations for strong growth will continue to underpin the strength of Asian currencies in 2007, as will narrowing interest rate differentials, due to monetary tightening in some countries.

### 1.2.11 Net capital flows to emerging markets and Asia-Pacific



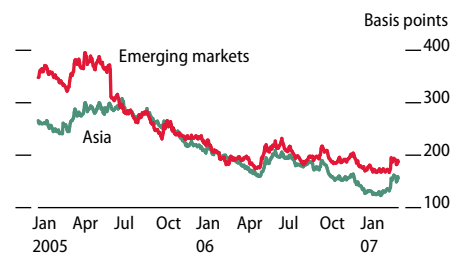
EM = emerging markets; AP = Asia-Pacific.

Note: Emerging markets and Asia-Pacific follow the definition of the Institute of International Finance Inc.

Source: Institute of International Finance Inc., *Capital Flows to Emerging Market Economies*, various issues, available: <http://www.iif.com>.

[Click here for figure data](#)

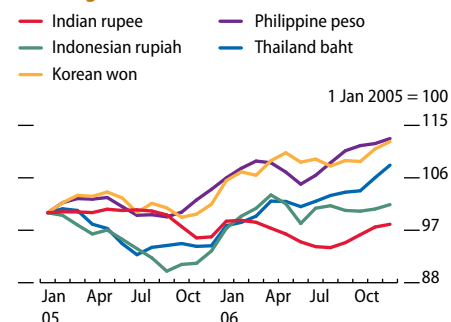
### 1.2.12 Sovereign credit spreads



Source: Bloomberg, downloaded 15 March 2007.

[Click here for figure data](#)

### 1.2.13 Nominal United States dollar exchange rate index



Sources: International Monetary Fund, *International Financial Statistics* online database; Central Bank of China, available: <http://www.cbc.gov.tw>; both downloaded 13 March 2007.

[Click here for figure data](#)

# Subregional summaries

## Central Asia

### Subregional performance

Subregional growth in gross domestic product (GDP) was boosted by a favorable external environment as oil and non-oil commodity prices rose. GDP growth strengthened to 12.4% in 2006 (Figure 1.3.1), up from 11.2% in 2005, and from an average of 9.4% over 2000–2005. The hydrocarbon exporters—Azerbaijan, Kazakhstan, Turkmenistan, and Uzbekistan—accounted for much of the growth. Most non-oil exporters also saw higher growth, benefiting from stronger non-oil commodity prices, and from workers’ remittances from, primarily, Kazakhstan and the Russian Federation. Only the Kyrgyz Republic’s growth was anemic.

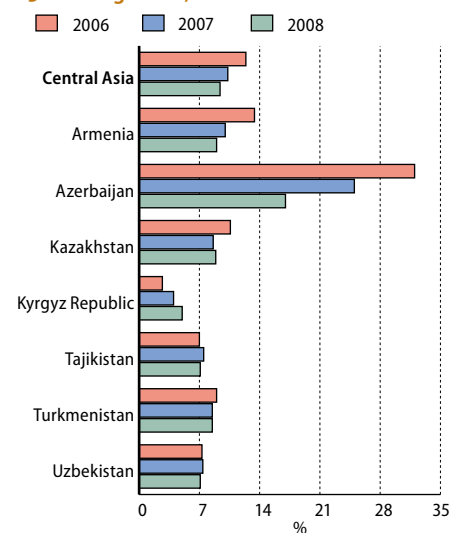
While vibrant external demand is the proximate cause of the growth upturn, domestic demand, in particular private consumption growth, has also been buoyant, stimulated by higher wages, remittances, and credit expansion. The rapid expansion in construction and services across the subregion is bifurcated, from the oil boom on the one hand, and from remittances on the other.

Strong domestic demand, together with rising net foreign assets, put upward pressure on prices and the money supply. Subregional average consumer price inflation rose slightly to 8% in 2006, with higher inflation reported in four countries (Tajikistan, Kyrgyz Republic, Kazakhstan, and Armenia) and a fall reported in two official estimates (Azerbaijan and Uzbekistan).

For countries that experienced higher inflation, contributory factors include wage and pension increases, higher food and fuel prices, and credit expansion. Azerbaijan’s officially reported decline in inflation is at odds with alternative estimates that are more consistent with the last couple of years’ surge in spending. Reflecting expansion in credit to the private sector and accelerating official reserves accumulation, broad money has grown strongly in several countries. Monetary tightening measures taken by central banks, including raising refinancing rates and reserve requirements, have not been very effective so far.

Fiscal positions showed diverging patterns as oil exporters’ soaring revenues were used to ramp up public spending while the non-oil exporters’ were accompanied by expenditure restraint. Azerbaijan and Kazakhstan pursued an expansionary fiscal policy, spurred by burgeoning oil revenues: Azerbaijan’s non-oil fiscal deficit as a share of non-oil GDP in 2006 was estimated at an unsustainable 36%. Kazakhstan’s

1.3.1 GDP growth, Central Asia



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)



non-oil fiscal deficit was much lower. The saving factor (literally) was the large increases in net assets of the oil funds of the two countries. With improved tax collections and expenditure restraint, the Kyrgyz Republic and Tajikistan managed to improve their fiscal positions despite the severely constrained fiscal space they had to contend with, while Uzbekistan and Turkmenistan maintained a more or less balanced recorded budget. Of concern are the still sizable energy sector quasi-fiscal deficits in Azerbaijan, Kyrgyz Republic, and Tajikistan, that reflect weak public resource management and that narrow the fiscal space.

External performance reflected differing dynamics of trade and invisibles accounts. Large current account surpluses were recorded in Azerbaijan, Turkmenistan, and Uzbekistan, as commodity price-driven surges in export revenues outpaced imports. There was a notable slowing of import growth in Azerbaijan as hydrocarbon-related imports of machinery and equipment tapered off with the completion of a number of large projects. Kazakhstan's more modest current account surplus as a share of GDP was due to the sizable trade surplus being offset by hydrocarbon-related services and income payments.

On the capital account, hydrocarbon-related net foreign direct investment (FDI) inflows fell in Azerbaijan but picked up in Uzbekistan. Export growth recovered in the Kyrgyz Republic and accelerated in Tajikistan but slackened in Armenia. All three countries saw acceleration in import growth fueled by higher energy costs and strong remittance-driven growth in demand for consumer imports. Trade deficits were partially offset by strong remittance inflows in other accounts of the balance of payments.

On the financing side, net FDI covered around one third (Kyrgyz Republic) to one half (Armenia and Tajikistan) of the current account deficit. Gross official reserves across the subregion have grown. This has proved to be a mixed blessing in that the resulting thicker import cushion comes with pressure on money supply from surging foreign exchange inflows. This is problematic in an environment where, in many cases, sterilization options are limited. Among low income countries that depend largely on official concessional assistance, currently, external debt sustainability is a concern for the Kyrgyz Republic. Among countries with access to capital markets, Kazakhstan's external borrowing by private commercial banks has risen steeply.

The subregion has seen some headway on structural reforms in certain areas such as small-scale privatization, banking reform, and infrastructure reform but in other areas such as governance and enterprise restructuring, the reform backlog is significant. Several countries have continued to improve the private sector incentive framework by streamlining the tax regime (Kyrgyz Republic and Uzbekistan), competition law (Kazakhstan), and business registration and licensing (Armenia and Azerbaijan). Uzbekistan's slow steps in trade reform (both external and domestic) continues to be an impediment to private sector development.

Several countries took measures to tighten bank regulation and supervision. In addition, Tajikistan made tangible progress in deregulating foreign participation in banks, strengthening minimum capital requirements, and delicensing banks. Kazakhstan continued to

develop its securities markets and nonbank financial institutions. Areas to be looked at with renewed vigor include ownership transparency and related lending (Armenia), stalled bank privatization (Azerbaijan), and performance by banks of functions inappropriate for financial intermediaries (Uzbekistan).

With regard to sector reforms, in agriculture Uzbekistan continued to transform *shirkats* (farm cooperatives) into leaseholds, a contributory factor to reported higher productivity in the cotton subsector. In energy, Tajikistan undertook corporatization of the state electricity company and the formulation of a restructuring and unbundling strategy for the sector. Progress on public sector reform was mixed. While small-scale privatization has come on well (and is largely complete in several countries), large-scale privatization has made but a few, faltering steps. Corporate governance in public enterprises is also hobbled. Recent reform of the social protection system include improved social assistance targeting and pension reform (Azerbaijan).

### Subregional prospects

Subregional growth is expected to remain strong with subregional growth at about 10% in 2007 and 2008. The external environment is likely to remain favorable even though oil prices are easing and non-oil commodity prices are softening. The subregion's hydrocarbon producers are expanding capacity that will meet higher demand from the larger Asian economies, particularly the People's Republic of China (PRC). Meanwhile, the hydrocarbon-importing countries now seem likely to get a respite from high oil prices. After a pause, hydrocarbon-related FDI inflows to the subregion's two largest oil producers (Azerbaijan and Kazakhstan) are likely to resume, while Uzbekistan is set to see a further pickup in FDI, particularly from the PRC and the Russian Federation.

Although non-hydrocarbon commodity prices are now softening, growth in demand, especially from the PRC, is seen sustaining export growth rates, while import growth rates could decelerate (as easing oil prices relieve pressure on trade balances).

Private consumption in the two big oil producers could moderate if domestic credit conditions tighten and greater wage restraint is exercised to check inflationary pressures. Private consumption in remittance-generating countries could remain strong if the pace of inflows keeps up.

Some downside risks are seen in: further surges in foreign exchange inflows, so creating excess liquidity and feeding through into very high inflation; deteriorating quality of loan portfolios as credit expansion continues unabated; tighter regulation of foreign migrants in the Russian Federation adversely affecting remittance inflows; worsening current account balances among oil-importing countries; and narrowing of fiscal space in countries with external borrowing constraints.

### Country highlights

#### Armenia

Largely on account of the rapidly growing nontradable sectors of construction and services, the economy continued to grow beyond expectations at 13.4% in 2006. The fiscal deficit was kept in check through expenditure rationalization and tax reforms. Higher



remittances, public spending, and private investment supported growth in domestic demand. Rising fuel prices and a poor agricultural harvest put some pressure on prices, but inflation remained contained. A moderate deceleration in GDP growth to 9–10% is expected in 2007–2008 as production capacity limits are reached and the pace of expansion in construction and services eases. Prospects are promising, but structural reforms have to continue, parliamentary and presidential elections must be seen to be democratic, and subregional conflicts need to be resolved to allow closed trade routes to open.

#### *Azerbaijan*

Phenomenal economic growth at 32% was recorded in 2006, powered by soaring production and exports of oil and gas. Very rapid expansion in government spending and the money supply are putting increasing pressures on prices and inflation in the last quarter of the year accelerated to 11%. Oil and gas production from recent investments will continue to underpin remarkable growth projected at 25% in 2007 and 17% in 2008. Foreign investment, primarily for hydrocarbons, is beginning to taper off as large projects in the sector become operational. The Government is bullish that much higher domestic public investment, especially non-oil, will partly offset this decline. Yet rapid and deep structural reform is imperative for such investment and—along with controlling inflation and preventing excessive exchange rate appreciation—is the key challenge.

#### *Kazakhstan*

Strong prices for oil and gas, rapid growth of domestic consumption, and a rebound in investment continued to propel the economy. Money supply grew by 80% over the year, fueled by a huge increase in credit to the private sector. GDP growth in 2006 was 10.6% and is projected to stay high at nearly 9% in 2007 and 2008. But these very strengths carry within them the seeds of future challenges—immediately, keeping rising inflation in check, and improving banks' risk management of their loan portfolios; further out, diversifying the economy, pushing through structural reforms, enhancing competitiveness, and ensuring more equitable development. These measures, plus fiscal and monetary policy coordination, are needed to ensure sustainable growth.

#### *Kyrgyz Republic*

Nearly 2 years after the Tulip Revolution, political stability remains elusive. Although the new Government made real efforts to maintain macroeconomic stability, tensions between the different power centers have distracted the authorities and hampered structural reforms, including the passage of key economic legislation. In addition, an accident at the Kumtor gold mine, the largest industrial contributor, kept growth slow at 2.7% in 2006. The medium-term outlook, though positive, is clouded by governance concerns, a poor business climate, and political uncertainty.

#### *Tajikistan*

The economy expanded at 7% in 2006, despite higher costs of oil and gas. Burgeoning remittances spurred demand, as supply shocks from higher

oil, utility, and food prices pushed inflation back into two-digit territory. Implementation of large infrastructure projects and a favorable outlook for aluminum production (the dominant industry) should propel growth to 7.5% in 2007. Medium-term economic prospects are promising, if the expansion in externally financed infrastructure projects is supported by the broad development reforms.

### *Turkmenistan*

The economy continued to grow rapidly in 2006, but the exact figure was likely lower than the official estimate. It is uncertain whether the newly elected president will embrace reform and engage with the international community. The country is heavily dependent on exports of gas and oil, a situation unlikely to change soon. Growth in 2007 is seen coming in at 8.5%, little changed from a year earlier. The key development challenges are to effectively channel oil and gas revenues toward productive investment, implement market-oriented reforms, and rebuild human capital.

### *Uzbekistan*

Continued strong—but narrowly based—growth was driven by increased net exports, a pickup in workers' remittances, and productivity gains in agriculture. Major challenges over the medium term are to continue managing monetary and fiscal policies to cope with inflationary pressures, integrate the economy with the rest of the subregion, advance structural reforms in banking, restructure state enterprises, and remove state controls hindering private development. Economic growth in 2007 is projected at somewhat higher than 7%, a rate maintained for the past 3 years. Further diversification from commodities and energy would also help sustain growth.

### **Development challenges**

Despite differences in resource endowments, in sources of growth, and in the pace of structural reforms, the countries of Central Asia face three main common challenges. First, all of them are undergoing transition-induced structural change. From overindustrialization before transition (as measured by industry's disproportionate share in employment), these economies are undergoing industrial restructuring that has entailed job destruction in old, inefficient state enterprises, and resource reallocation and job creation in new private firms. Some countries (e.g., Armenia) are quite advanced in the process of industrial restructuring, while others are still lagging. In the latter, a weak business environment is delaying the exit of inefficient state enterprises and new entry by private firms.

Second, much of the new industrial activity in the subregion involves the natural resource industries: energy (Azerbaijan, Kazakhstan, Turkmenistan, and Uzbekistan), gold (Kyrgyz Republic and Uzbekistan), aluminum (Tajikistan), and copper and other base metals (Armenia). On the positive side, the subregion's natural resource wealth has attracted FDI and spurred growth of related construction and services industries. The downside is that the subregion's share of skilled labor-intensive and capital-intensive manufacturing exports is on the decline. The subregion's policy makers recognize the inherent risks in being overly

dependent on natural resource-based industries, not the least of which is heightened vulnerability to price shocks. Economic diversification is therefore high on their agendas. The challenge is to pursue this within an industrial policy framework based on a level playing field, and on transparency and accountability.

Third, surging foreign exchange inflows, whether due to oil revenues or remittances, are generating excess liquidity across the subregion. Thus far, the burden of mopping up the excess liquidity has fallen on central banks. Indeed in several cases, the fiscal stance has been part of the problem, not the solution. The challenge for policy makers is to pursue an effective strategy for price stability and enhance economic competitiveness.

## East Asia

### Subregional performance

A fourth consecutive year of double-digit expansion (10.7%) in the People's Republic of China (PRC) lifted aggregate subregional growth to 8.7% (Figure 1.3.2), easily exceeding the average of the previous 5 years. Buoyant demand for East Asia's manufactured exports helped underpin the growth acceleration: subregional exports grew by 19.0% in nominal terms (the PRC's by 26.0%). Net exports contributed significantly to GDP growth in the major subregional economies. Domestic demand also grew, with private consumption picking up in the PRC; Hong Kong, China; and Korea. However, private consumption decelerated in Taipei, China because of a tightening of consumer credit. Private investment strengthened in all those economies, as well as in Mongolia, which is attracting investment into mining. With a boost from the growth in exports, the subregional current account surplus vaulted to 7.0% of GDP, double the level of 4 years earlier. Inflation was low at 1.6% as generally favorable weather helped limit food price increases.

### Subregional prospects

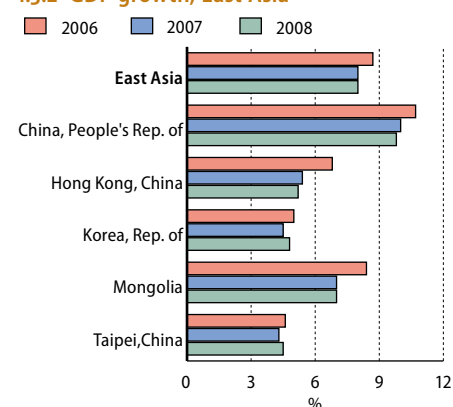
Measures taken over the past 2 years by PRC authorities to rein in fixed asset investment are expected to bite in 2007, trimming growth in that economy to about 10%. This will bring down aggregate growth to 8.0%. All the economies in the subregion are forecast to slow, but still achieve solid growth. External demand will soften as growth rates subside in industrial nations. Domestic demand will strengthen, though, in Hong Kong, China; Korea; and Taipei, China. In the PRC, consumption demand is projected to rise, providing some counter to the targeted reduction in fixed asset investment. The subregional current account surplus will be marginally lower than 2006. Inflation will stay around 2%, assuming normal weather patterns.

### Country highlights

#### People's Republic of China

This economy expanded at a cracking 10.7% in 2006, the fastest rate in 10 years. Industry, including manufacturing and construction, was the main contributor, but services also grew robustly. On the demand

1.3.2 GDP growth, East Asia



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

side, investment accounted for much of the growth, though net exports and consumption both made substantial contributions. Investment was driven largely by firms reinvesting profits into new industrial activity. The Government's efforts to restrain fixed asset investment pulled its growth down from about 30% in the first half of the year to 21% in the second. In particular, investment slowed sharply in industries that have built excess production capacity, such as textiles, coal mining, and electricity.

Faster growth in exports than imports boosted the trade surplus by \$60 billion to \$194 billion in 2006. Bilateral surpluses with the United States (US) and European Union (EU) surged, sparking trade friction and accusations of an undervalued yuan. The rising trade surplus, coupled with higher tourism receipts and interest income on the large official foreign reserves, boosted the current account surplus to 8.6% of GDP. Foreign direct investment (FDI) reached \$69.5 billion and speculative capital flowed into property and stock markets. Foreign exchange reserves shot past the \$1 trillion mark by year-end. In the job market, 11.8 million new jobs were created in urban areas last year, but millions of migrants from the countryside, new graduates, and laid-off workers still went without work. As a result of the excess capacity and strong competition in manufactured products, inflation moved down to 1.5%.

Steps taken to cool the economy included a raft of administrative measures to restrain investment, such as raising downpayment requirements for housing purchases to curb speculation and sending inspection teams to provinces to check if new investment projects violate land-use and environmental regulations. Market-oriented tightening included five increases in the reserve-requirement ratio for commercial banks between mid-2006 and February 2007, and three hikes in the benchmark 1-year lending rate through March 2007. These measures moderated growth in domestic credit, but actual lending and broad money increased faster than targets set by the central bank. To ease upward pressure on the yuan from the surging trade surplus and strong capital inflows, the authorities allowed the currency to appreciate by 2.4% against the US dollar between July and December, a little faster than 0.9% in the first 6 months.

In 2007, the PRC's economic growth is projected to moderate to 10.0%. Growth of industry is forecast to edge down by about 1 percentage point to 11.0% because of significant oversupply in some sectors; slower growth in investment as a result of tightening measures; and easing export growth as external markets weaken a little. Agriculture is expected to benefit from a new official emphasis on rural development and services from higher incomes, both of which should maintain growth in private consumption.

Responding to various restrictions, especially those targeted at energy use and pollution, and others curbing property speculation, fixed investment growth is forecast to decelerate to 20%. The softening in export markets and a reduction in PRC tax rebates for exports are expected to reduce the growth of merchandise exports to 18% in 2007. Import growth will ease to about 18% as investment decelerates. The large export base and the moderation in import growth suggest that the trade surplus in goods will climb to about \$257 billion by 2008, and the

current account surplus will increase further. Inflation will likely stay below 2% in 2007. Over the next 5 years, GDP growth is expected to average about 9%.

### *Hong Kong, China*

This economy grew robustly by 6.8% in 2006, a third successive year of above-trend growth, though the rate decelerated from the previous 2 years. Domestic and external demand supported this performance. Closer links with the booming PRC benefited the economy in several ways: most importantly through reexports of PRC goods, and through now-substantial financial services exports to the PRC. (Services account for more than 90% of the economy's GDP.) In 2007, GDP growth is projected to come down to 5.4%, given the expected slowing in the PRC and US economies. Consumer spending is expected to strengthen on the back of generous budget givebacks announced in early 2007. Inflation is seen easing from 2.0% to 1.6% in 2007 as budget initiatives exert downward pressure on prices.

### *Republic of Korea*

Growth accelerated to 5.0% in 2006, the fastest rate in 4 years. It was spurred by a recovery in domestic demand and strong exports, though momentum slowed over the course of the year. Private consumption posted the best rate of expansion since the credit-card crisis of 2003. The recovery broadened with a pickup in capital investment as companies invested in machinery and equipment.

This year is likely to see a continued expansion of investment in manufacturing, joined by greater housing investment. Private consumption growth, weighed down by high levels of household debt, is expected to continue, albeit at a moderate pace. However, growth in exports will ease as a consequence of the slowdown in the US. Rapidly rising imports, driven in part by demand for overseas travel and education, will halve the contribution of net exports to growth. The economy is forecast to grow by 4.5% this year, a half percentage point down from 2006. Inflation will inch up to 2.4% from 2.2%, reflecting the strengthening domestic demand.

### *Mongolia*

This narrowly based economy depends heavily on agriculture and mining. But as the winter was mild and copper and gold prices were high in 2006, the economy performed well. GDP growth rose to 8.4%, marking the fourth straight year of 6%-plus expansion. Growth is forecast to decelerate in 2007, since mineral prices are expected to stabilize, the rate of economic expansion in the PRC (Mongolia's main export market) will be tempered, and livestock growth rates will likely slow. Inflation, which often runs at relatively high levels in this economy, receded to just over 5% in 2006, but will come in a bit higher in 2007.

### *Taipei, China*

On the back of stronger exports, the economy accelerated in 2006, recording growth of 4.6%. Exports of optical equipment, electronics, and machinery gained from the stronger international trade environment.

Domestic demand was subdued for most of the year, damped by a tightening of consumer credit that followed the bursting of a credit-card bubble in late 2005. This year, consumption and investment demand are expected to pick up, cushioning the economy from an expected slowdown in external demand. On balance, that will leave GDP growth slightly below last year's pace, at 4.3%. Inflation will remain at low levels (1.6% in 2007 compared with just 0.6% in 2006).

### Development challenges

East Asia faces various challenges. In the PRC, concerned that rapid industrial and export-led growth has caused imbalances in the economy, the authorities aim to rebalance the economic structure. This will involve, on the demand side, reducing reliance on investment and exports for growth in favor of private consumption, and on the production side, a shift from industry-led growth to more emphasis on services. Planners view economic rebalancing as a social, as well as economic, objective. This policy has evolved over several years, but progress is slight: the dependence of growth on external demand is still high; the surge in investment and commercial bank lending has not yet been brought under control; and the share of gross capital formation in expenditure-based GDP rose in 2006, while that of consumption fell. Furthermore, the share of services in total GDP remains low, and actually declined in 2006. Environmental protection targets were not met, either.

On social metrics, income inequalities in the PRC have worsened and unemployment and underemployment have become serious concerns for policy makers. The Government is trying to steer policies in directions that will gradually achieve a rebalancing, while maintaining high enough rates of economic growth to absorb large numbers of people moving to the cities in search of higher living standards.

Korea faces the challenge of raising services productivity, since lagging productivity is holding back improvements in the labor market and damping consumption growth. This reflects, in part, incomplete structural reforms in services and, more broadly, in the labor market.

For its part, Taipei,China needs to nurture new sources of economic growth, given that much of its labor-intensive manufacturing has migrated to the PRC. Services firms in Taipei,China are mainly oriented toward the domestic market. The challenge is for manufacturers to move further up the value chain and for services firms to turn outward for expansion.

One challenge facing Hong Kong, China is how to broaden the tax base. It must also attend to environmental issues and an aging population. Perhaps the biggest test is to maintain the high institutional standards that support its financial services industry at a time when these services are increasingly tied to mainland companies that have operated according to different standards.

Mongolia, at an earlier stage of development than the other economies, still confronts a poverty incidence estimated at nearly one third. An important challenge is to use government revenues from mineral resources to set the country on a sustainable development path, while addressing social and environmental problems.



## South Asia

### Subregional performance

South Asia's GDP grew by 8.7% in 2006 (Figure 1.3.3), the second year above 8.5%, having averaged more than 7.5% a year growth since 2003. The GDP of nearly every country in the subregion grew at over 6.0% in 2006. India turned in the highest growth rate of 9.2% among the large economies and the Maldives grew at 18.2%, fastest among the small economies. The services sector contributed most to growth in South Asia, but industry sector growth accelerated in India and Bangladesh, buttressing the sustainability of high growth rates in the future. High levels of consumption and investment boosted growth rates. Domestic demand expanded because of rising incomes, credit expansion, and strong workers' remittances. World economic expansion kept external demand strong fostering export growth, while an improved business climate attracted increased domestic private investment and foreign direct and portfolio investment, both reaching the highest historical levels in the large economies.

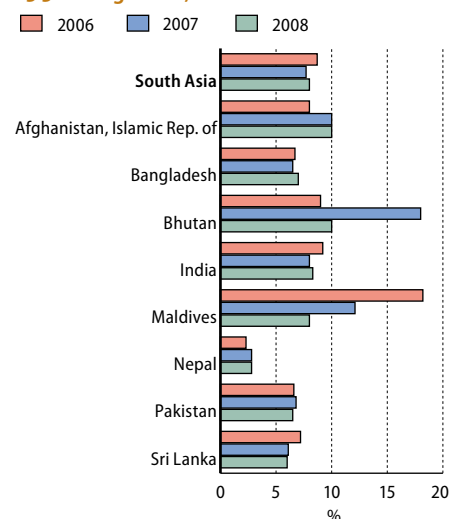
Demand pressures and high world oil and commodity prices led to an increase in the subregion's inflation rate to 6.0% in 2006. Inflation picked up in Bangladesh, India, and Nepal, but came down in Pakistan and Sri Lanka (though from much higher levels). Despite several central banks' monetary policy measures that increased nominal interest rates to tighten liquidity, rising inflation rates kept real interest rates low. Simultaneously, government budget deficits remained at elevated levels to reinforce credit expansion, partly because of the increased subsidy to buffer rising oil prices, reconstruction efforts following natural disasters, and high development expenditures.

South Asia's current account deficit increased marginally in 2006 to 2.1% of GDP. Although merchandise exports grew at a robust rate of 18.8%, imports grew at an even higher rate of 24.9%, induced by domestic demand pressures and high world commodity prices. Exports of services and the surge in workers' remittances brought the current account to a narrow deficit. The subregion's foreign exchange reserves increased because of large net capital inflows. Real effective exchange rates remained stable.

### Subregional prospects

Economic growth in developed countries is expected to slow in 2007 and stage a modest recovery in 2008. The world price of oil and other commodities is likely to fall. With this backdrop, South Asia's prospects still remain bright due to strong domestic demand and investment. Nevertheless, regional economic performance is likely to modulate in step with developed-country trends, though at robust levels of GDP growth of 7.7% in 2007, rising to 8.0% in 2008. Larger countries in the subregion are forecast to maintain high rates of growth, with India averaging about 8% a year and Pakistan and Bangladesh around 7% a year over the next 2 years. GDP growth in the smaller countries over the same period is likely to be varied, ranging from yearly average growth rates of 14% in Bhutan to 3% in Nepal. The services sector is anticipated to lead economic growth, backed by accelerated growth in manufacturing.

1.3.3 GDP growth, South Asia



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

Monetary policy measures taken in 2006 by several countries are likely to curb credit growth to the private sector for consumption and investment, reinforcing sluggish demand from developed countries. Moreover, improving fiscal balances resulting from increased tax revenues and lower subsidies to buffer high oil prices are also expected to rein in credit growth to the public sector. These developments will probably dampen the pace of economic growth and reduce the subregion's rate of inflation to about 5% a year during 2007 and 2008.

Despite the reduction in world commodity prices, South Asia's growth of merchandise imports is likely to outstrip exports because of high regional growth rates and lower demand in developed countries. Vigorous growth in exports of services and workers' remittances is expected to substantially compensate for the trade shortfall, leaving the current account with small deficits of about 2% of GDP for the next 2 years. High growth rates in the subregion will continue to attract large capital flows. Countries are likely to add to their international reserves and maintain stable exchange rates.

## Country highlights

### *Islamic Republic of Afghanistan*

In the licit economy, economic growth slowed to 8.0% in 2006 as agriculture was hit by another drought, while reconstruction-linked construction and services continued to expand. Growth is expected to recover to 10% in 2007, assuming normal rainfall.

The Government continued along its track of solid macroeconomic policy and structural reforms. Yet popular discontent with slow reconstruction, pervasive corruption, as well as sharply deteriorating security, institutional and human resource constraints, a heavy reliance on aid, and a very low domestic revenue base, all remain formidable challenges. As does the impact of opium production, which reached record levels in 2006. Since current, licit, drivers of growth cannot provide sustained growth, creating a private sector enabling environment and diversifying the economy remain crucial tasks.

### *Bangladesh*

At 6% over the past 4 years, strong GDP growth has been underpinned by more market-oriented economic policies, a dynamic garment sector, and substantial inflows of overseas workers' remittances. The lead-up to the parliamentary elections in January 2007 was generally expected to be a rough patch given the country's contentious political environment; the constitutional mechanism of a neutral caretaker government was expected to help smooth the way. Deepening political deadlock culminated with the president in January declaring a state of emergency and calling off the elections.

The new caretaker Government has continued with established economic policies and expedited structural and sector reforms. It has taken a broad agenda of activity, including an extensive anticorruption drive that it sees necessary to establish better foundations for holding the elections. GDP is forecast to maintain its recent momentum and grow by 6.5% in 2007. Inflation, which has trended upward in recent

years, is expected to keep inflation in check at 7% by a tightened monetary policy.

### *Bhutan*

The huge Tala hydropower project started commercial production in July 2006 boosting GDP growth for the year to 9.0%. Tala is forecast to double electricity export capacity, boosting GDP growth to 18% in 2007, raising government revenues significantly and pushing the current account into surplus. This is all highly beneficial, however, the employment elasticity of hydropower is low and has little impact on creating jobs for the many tens of thousands of young people entering the labor market or migrating to urban areas. While some progress has been made, Government policies need to stimulate further greater private sector activity and to diversify the economy.

### *India*

Two years of above-trend growth at around 9% are causing inflation. Optimism over growth prospects has brought high capital inflows and currency appreciation pressure. Manufacturing and construction growth have stimulated a voracious appetite for credit, which in turn complicates attempts to control the money supply.

Agricultural stagnation is the key structural challenge. Rising food prices contribute to inflation. Stagnation also widens inequality, as industry accelerates and services pull on robustly. It also raises pressures to transfer land out of agriculture into industry, and highlights the importance of industrial job creation for growth, labor absorption, and poverty reduction. Yet land transfer from agriculture to industry implies significant worker displacement, and has caused serious social unrest. With inflation high, and serious structural hurdles for the economy to overcome, the Reserve Bank of India finds itself in a precarious position, since it must damp expenditures in the short run, while also ensuring adequate credit supply to promote manufacturing and agricultural investments in the medium term.

However, interest rates have risen, construction growth has already tapered, and the rupee is appreciating slightly. Agricultural planting has responded to rising prices. These trends will help moderate inflation. A soft landing therefore appears likely as growth is expected to decelerate smoothly to 8% in 2007.

### *Maldives*

The economy took a downturn in 2005, largely due to the impact of the December 2004 tsunami but growth rebounded sharply in 2006 as tourist arrivals essentially reached their earlier peak level. However, the Government's expansionary fiscal policy adopted in response to the disaster, building on long-standing structural issues, is worsening the fiscal indicators. This deterioration could threaten long-term prospects. Nevertheless, tourism is expected to expand further in 2007 and growth is projected at 12.1%.

### *Nepal*

Economic growth in 2006 remained hobbled at 2.3% by the long-running

insurgency, political instability, and poor weather. Yet there is now guarded optimism on the political, and thus economic, front, due to major political breakthroughs starting in April 2006. These brought a comprehensive peace agreement that officially ended the 11-year armed insurgency and started a political process that holds promise of peace and a transition to a more productive economy. Nevertheless, the challenges are huge, and include widespread poverty, pervasive social inequality, low economic growth, and the legacy of a quasi-feudal political structure.

### *Pakistan*

Buoyant growth, improved macroeconomic fundamentals, and strengthened international credit ratings have been the economy's hallmarks in recent years. In 2006, high oil prices, a weak agricultural performance, as well as the effect of the October 2005 earthquake, trimmed the expansion to 6.6%, while strong demand-side pressures have exposed macroeconomic stresses.

The economy is expected to pick up slightly in 2007 to grow by 6.8%, reflecting some strengthening in agriculture and manufacturing. Inflation is set to moderate to 7.0% (from 7.9% a year earlier), after a further tightening of monetary policy, but still come in above the central bank's target (6.5%). Spurred by an expansionary, pro-growth fiscal policy, the budget deficit will widen slightly (to 4.5% of GDP), as will the current account deficit (also to 4.5% of GDP). The medium-term outlook remains positive, but macroeconomic stability has to be maintained and structural issues addressed.

### *Sri Lanka*

Despite resurgence of the civil conflict, the impact of the Asian tsunami, and near doubling of oil prices since 2004, the economy in 2006 grew at 7.2%, its fastest rate since 1978. This strength was fueled by buoyant private activity and expansionary macroeconomic policies that, though, accelerated Colombo consumer price inflation to 20.5% by January 2007. Growth is forecast to moderate to 6% over the next 2 years, given the conflict, slow pace of structural reform, and need to cool the economy. Further out, if the fiscal consolidation and increased investment envisaged in the new 10-year development framework are achieved, growth is expected to pick up substantially.

### **Development challenges**

South Asia's recent economic performance shows it can match East Asia's growth rates. To sustain this accelerated growth, the subregion faces challenges and opportunities at global, regional, and country levels. Although the world price of oil is expected to decline somewhat with the slowdown of the US and EU economies, it may not happen because of political developments in the Middle East. The earlier oil price hike hit South Asian economies hard, imposing a burden of about 20% of export earnings. Moreover, governments shielded their economies from the full impact of rising prices with subsidies, which are unsustainable. South Asia needs to develop an energy policy aimed at reducing demand, supporting the expansion of local energy supplies, and developing

regional distribution networks that allow cost-effective transfers of power and gas among countries.

Growing global payments imbalances pose a risk to South Asia as a disruptive correction could abruptly check capital flows, increasing the cost of funds, and possibly deflating the ballooning asset prices in the subregion. To buffer such an eventuality, reforms of the subregion's financial systems, which started in the early 1990s, must continue apace, especially in the inefficient public sector banks that still predominate in several countries.

The incomplete pass-through of oil prices implies that inflationary tendencies remain suppressed throughout the subregion. If domestic demand pressures are not successfully checked by tightening monetary and fiscal policies, inflation and the current account deficits could rise to acute levels. Macroeconomic policies therefore have to be carefully crafted to sustain economic growth and maintain price stability to insure the regional economies a soft landing.

Moreover, the structural policy reforms that have spurred recent private sector-led growth should continue with emphasis on reducing barriers to employment growth that would alleviate poverty. In South Asia, the agriculture sector provides the most employment, but falling levels of public investment, deterioration in support services and inappropriate output pricing, marketing and subsidy policies in several countries have led to erratic performance.

As industrial growth is picking up, policies that improve the business climate and infrastructure are needed to sustain that accelerated pace. Despite recent liberalization policies, South Asia's regulations for industry, trade, labor, finance and taxes are limiting its growth and employment potential. A recent analysis concluded that improving these regulations to the level of Thailand would generate additional GDP growth of 0.8% in Bangladesh and Pakistan, and 1.6% in India. Electricity, water, road, rail, airports, and port services are poor throughout the subregion. Improvements within every country and in intraregional connections would yield substantial dividends by reducing costs of production and trade.

India accounts for 80% of South Asia's GDP, and so its accelerated growth can benefit the subregion by policies to integrate regional economies. South Asia has not done well in integrating with the rest of the world and, although steps for regional integration have been taken, the subregion is still far behind Southeast Asia on both counts, achieving only about one fourth of its total trade to GDP and intraregional trade penetration levels.

Through integration, enhancing efficiency and improving product quality offers immense opportunities for sustaining rapid growth and reducing poverty. As India shares borders with most South Asian countries, it could be the hub for expanded trade and investment for goods and services in the subregion. Obstacles to intraregional trade remain high, but can be overcome by following the example of the ASEAN group of countries, which eliminated nontariff barriers, reduced tariffs, and simplified and harmonized customs procedures.

## Southeast Asia

### Subregional performance

The economies of Southeast Asia expanded by 6.0% in aggregate in 2006 (Figure 1.3.4), above the average growth of the previous 5 years. Most countries grew at a faster rate than in 2005, reflecting strong external demand, supportive monetary conditions, and for some, the beneficial impact on agriculture of favorable weather conditions for most of the year.

For the subregion, export growth accelerated to nearly 18% in nominal terms, with exports from Cambodia, Lao People's Democratic Republic (Lao PDR), and Viet Nam rising at faster rates than this. Exports from several economies were boosted by the upturn in global demand for electronics (Malaysia, Philippines, Singapore, and Thailand), others from high prices for oil or natural gas exports (Indonesia, Malaysia, Myanmar, and Viet Nam), and many gained from high prices of agricultural commodities, such as natural rubber and palm oil. Agricultural production also benefited from favorable weather conditions, although floods and typhoons had an adverse impact for parts of the year in Philippines, Thailand, and Viet Nam.

Economic growth in general was supported by ample domestic liquidity, reflecting buoyant inflows from the external balance of payments. Central banks' accommodative monetary policies also kept liquidity flush in several countries. Fiscal policy was more mixed: the general bias was to maintain fiscal consolidation, even if some governments began to shift more of their budgets to development expenditures.

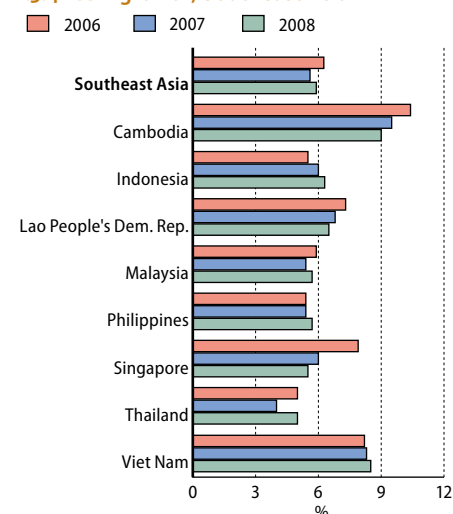
As exports surged, current accounts strengthened across the subregion. Furthermore, investment was weak in Indonesia, Philippines, and Thailand, which moderated growth of imports. Southeast Asian inflation averaged 7.1% in 2006, up from 6.3% the previous year. The average was raised by high 13.1% inflation in Indonesia—the biggest economy in Southeast Asia—which saw price pressures surge from late 2005 when the Government reduced subsidies on fuel.

### Subregional prospects

Growth is projected to slow modestly to 5.6% in 2007, primarily reflecting the likely softening in some major export markets. Only in Indonesia and Viet Nam is growth projected to be higher this year. Inflationary pressures are forecast to subside significantly (to average 4.2%) on the expectation of a moderation in world fuel prices and appreciation of subregional currencies.

The aggregate current account balance for the subregion as a whole is projected to deteriorate slightly. The deceleration in growth of global trade and the expected easing of some commodity prices will contribute to lower export growth. Imports are likely to record a solid expansion despite the expected decline in world fuel prices, as investment is set to pick up, especially in Indonesia. Continued buoyancy of remittances from overseas workers and in tourism receipts should provide support to current accounts in several countries.

1.3.4 GDP growth, Southeast Asia



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)



## Country highlights

### *Cambodia*

Consolidating rapid growth over the previous 2 years, the economy expanded strongly by 10.4% in 2006, reflecting strong clothing exports, tourism receipts, and construction activity. Forecast growth averaging just over 9% in the next 2 years will be more dependent on strengthened domestic economic activity, itself underpinned by improved rural incomes, larger inflows of FDI, and greater government capital spending.

### *Indonesia*

Moderate economic growth of 5.5% last year was based on private consumption and exports, while fixed investment growth dwindled. Inflation eased from high levels as the year progressed, enabling a reduction in interest rates. Economic growth is expected to pick up by a half percentage point in 2007, supported by greater development spending and some improvement in the poor investment climate. If the Government can accelerate reforms, it could pave the way for a significant lift in investment and a boost in growth, which in turn would make headway in job creation and poverty reduction.

### *Lao People's Democratic Republic*

Foreign investment in hydropower and mining, together with rising exports of minerals in 2006, continued to drive double-digit expansion in industry, the major contributor to the GDP growth rate of 7.3%. Inflation slowed to levels not seen for 12 years. Economic growth is projected to decelerate moderately this year to 6.8%, mainly because export markets and mineral prices will not be as strong as in 2006.

### *Malaysia*

Consumption spending produced a pickup in growth to 5.9% in 2006. Private and public investment also strengthened with support from the Ninth Malaysia Plan. Growth is projected to slow by about a half percentage point in 2007 as export markets soften and both household spending and private investment decelerate. Higher government investment is expected over the Ninth Plan period as the Government encourages firms to climb the value chain, but constraints such as gaps in skills will need to be overcome for private investment to increase substantially.

### *Myanmar*

High prices for natural gas exports and a good harvest led to a modest pickup in economic activity. But macroeconomic stability remains elusive with monetized fiscal deficits feeding high inflation, which returned to double-digit levels and could go higher.

### *Philippines*

Achievements included another year of moderate economic growth (5.4%), a downtrend in inflation, and stronger fiscal and external positions. This year, still-high levels of remittances and low real interest rates, as well as greater fiscal expenditures, should keep expansion at around the same level. However, growth has not been strong enough to

lift employment sufficiently, mainly because of a declining investment-to-GDP ratio. Improvements in the investment climate are needed to spur economic expansion, increase employment generation, and provide public resources for social programs.

### *Singapore*

Growth in 2006 hit 7.9%, well above the economy's trend rate for a third year running. External demand was the main driver, although domestic demand, especially investment, also picked up. The pace of growth is expected to decelerate in 2007 to a still-strong but more sustainable rate of 6.0%. Closer links with global economic networks and structural reforms have contributed to the healthy performance, but also led to widening income gaps.

### *Thailand*

Strong exports drove a pickup in economic growth to 5.0% last year, since domestic demand was damped by several factors including rising interest rates and inflation in the first half, flooding, and political uncertainties for much of the year. Inflationary pressures eased in the second half of 2006, paving the way for the central bank to start lowering rates early in 2007. Economic growth is projected to slow to 4.0% this year, and the outlook for 2008 depends heavily on elections being held and on the incoming Government providing a clear and credible economic program.

### *Viet Nam*

This economy maintained a rapid rate of growth in 2006, estimated at 8.2% according to the Government. It was supported by robust exports, rising consumption spending, and strong investment. Inflation also stayed high, averaging 7.5%. Membership of the World Trade Organization from January 2007 has added impetus to development and market-oriented reforms. Provided that further progress is made on structural reforms, brisk growth of just over 8% is projected this year and next.

## **Development challenges**

Southeast Asian economies face a number of challenges to sustainable growth, social development, and poverty reduction. While countries across the subregion have improved their fiscal performance, spending on social and physical infrastructure has lagged. In Indonesia, Malaysia, and Thailand, where debt ratios are at manageable levels, fiscal policy has more scope for increased expenditures on social and physical infrastructure. In the Philippines, although progress in fiscal consolidation has been significant, the debt level remains high and, consequently, the shift toward development expenditures is likely to be more gradual.

Recent success in raising revenues as a share of GDP in the Philippines and the smaller economies of Cambodia and the Lao PDR needs to be prolonged to ensure that these governments achieve an adequate level of public spending on development.

Institutional reforms to reduce the costs of doing business and to improve the investment environment remain a challenge in most of

Southeast Asia's economies. Optimism in financial markets is yet to spill over into the real sector in Indonesia and, especially, the Philippines where investment has declined as a share of GDP in the past few years. Key priorities should be improving the provision of infrastructure, chiefly power, water, and transport, including an adequate regulatory framework for private sector participation; reducing the costs of complying with regulations in customs, trade, and (particularly in Indonesia) labor markets; and enhancing the delivery of public services.

Concerns caused by decentralization in Indonesia and political uncertainties in Thailand underscore the importance of ensuring predictable policies on which investors can base long-term decisions. Malaysia and Thailand need to enhance the skills of their workforces to move up the value-added chain in production. In Viet Nam, where investment is high as a share of GDP, the key challenge is to raise the efficiency of capital, with reforms of state-owned enterprises and banks, development of capital markets, and regulations to ensure transparency and accountability.

Among the smaller economies, Cambodia's main challenge is to diversify its sources of growth, given the economy's high dependence on clothing and tourism. Reforms in agriculture, notably in land management, as well as legal and judicial moves to improve the environment for private sector activity, are key priorities.

The discovery of apparently significant oil and gas reserves has raised the prospects of substantial revenues for the Cambodian Government in the medium term. These revenues could provide a much-needed boost to social spending and infrastructure. However, appropriate policies to guard against the "natural resource curse" and to enhance transparency and accountability in the use of these resources need to be put in place. Similar policies are necessary in the Lao PDR and Myanmar, which also benefit from large receipts from natural resources. They, too, have a need to promote the development of agriculture and rural small businesses to lift more people out of poverty.

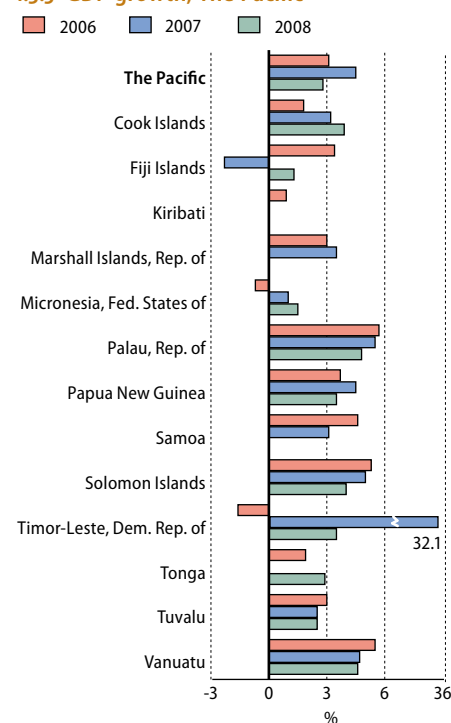
Vulnerability to natural disasters and the rising incidence of communicable diseases, such as avian flu, pose another important challenge to subregional economies. This underscores the importance of building into the planning and budgeting processes precautions to mitigate the effects of natural disasters and to manage them once they occur. Information dissemination and putting in place measures for prompt action are also important to curtail the spread of communicable diseases.

## The Pacific

### Subregional performance

Aggregate economic growth in the Pacific islands was a modest 3.1% in 2006 (Figure 1.3.5), improving from average growth of about 2% over the previous 5 years. Stronger growth in the two biggest Pacific economies—Papua New Guinea and Fiji Islands—lifted the subregional aggregate. In terms of numbers of economies, however, growth picked up in only half of them, and two economies—the Federated States of Micronesia and Timor-Leste—contracted.

1.3.5 GDP growth, The Pacific



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

Where gains in growth were achieved, they mainly reflected contributions from favorable mineral and commodity prices, aid flows, income from fishing license fees and tourism, and receipts from trust funds. High prices for natural gas and oil assisted the energy exporters, Papua New Guinea and Timor-Leste, but also strained the external balances and put upward pressure on inflation in other countries.

The subregional inflation rate accelerated by about 1 percentage point to 3.3%.

### Subregional prospects

Aggregate growth is forecast to rise to 4.5% this year, essentially because Papua New Guinea's expansion will strengthen further while Timor-Leste is projected to rebound from recession. However, the economy of the Fiji Islands is likely to contract in 2007, and growth will slow in about half the Pacific economies. External conditions are mostly favorable, so that tourism receipts, export revenues, remittances, and incomes from trust funds should be reasonable. The outcome for some countries will depend partly on fishing license fees and farm production, which are affected by weather conditions.

In a subregion where the climate for private sector development is generally unfavorable, countries that create more hospitable conditions for the creation of small and medium businesses are likely to be rewarded with stronger performances in growth and employment generation. Subregional inflation in 2007 is forecast to edge higher to 3.5%.

### Country highlights

#### *Fiji Islands*

Growth rebounded to 3.4% in 2006 because of a pickup in sugar production, expansion in construction, and growth in services stimulated by consumption demand. However, exports were weak and the current account deficit widened, placing pressure on foreign reserves. The country's gold mine closed late in the year. Even before the Government was removed from office by a military coup in December, the outlook for 2007 was a concern because fiscal pressures required a reining-in of the public sector. After the coup, several donors suspended most new aid proposals. Tourist arrivals are expected to fall. Recession is now forecast for this year, followed by a modest recovery.

#### *Papua New Guinea*

Rising global prices for export commodities and strong supply responses from the agriculture and minerals sectors lifted economic growth to 3.7% in 2006. Formal private sector employment rose by nearly 5%. The outlook is for faster expansion of 4.5% this year, based on stronger mineral production and construction activity. The agriculture, forestry, and fisheries sectors are also expanding, which benefits a broad span of the population, given that the minerals sector is not labor intensive. Inflation is expected to remain moderate at about 3%, if sound fiscal and monetary policies remain in place. Moving to higher levels of growth requires the resolution of problems of law and order, poor infrastructure, and inadequate service delivery.

### *Democratic Republic of Timor-Leste*

Revenues from oil and gas surged in 2006, increasing the national petroleum fund and foreign reserves. However, non-oil GDP is estimated to have contracted, after an extended outbreak of civil unrest. A sharp rebound in non-oil GDP is projected this year, based on increased spending by the Government and by international personnel deployed in the country for peacekeeping and to assist in elections. Growth could get a further boost from additional funding for infrastructure from the United States Millennium Challenge Account. This will also require an improvement in the public sector's ability to execute budget projects.

### *Small Pacific countries*

Republic of Palau, Samoa, Solomon Islands, and Vanuatu recorded relatively high growth in the range of 4.6–5.7% last year. Palau's high growth was supported by tourism and donor-funded large capital projects. In Samoa, expansion was led by construction and services, buttressed by remittances. Solomon Islands overcame the impact of civil unrest to record stronger growth. Log production, fisheries, and palm oil contributed. Vanuatu's expansion was supported by tourism-related services. These four economies are forecast to register slightly lower growth rates in 2007.

The Republic of Marshall Islands and Tuvalu grew by 3.0% last year. In the Marshall Islands, the United States Compact grant was the main source of income, and much of it went into infrastructure and public sector employment. The Tuvalu economy was bolstered both by increased public expenditures on higher inflows of aid, and by remittances and offshore earnings.

The Cook Islands and Tonga experienced disappointing 2006 growth of just under 2%. Lower production in agriculture and a decline in construction hurt the Cook Islands, but the economy will pick up in 2007. Tonga was weakened by a poor season for the squash crop, slower construction activity, and civil unrest late in the year. In 2007, Tonga's economy is expected to be flat, as reductions in the public service and damage caused by the unrest are offset by the start of urban reconstruction. Nauru's economy is forecast to contract this year because of public sector cuts. In the Federated States of Micronesia, economic activity contracted last year partly because aid was reduced, but a resumption of growth, at low levels, is forecast for this year. Growth in Kiribati, which depends heavily on Government spending, faded to less than 1% in 2006.

### *Civil unrest*

Last year will be remembered in the Pacific islands for outbreaks of civil and political unrest. The underlying causes—including high levels of youth unemployment—in most cases remain to be addressed.

The first civil unrest for 2006 broke out in Solomon Islands. Following general elections in April, riots erupted in the capital, Honiara, in reaction to the announcement of the new prime minister. Serious damage to property was sustained in the Chinatown area. The Regional Assistance Mission to Solomon Islands, established in 2003 as a Pacific Islands Forum initiative, was reinforced with police and army personnel,

and law and order was quickly restored. Subsequently, the military component of the Regional Assistance Mission was scaled down and urban reconstruction commenced. In Timor-Leste, civil unrest began in the capital Dili in April and continued for some months. About 2,200 houses were burned. The Government requested external assistance and more than 2,000 international personnel were deployed. This restored a degree of stability.

In the Fiji Islands, tensions between the Government and the military became evident by October. The open threat of a coup by the military caused international concern. Australia and New Zealand made evacuation plans for their citizens. On 5 December, the Government was removed in a coup led by the military commander, who subsequently presided over the establishment of an interim government. Several donor countries suspended most new aid proposals.

In Tonga, a pro-democracy demonstration in November sparked a riot that led to burning and looting of many businesses in the capital Nuku'alofa, and the loss of life. Again, law and order was quickly restored with external assistance. But in Tonga, and more generally in most countries that experience such civil unrest, political and social divisions usually deepen, and business confidence is undermined.

The impacts are being felt differently in the affected countries, and the speed of recovery will be varied. In general, countries with mineral resources and sufficient foreign reserves are better insulated from the adverse impacts. Solomon Islands and Timor-Leste fall into this category. Fiji Islands and Tonga face more severe fiscal constraints and some of their industries are in decline. Any continuance of unrest could severely affect such economies, particularly impacting key income-generating sectors, such as tourism and foreign investment.

### Development challenges

The challenge for the majority of the Pacific island governments is to facilitate private sector-led and more self-reliant economies that can generate employment. Constraints to private development include governance problems, policy uncertainty, investment restrictions, and traditional communal land ownership.

Regional initiatives like the Pacific Plan, approved in October 2005 and endorsed by 13 Pacific island governments, will support development objectives of the national authorities. The Pacific Plan pursues the goals of sustainable development, economic growth, and good governance, and an action plan has been formulated to achieve these goals. However, the subregion is struggling to implement many of the proposals, partly because of limited public service capacities.

There is a risk that countries with mineral resources come to depend on incomes from exporting those resources, and neglect sectors such as agriculture and small and medium business development. Global prices for energy and minerals are not guaranteed to remain at high levels. Moreover, resources are depleted over time. Sustained growth cannot be based solely on exports of minerals. Implementing structural reforms, sustainable fiscal policies, and prudent monetary policy will be necessary to facilitate faster economic growth and to generate employment.



# Ten years after the crisis: The facts about investment and growth

## Introduction

Ten years have passed since Asia's twin currency and banking crises. In many ways, an air of normality has returned. Per capita incomes in the crisis economies now surpass their precrisis peaks, social indicators are improving, and the region is again enjoying growth that is the envy of many parts of the developing world (Figure 1.4.1).

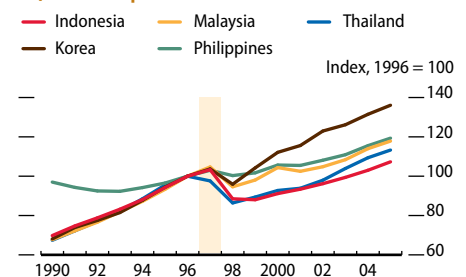
But despite welcome recovery, the effect of the crisis has not been completely erased. Growth has settled on a lower trajectory. Comparing the period 2000–2006 with 1990–1996, growth has slipped by an average of 2.5% a year in the five countries that were most directly affected (Indonesia, Korea, Malaysia, Philippines, and Thailand). The persistence of such a gap implies large permanent losses of income compared with precrisis trends. Indeed, if the impacts of the crisis on income levels are to prove transitory, a period of faster than “normal” growth would be required to compensate for the output “lost” during the crisis years.

An important question, then, is what explains the slowing of output growth: Is the deceleration simply an artifact of the precrisis boom and a shift to something more sustainable? Or is it symptomatic of deeper constraints that may be preventing output from matching its potential? This chapter of the *Asian Development Outlook 2007* looks more closely at these questions by examining the experiences of the five countries that were in the front line of the crisis.

Data on the evolution of growth in the five crisis countries are presented in the next section, *Has the crisis slowed growth?* These confirm that “trend” growth has fallen relative to precrisis “norms.” A growth accounting framework is then used to dissect growth in the third section, *Proximate causes of slower growth.* In only two of the five countries has there been a slowing in the rate of growth of employment and the impact of this on GDP growth has probably been quite small. A sharp deceleration in the rate of fixed capital formation, particularly by the private sector, is likely to have had a more pronounced impact on output growth. On a number of measures, investment rates now seem “too low.”

In the following section, *Why investment has tumbled*, possible reasons for the decline in investment are aired. Some of the factors that held investment back immediately following the crisis have receded. For example, it seems unlikely that financing constraints are important or that there is still significant underutilized capacity. Likewise, the idea that investment has been redirected from the crisis countries to competitive

1.4.1 Per capita GDP



Source: World Bank, *World Development Indicators* online database, downloaded 12 February 2007.

[Click here for figure data](#)

export platforms in the People's Republic of China (PRC) and Viet Nam does not bear closer scrutiny.

Another idea is that “optimal” investment rates have come down. In the precrisis period, countries relied too heavily on investment for growth, and to a significant extent investment spending was wasted (see, e.g., Crafts 1999). But as a result of extensive policy and institutional reforms, saving is possibly now being allocated more efficiently, generating faster growth for a given investment rate. Although it is possible that the “optimal” investment rate is lower, this would not explain why output growth as well as investment is in a lower gear.

Perhaps the crisis has shaken beliefs about the ability of countries to sustain growth over the long term? Certainly, governments have lowered their ambitions on growth (as outlined in various planning documents) and, through rapid reserves accumulation, have revealed strong precautionary instincts. Likewise, private sector investors, rattled by losses and allergic to risks, and perhaps taking their cue from government, may have scaled back on what once would have been considered viable projects. There is also evidence to suggest that private investors have been busy fortifying their financial defenses by reallocating surpluses from “hard” investments to capital reserves and other liquid assets.

As expectations and confidence can exercise a decisive impact on behavior and outcomes, the penultimate section, *Risk, uncertainty, and investment behavior*, asks whether there is any evidence to support the idea that perceptions of uncertainty and risk have increased.

The last section presents conclusions, and suggests that the challenge of lifting investment and investor confidence lies in lighter but more effective regulation, improved governance, exposing sheltered activities to more competition, and building modern and efficient financial systems.

## Has the crisis slowed growth?

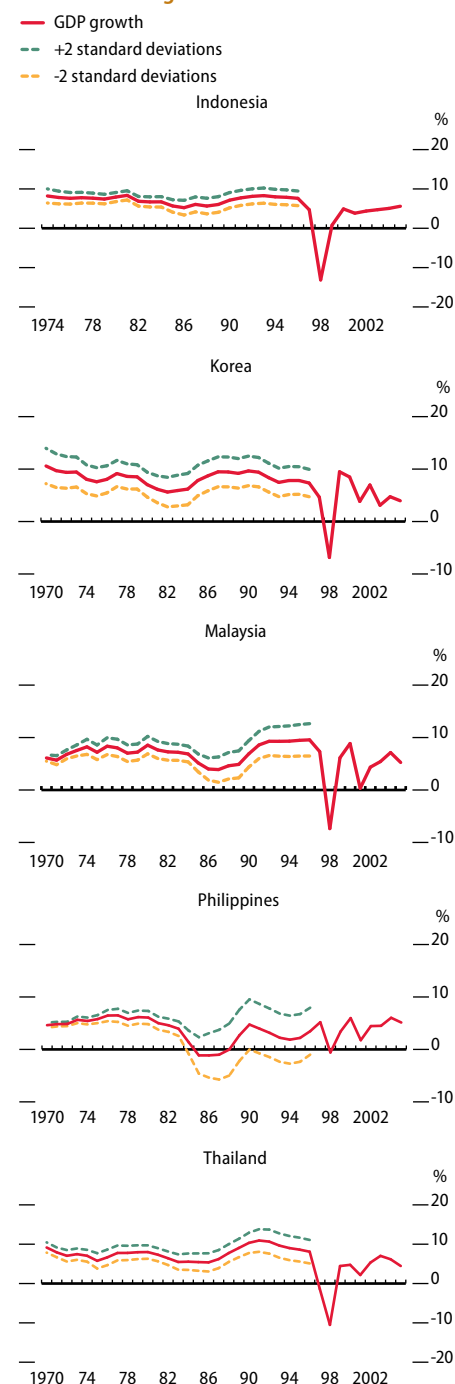
To answer this question, GDP growth rates are compared before and after that watershed. Trend growth in any precrisis year is defined as the unweighted average of annual year-on-year growth for the current and past 4 years. A 5-year average is a rather basic indicator of a trend, but is readily interpretable and transparent.

Estimated precrisis trends are shown in the panels of Figure 1.4.2. The trends are bounded by intervals that are two standard deviations wide. The intervals around trend growth provide an indication of the volatility of growth in the sample period, with wide intervals signifying greater volatility.

For the period 1997–2005, the graphs show actual growth rates, not trend rates. The reason is that it is difficult to identify a postcrisis trend that filters out the violent changes in growth that occurred during the crisis. Nevertheless, the graphs allow an informal judgment about whether the postcrisis experience “fits” with observed trends prior to the crisis.

In Indonesia, growth in each year from 2000 to 2005 is uniformly lower than estimated trends dating back to 1987. If 1986 is excluded, observed postcrisis growth rates are lower than trend estimates dating back to the early 1970s. Growth rates from 2000 to 2005 are also two or more standard deviations below the estimated trends in each year from

### 1.4.2 Precrisis trends and postcrisis realizations of growth



Note: All trends and standard deviations are calculated beginning in 1965, except Indonesia, where a 1970 base is used to eliminate the impacts of the economic dislocation that occurred in the mid-1960s.

Source: World Bank, *World Development Indicators* online database, downloaded 12 February 2007.

[Click here for figure data](#)

1991 to 1996. These comparisons suggest that Indonesia's postcrisis growth experience does not readily fit with the precrisis pattern.

The evolution of Korea's growth rate is somewhat more complicated. Indeed, as a country whose per capita income is approaching that of rich countries in North America and Europe, and whose economic structure is maturing, Korea's potential growth rate would in any case be expected to moderate gradually. Perhaps there is some evidence of this in the data spanning the late 1980s and first part of the 1990s.

Also, unlike the other countries, Korea's growth bounced back quickly after the dislocation of the crisis, exceeding earlier norms. But since 2001, growth has drifted down. In 4 out of the 5 years from 2001 to 2005, annual growth was less than 5%. The last such episode of relatively slow growth was in the mid-1960s. On this metric, postcrisis growth does not fit the precrisis experience, but slowing most probably reflects lower potential at elevated income levels.

The data for Malaysia are similar to those for Indonesia. Even peak postcrisis growth in Malaysia is lower than estimated trends going back to 1992, and for most years it is far below trend. Much the same is true if the comparison is with the 1970s and the early 1980s. The apparent similarity with the mid-1980s is because the Malaysian economy contracted in 1985. So far, there is little evidence of postcrisis growth rates trending up.

Historically, growth in the Philippines has languished, buffeted by political and other shocks. Not only was there little evidence of "exuberance" in the Philippines prior to the crisis, the impact of the crisis on growth (if not the exchange rate) was delayed until 1998. And the resulting contraction was not in any sense unusual. The Philippine economy had shrunk in the mid-1980s and again in the early 1990s. Even in its more stable periods, per capita growth has only occasionally exceeded 3% a year. In recent times, the Philippines has, albeit with some undulations, reestablished growth rates comparable with the averages of the 1970s.

Two factors complicate an assessment of whether Thailand's postcrisis growth experience "fits" the precrisis pattern. First, trend growth was actually decelerating through the 1990s, after double-digit expansion in the late 1980s. Second, actual growth dipped in 1996, not in 1997 (or 1998) as in the other crisis countries. Thailand was first into the crisis, but not first out. If the growth acceleration of the late 1980s and the steady (though slowing) growth of the 1990s are seen as an aberration, then the postcrisis experience is similar to the 1970s, when Thailand expanded at a leisurely pace. But a reversion to 1970s' norms is probably not a relevant benchmark for gauging recovery. Judged against more contemporary experience, Thailand's postcrisis growth record has been ordinary.

The conclusions suggested by this simple descriptive approach are broadly supported by more sophisticated statistical methods. Using Bai-Perron tests, Jones and Olken (2005) identify growth decelerations for Thailand in 1995 and Indonesia in 1996, but no evidence of the subsequent accelerations that would be needed to restore precrisis trends. Berg et al. (2006), following a similar strategy, detect structural slowing in Korea in 1996 and in Thailand in 1995. In the case of Thailand, the slowdown is followed by an acceleration in 2000, but no acceleration is found for Korea. Finally, Cerra and Saxena (2005) conclude that there is evidence

of permanent output losses in the crisis countries, which have not been compensated by higher than “normal” growth rates.

Ten years on, it would seem that the crisis has had a lasting impact on output levels and, possibly, on growth rates too. But it would be hazardous to extrapolate and suggest that these shifts are permanent. Future trajectories are likely to be shaped by a variety of institutional and policy factors. Also, as Korea’s experience illustrates, there are other forces that pull growth and output levels. Indeed, had the crisis not occurred, investment and growth rates in Korea would probably have decelerated of their own volition.

## Proximate causes of slower growth

One way of dissecting growth is to identify how changes in the application of labor, human capital, physical capital, and technology have influenced its path. Changes in output growth can occur only if there has been a change in one or more of these components.

### Employment

Figure 1.4.3 shows average growth of the labor force and employment for the periods 1990–1995 and 2000–2005. In all countries but Thailand, the growth of the labor force slowed between the pre- and postcrisis periods. In the Philippines and Thailand, the growth of employment accelerated between the two periods, barely changed in Indonesia, and slowed in Korea and Malaysia.

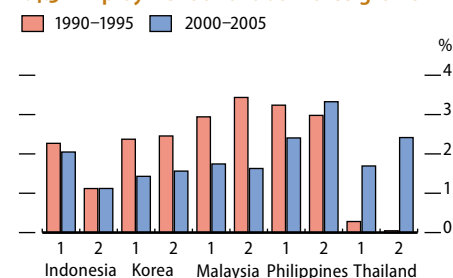
Clearly, this mixed picture cannot explain a general trend of slowing growth. Estimated labor shares in national income tend to be quite low in the crisis countries (some as low as 0.35). Taken at face value, a low labor share suggests that it would take quite large changes in employment or labor force growth to move growth rates by the observed magnitudes. Malaysia is the country where employment and labor force growth change most between the pre- and postcrisis periods: the rate of employment growth drops by 1.8 percentage points. This possibly could account for anything in the range of 0.7–0.9 percentage points of GDP growth a year, depending on the true labor share.

In the other countries, imputations would give much lower impacts, and in the Philippines and Thailand would suggest accelerating rather than slowing GDP growth. But unraveling causality is not straightforward. Labor force participation rates (and of course employment) are sensitive to economic conditions, which in turn will be influenced by growth and policies. In Malaysia, for example, where effects seem big, the gap between employment and labor force growth rates has, possibly, been influenced by policies on temporary workers and immigration.

### Human capital

Measuring the quality of labor is fraught with difficulty. Estimates of average years of education or educational attainments do not capture critical factors linked to quality (see the chapter *Education and structural change in four Asian countries*, also in Part 1). Leaving this shortcoming to one side, attempts to estimate the contribution of human capital to

1.4.3 Employment and labor force growth



1 = labor force; 2 = employment.

Sources: CEIC Data Company Ltd.; Bank of Thailand, available: [www.bot.or.th](http://www.bot.or.th); both downloaded 6 March 2007.

[Click here for figure data](#)

growth using growth accounting methods have come up with estimates that are generally quite small (Young 1995, Collins and Bosworth 1996). If these estimates are considered reliable, it would require an implausibly abrupt slowing of human capital accumulation, or even reversals, to account for the shifts in aggregate growth that have been observed in the crisis countries. Human capital's impact on the deceleration in growth is unlikely to have been big.

### Productivity growth

Technological progress is usually measured by growth in total factor productivity (TFP). TFP growth captures how much additional output can be generated for a given set of labor, human capital, and physical capital inputs. It is well known that estimates of TFP growth require a large number of assumptions and that they can be contaminated by errors in measurement of other inputs. For these reasons, TFP estimates should be considered with caution. Even for the same countries over the same time period, estimates of TFP growth often vary widely (see, e.g., Crafts 1999).

At an aggregate level, the effect of the crisis on TFP growth is likely to have been negative. There are at least two reasons for this. First, given significant fixed costs of capital investment and of hiring and firing of workers, it is likely that firms initially adjusted capacity utilization rates (see *Capacity utilization*, below) and workers' hours in response to lower demand. Second, as workers who lost their jobs moved into informal activity and back to agricultural work, this would have registered in declining aggregate productivity. Estimates of TFP growth by APO (2004) confirm that TFP growth collapsed during the crisis, but also suggest that TFP growth has since reverted to earlier trends (Figure 1.4.4). Taken at face value, these estimates imply that slower technical progress is an unlikely cause of the deceleration of growth.

### Fixed capital

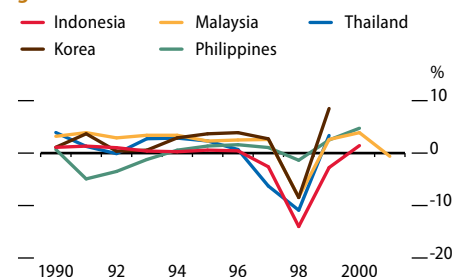
If changes in labor force growth, human capital accumulation, and TFP growth cannot easily account for the observed deceleration of output growth, it follows that capital accumulation has slowed. Slower capital accumulation requires either a lower ratio of fixed investment to output, or a decline in capital productivity, or both.

Figure 1.4.5 plots fixed investment rates. It is clear that investment rates declined steeply in the wake of the crisis. This experience fits with a much broader international pattern in which growth decelerations have been tied with declining investment ratios (Hausmann, Rodrik, and Velasco 2005; Rogers 2003; Attanasio, Picci, and Scorcu 2000). Having fallen, investment ratios have been broadly flat, showing little inclination to return to the levels seen in the precrisis period. In fact, declining capital productivity in Indonesia, Korea, Malaysia, and Thailand would require higher investment rates to deliver the same growth. Only in the Philippines might rising capital productivity have allowed investment rates to come down without pinching growth.

### Summary

In accounting for lower growth in the postcrisis period, it is possible that demographic factors and changes in employment growth play a role, but

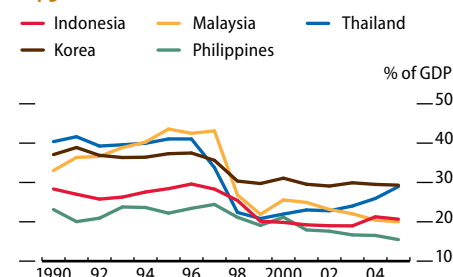
**1.4.4 Evolutions of total factor productivity growth**



Source: Asian Productivity Organization (2004).

[Click here for figure data](#)

**1.4.5 Fixed investment rates**



Source: World Bank, *World Development Indicators* online database, downloaded 12 February 2007.

[Click here for figure data](#)

a minor one and one that is differentiated by country. Changes in the rate of accumulation of human capital or in total factor productivity seem unlikely explanations. In all countries, investment rates have fallen and, except in the Philippines, impacts on growth are unlikely to have been compensated by higher capital productivity. In the next section, possible explanations for the fall in the fixed investment rate are canvassed.

## Why investment has tumbled

### Is investment too low?

Are fixed investment rates too low? If they are, what are the possible explanations for their fall? It may be that elevated investment rates prior to the crisis reflected asset price bubbles and that correction has now brought investment back to realistic levels.

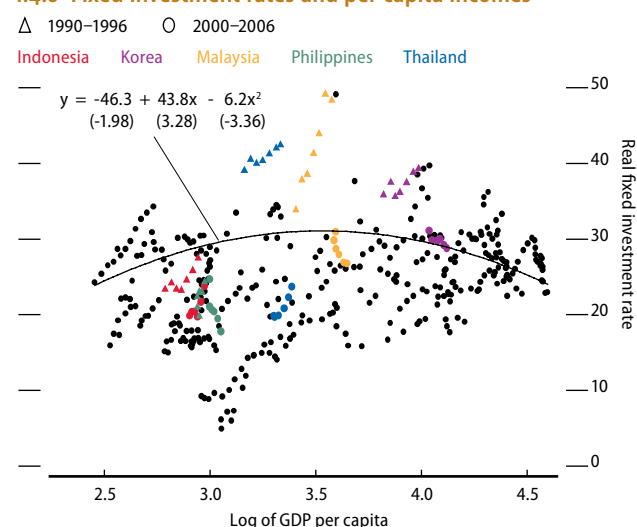
Figure 1.4.6 shows a scatter-plot of investment rates and per capita incomes pooling historical data for East and Southeast Asia. This panel suggests that investment rates follow a quadratic trend, first rising with per capita income and then tapering off. Clearly, there is substantial variation around predicted levels. Hong Kong, China stands out as an economy that grew quickly with comparatively modest investment outlays. At the other end of the scale, the PRC's investment rates are unusually high.

The figure contrasts pre- and postcrisis observations for Indonesia, Korea, Malaysia, Philippines, and Thailand. Controlling for per capita incomes, precrisis investment rates easily exceed their “predicted” levels and, with the exception of Korea, postcrisis investment rates fall below them. Chinn and Ito (2005), Eichengreen (2006), and IMF (2005) all provide evidence pointing to the conclusion that postcrisis investment rates are “too low.” But Korea may be an exception. Its per capita incomes are approaching a level at which investment rates would be expected to drift down naturally, and postcrisis investment rates are not too far from values that would be predicted on the basis of broader experience.

Perhaps the tumble in investment rates can be explained by factors unrelated to, but coincident with, the crisis? Two possibilities merit attention: a fall in the real price of capital goods, and shifts in the composition of output. It is unlikely that falling capital goods prices explain the decline in the investment ratio. Although the real price of capital goods (measured against the GDP deflator) has fallen, this effect has been small (Kramer 2006). Investment rates still drop sharply in the postcrisis period after controlling for changes in relative prices.

The impact of changes in economic structure on the investment ratio is not easy to disentangle. One way to look at the links is through changes in sector contributions to growth, and through changes in incremental capital-output ratios (ICORs). If output shares and growth are shifting toward sectors with low ICORs, this would bring the aggregate investment rate down. But this perspective implies an element

### 1.4.6 Fixed investment rates and per capita incomes



Notes: The trend line was computed using 1990–1996 and 2000–2006 data for the PRC; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Philippines; Singapore; Taipei, China; Thailand; and Viet Nam. The colored triangles and dots identify data for the five countries most affected by the crisis for 1990–1996 and 2000–2006, respectively. The black dots represent data for the remaining years and the rest of the economies.

Sources: World Bank, *World Development Indicators* online database; Taipei, China data were from <http://eng.stat.gov.tw/public/Data/78298434471.xls> and <http://eng.stat.gov.tw/public/Data/782317224771.xls>; both downloaded on 12 February 2007.

[Click here for figure data](#)



investment, not the other way round. Nevertheless, Figure 1.4.7 shows the sector makeup of changes in growth comparing 1990–1996 to 2000–2005.

Comparing growth in the pre- and postcrisis periods, industry and services account for most of the change. Except in Korea and Thailand, agriculture and services add more to growth, buffering the overall negative impact of the crisis. In Indonesia and Malaysia, the contribution of services to growth has overtaken that of industry. The reverse is true for Korea. Services contribution registered the largest increase in the Philippines in the postcrisis period. In Thailand, there were no shifts in the ranking of sector contributions.

It would be difficult to distill from this any general conclusions about the impact that sector shifts may have had on the investment ratio. But in a world where ICORs link changes in output to accumulation, slower growth will of itself lower the investment ratio. If industry has a higher ICOR than either agriculture or services, then growth decelerations in industry will matter most for the investment ratio. Looking at the data through this lens is certainly interesting, but still leaves the puzzle as to why growth rates have fallen overall.

### Public investment

It is also useful to establish the extent to which the decline in fixed investment rates is caused by falling public sector investment. Everhart and Sumlinski (2001) have estimated public and private components of aggregate investment ratios for a number of countries. In this dataset, public investment includes not only the capital spending of central government, but also of state and local governments, as well as capital spending of public enterprises. Figure 1.4.8 shows the percentage-point changes in public sector investment ratios for Indonesia, Korea, Malaysia, Philippines, and Thailand from 1997 to 2000 (the latest available data point). Only in Thailand was there a significant drop in public investment by 2000.

National accounts data for the pre- and postcrisis periods paint a slightly different picture. In Malaysia, public sector investment rates partially compensated for the fall in private investment, but in Thailand, public investment rates also dropped, but by far less than the fall in private investment.

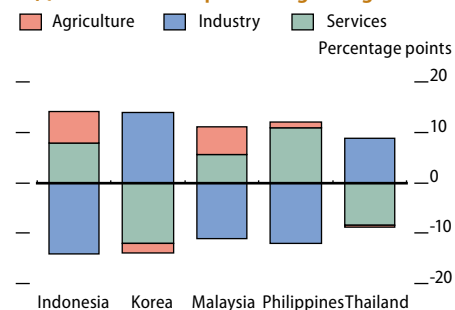
### Constraints on private investment

Mindful of the fact that public investment was not immune to the crisis, the remainder of the discussion focuses on factors that might have constrained private sector investment. Hausmann, Pritchett, and Rodrik (2005) suggest that low levels of investment are likely the result of either financing difficulties or low expected returns. If finance is a constraint, this could be because domestic finance is hobbled by low saving or poor financial intermediation, or because international capital is wary of country risks. But if the problem is low expected returns, a much broader range of candidate explanations presents itself.

### Loanable funds

While real credit contracted sharply after the crisis, there is now little evidence of credit constraints. Outside the Philippines, where savings

1.4.7 Sector makeup of changes in growth

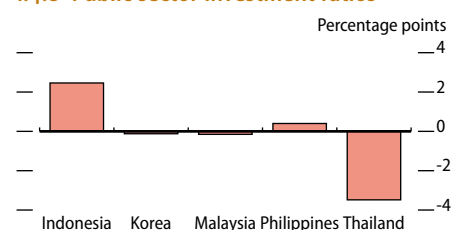


Note: Data for Malaysia and Korea are up to 2004 only.

Source: World Bank, *World Development Indicators* online database, downloaded 12 February 2007.

[Click here for figure data](#)

1.4.8 Public sector investment ratios



Note: Change calculated between 1997 and 2000, except for Indonesia and Korea, which is between 1997 and 1999.

Source: Everhart and Sumlinski (2001).

[Click here for figure data](#)

rates have been low for decades, domestic savings rates have remained high (Figure 1.4.9) and real interest rates are low by historical standards (Figure 1.4.10). Bank balance sheets have also strengthened greatly. Capital-adequacy ratios are up, nonperforming loan ratios are down, and banks have returned to profitability. Likewise, credit risks are lower, as corporate finances are now in better shape and property and other asset prices have recovered. International investors are again snapping up local equities. In short, there is little evidence of the generalized symptoms that would normally be present if finance was a problem.

This is not to say that there are no localized constraints on credit availability, perhaps for small businesses, or that some firms are not still handicapped by high levels of debt (see, e.g., Kramer 2006 and Lim and Kim 2005). As will be explained a little later, it is also most unlikely that investment is being held back by low levels of retained earnings.

### Expected returns

If financing is not a problem, it is possible that lower investment rates reflect a fall in expected returns. Expected returns will be influenced by a wide constellation of factors including productivity levels, the availability and cost of complementary factors, and competitive pressures. Investor beliefs and deeper institutional factors, while less tangible, are also likely to be important.

### Capacity utilization

The dip in investment rates that came on the heels of the crisis was hardly surprising. Sagging incomes and demand left firms with large amounts of underutilized capacity, which dragged equipment investment down. Construction activity collapsed as office property vacancies swelled. But nearly 10 years after the crisis, capacity utilization and property vacancy rates have more or less returned to “normal” levels (Figures 1.4.11 and 1.4.12), though Indonesia is still lagging. In the other countries, existing capacity may be sufficient to cope with temporary surges in demand but not with sustained expansion of output over several years.

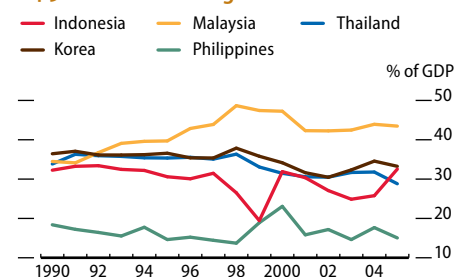
### Complementary factors

Bottlenecks in the supply of complementary factors can impede private investment. A large number of studies have pointed to the difficulties created by poor infrastructure and its impact on the costs of business (ADB, JBIC, and World Bank 2005). Infrastructure gaps have possibly widened in some of the crisis countries over the past decade and have added to business costs. But this should not be pushed too far as an explanation of why private investment spending ratios have dipped. Countries with relatively good infrastructure (Korea and Malaysia) as well as those with comparatively poor infrastructure (Indonesia and the Philippines) have seen their investment rates fall. Skill shortages might be another constraint on investment, particularly in Malaysia and Thailand.

### Investment diversion

Another popular explanation for the fall in investment rates is that the crisis countries are no longer as attractive as they once were as investment destinations. In particular, the emergence of the PRC, and to an extent

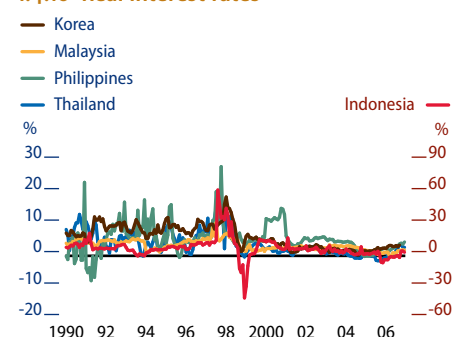
#### 1.4.9 Domestic savings rates



Source: World Bank, *World Development Indicators* online database, downloaded 12 February 2007.

[Click here for figure data](#)

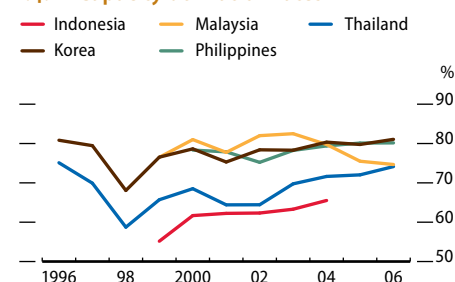
#### 1.4.10 Real interest rates



Source: International Monetary Fund, *International Financial Statistics* online database, downloaded 12 February 2007.

[Click here for figure data](#)

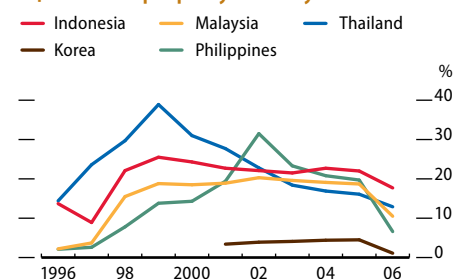
#### 1.4.11 Capacity utilization rates



Source: CEIC Data Company Ltd., downloaded 8 February 2007.

[Click here for figure data](#)

#### 1.4.12 Office property vacancy rates



Source: Jones Lang LaSalle, *Asia Pacific Property Digest*, various issues.

[Click here for figure data](#)

Viet Nam, as competitive export platforms has led to a diversion of investment flows. Figure 1.4.13 shows total foreign direct investment (FDI) flows over the period 1997–2005. Although there is some decline in the share of crisis countries through to 2003, this has been subsequently reversed. It is very likely that the PRC would have emerged as a competitive export platform even if the crisis had not occurred. The PRC cannot have a comparative advantage in everything, and even in sectors where it is an efficient producer, it seems that many investors prefer to diversify geographically rather than concentrate their FDI portfolio in the PRC (*Economist* 2007).

Eichengreen and Tong (2005) provide compelling evidence of complementarity in “vertical” FDI in East and Southeast Asia. Mutually beneficial spillovers are observed in industries that trade intensively in intermediate goods and parts (such as electronics). But for those industries (such as consumer goods and car parts) in which other countries directly compete with the PRC, there is some evidence of competition in other markets.

### Summary

Although some evidence suggests that precrisis investment rates were “too high,” postcrisis investment rates (outside Korea) now appear to be “too low.” Infrastructure bottlenecks (Indonesia and Philippines) and shortages of skilled labor (Malaysia and to a lesser degree Thailand) may have held private investment in check. But it is difficult to detect persuasive evidence of credit constraints, capacity overhang, or a blanket diversion of FDI to the PRC hampering investment.

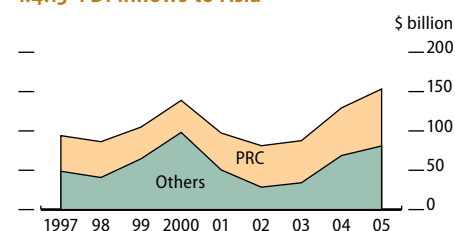
In the next section, the question is asked whether increased risks or uncertainty may have slowed growth and lowered investment rates.

## Risk, uncertainty, and investment behavior

The idea that beliefs can have a significant impact on investment spending is of course a very old one, vividly captured by Keynes’ allusion to “animal spirits.” Box 1.4.1 explains how risk and uncertainty may influence investment. An individual investor faces many potential sources of uncertainty and risk: the macroeconomic outlook; the policy and regulatory environment; and the “institutional arrangements” that protect people, secure property rights, and determine the overall quality of governance. In addition, foreign investors may be concerned about transfer risks, expropriation, and other factors.

The crisis bequeathed numerous policy and institutional changes (Rocha 2007). New governments came to power in Indonesia, Korea, Philippines (a bit later), and Thailand. Macroeconomic policies were recalibrated; currencies became more flexible and most central banks refocused their sights on inflation. Steps were taken to strengthen financial sectors, and to improve regulation and competition, including allowing greater foreign equity in sectors that had hitherto been off limits. And a raft of institutional changes followed, including new laws, the creation of new organizations intended to improve oversight and regulation, and shifts in the boundaries of decision making (e.g., decentralization). Regionalism acquired fresh impetus and initiatives

1.4.13 FDI inflows to Asia



Source: United Nations Conference on Trade and Development, *World Investment Report 2006* database, available: [http://stats.unctad.org/fdi/ReportFolders/ReportFolders.aspx?CS\\_referer=&CS\\_ChosenLang=en](http://stats.unctad.org/fdi/ReportFolders/ReportFolders.aspx?CS_referer=&CS_ChosenLang=en), downloaded 5 January 2007.

[Click here for figure data](#)

### 1.4.1 Risk, uncertainty, and investment

A risk normally refers to a hazard that leads to loss. In economics, the term “risk” is sometimes also used to refer to chance occurrences that result in gain (so-called “upside risks”). Risks can be assigned a probability of their occurrence. Since risks are predictable, they can be managed. By contrast, uncertainty refers to states that are unpredictable or indeterminate and that may lie outside the realm of experience. It is not possible to assign a probability to something that is uncertain, or to manage uncertainty, or even to prepare for it.

While the distinction between risk and uncertainty is important, it is seldom retained in empirical research where risk and uncertainty are treated synonymously and are equated with statistical measures of volatility. Broadly, that is the approach followed here.

The economics of investment decisions in conditions of uncertainty suggests that an increase in the level of uncertainty may either increase or decrease the level of investment. An increase in economic uncertainty may raise the chances of a favorable outcome and trigger a positive investment decision. But this theoretical result is much less likely where firms cannot easily reverse investment decisions or where they face fixed costs—see e.g., Harris, Nguyen, and Scaramozzino (2006). These circumstances are typical of developing countries where financial and asset markets are less developed.

When investment decisions cannot be easily reversed,

increased uncertainty may create a benefit to waiting, as waiting should allow a clearer picture of likely outcomes. As a consequence, investments may be delayed or canceled.

The empirical evidence on the impact of uncertainty on investment suggests that the effects are usually negative (Asteriou and Price 2005; Lensink, Bo, and Sterken 1999; and Ramey and Ramey 1995). These and other studies are based on aggregate data using cross-country panels and concentrate on risks in the economic environment.

In a path-breaking study, Brunetti and Weder (1997) looked at a variety of measures of institutional uncertainty and traced impacts on investment. Looking at information for over 60 countries, they found that the rule of law, corruption, and real exchange rate volatility have significant effects on total investment spending. Alesina and Perotti (1996) had earlier found that social and political instability had a negative effect on investment.

Micro-level evidence is more difficult to come by. But in a recent study, Harris, Nguyen, and Scaramozzino (2006) examine the impact of uncertainty on the investment behavior of Thai firms over the period 1994–2002. They measure uncertainty using historical information on the volatility of firms’ own stock prices, and find that heightened uncertainty reduces investment (having controlled for other possible influences), but that this effect is modulated when investment decisions are reversible.

sprang up to fortify common, regional-level financial defenses; accelerate the development of regional capital markets; and improve economic monitoring, transparency, and information sharing.

But the crisis also taught private investors hard lessons about the consequences of discounting risks. Bankruptcies and widespread financial distress followed the crisis. Having been caught badly off guard once, investors are now possibly much more cautious than before. Indeed, new institutional arrangements may themselves have added to uncertainty. Even positive changes have adjustment costs and institutional changes are often slow. Moreover, the removal of implicit and explicit guarantees and subsidies increased competitive pressures, and weakening insider control may have increased risks for some.

In the public sector, the crisis was a sharp reminder of the importance of matching institutional progress and capabilities (particularly in the financial world) with expansion of the real sector. As a consequence, policy makers’ aspirations have now been lowered with sights set on growth rates that are more modest than those touted before the crisis. A sharp accumulation of foreign exchange reserves is another indicator of a heightened sense of caution.

Trying to measure these effects with any sense of precision and to disentangle their impacts on behavior is not possible. But information on macroeconomic forecasts, equity prices, corporate balance sheets, country

risk assessments, and measures of the quality of country governance may signal how moods have changed. Although such evidence is largely circumstantial, and perceptions can diverge from reality, these data may nevertheless suggest important changes in the background conditions that affect economic activity. While micro-survey data for risks and business conditions are also now available, they do not go back to before the crisis (Box 1.4.2).

### 1.4.2 Microbusiness data

The *Global Competitiveness Report 2006–2007* (World Economic Forum 2006), the *Doing Business* surveys (World Bank various years), and the *Investment Climate* reports (World Bank various years) provide a rich seam of information about the institutional and regulatory environments within which businesses operate.

Although the *Global Competitiveness Reports* go back to the 1990s, the information they provide is not readily comparable over long periods as samples and questions change. The *Doing Business* and *Investment Climate* reports both postdate the crisis, and so do not provide a benchmark with which to compare recent performance. The *Global Competitiveness Reports* and the *Doing Business* surveys rely on expert opinions and views, whereas the *Investment Climate* reports draw on large sample surveys of businesses.

The crisis countries fall into two broad categories when seen through the optic of these large international surveys. Korea, Malaysia, and Thailand tend to compare favorably on many indicators; Indonesia and the Philippines tend to lag.

In the *Doing Business* surveys, Korea, Malaysia, and Thailand rank in the top 30 countries in the world, with Indonesia and the Philippines trailing at ranks 135 and 126 (out of 175 countries), respectively.

In the most recent *Global Competitiveness Report*, Korea ranks 24, Malaysia 26, and Thailand 35. Indonesia ranks

number 50 and the Philippines is number 71 out of 125 countries.

While there is broad agreement in the surveys about Korea, Malaysia, and Thailand, the differences in (percentile) ranks for Indonesia and the Philippines are quite large. This may reflect differences in the objectives and scope of the surveys, with the *Doing Business* results focusing on a narrower range of quantitative indicators that are directly related to the costs of starting and operating a business. By contrast, the *Global Competitiveness Report* covers a wide array of indicators, including measures of governance, social achievements and capabilities, institutions, and the environment.

*Investment Climate* reports are available for Indonesia, Malaysia, Philippines, and Thailand (but not Korea). These were completed in 2004 and 2005. Each report is based on survey information collected from firms, which is analyzed with a view to identifying impediments to investment. Judged from an international perspective, Malaysia and Thailand offer comparatively hospitable conditions for business, showing little hint of the convulsions they experienced during the crisis.

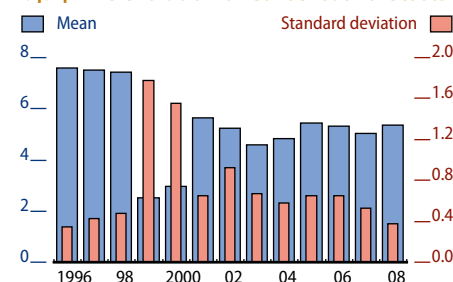
On the other hand, Indonesia and the Philippines compare unfavorably and are perceived to have weaknesses across the board. These results are certainly interesting, but as snapshots they do not allow a judgment about the underlying dynamics.

## Macroeconomic forecasts

Consensus Economics has published forecasts of selected macroeconomic indicators for Indonesia, Korea, Malaysia, and Thailand since 1995. By examining these data it may be possible to assess the degree of confidence that “experts” have in the outlook. If, for example, forecasts of growth move lower and the dispersion of these forecasts widens, this might indicate that risks to the outlook have increased.

In Figure 1.4.14, the evolution of Consensus Economics forecasts for GDP growth from January 1995 (the forecast for “1996”) through to January 2007 (the forecast for “2008”) are shown together with the standard deviation of the forecasts. The figure shows simple averages of mean forecasts and standard deviations. The impacts of the crisis are immediately apparent in the sharp drop-off in forecasts of average growth

1.4.14 The evolution of Consensus forecasts



Note: Data are 1-year ahead average forecasts for Indonesia, Korea, Malaysia, and Thailand; i.e., the forecast for 1996 was made in January 1995.

Source: Consensus Economics Inc., *Asia Pacific Consensus Forecasts*, various issues.

[Click here for figure data](#)



that occurred in January 1998. Relative to the years before the crisis, it is clear that private sector forecasters have lowered their sights, and are yet to raise them. Equally striking is the increased dissonance in the outlook that starts in January 1998 and is present through to January 2005. This could be interpreted as evidence that not only were private sector forecasters less optimistic than before the crisis, they were also much less certain.

### Equity values

Equity prices are often used as a barometer of investors' views of long-term growth and market prospects. Figure 1.4.15 presents data on real equity prices. These have been calculated both in domestic currency and in US dollar terms. In domestic currency units, real price indexes are defined as the benchmark index (measured relative to a 1990 base), divided by the consumer price index. The US dollar indexes convert the local indexes at market exchange rates, and are then divided by the US consumer price index. While the US dollar index is affected by exchange rate movements, capital flows and exchange rates are influenced by investor confidence, too.

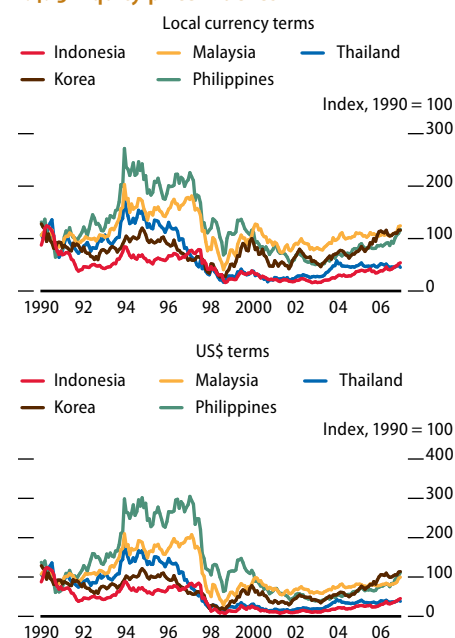
In domestic currency units, real equity prices in 2006 exceed values in 1990 only in Korea and Malaysia, while in US dollar terms, only Korea's equities have appreciated. Dollar prices in Indonesia and Thailand are less than 40% of their 1990 level and prices in Malaysia and the Philippines are about 15% lower. This might be taken as evidence that confidence in long-term growth prospects in the crisis countries has ebbed, leading to lower investment rates and slower growth (e.g., Lee and McKibbin 2006).

Equity prices have, admittedly, some limitations as a measure of investor beliefs about long-term growth prospects, and are just as likely to be influenced by short-term prospects for gains as by the long-term outlook. Certainly, surges in emerging market equity prices in 2006, which have continued through the first months of 2007, appear to reflect speculative positions taken by investors hunting for yield in highly liquid international markets. But to the extent that this has raised prices, it suggests that the present comparisons may exaggerate beliefs about long-term prospects. If, instead, comparisons are made between 1990 and 2005, all markets (including Korea) show lower prices in US dollar terms relative to a 1990 benchmark. These trends suggest that beliefs about potential growth may have been downgraded or that the risk premium may have been raised.

### Corporate balance sheets

Debt-equity ratios prior to the crisis had reached dangerously high levels and left debtor firms exposed to interest rate and market risks. A difficult process of debt resolution and workouts followed, but with the majority of the work being completed within 5 years. The data in Figure 1.4.16 capture trends in debt-equity ratios from 2002 to 2006. The ratios in this figure are expressed in ratios of the market value of debt to the market value of capitalization for all listed companies in each market. The sharp declines in debt-equity ratios over this period suggest a sustained effort within the corporate sector to protect against risks and fortify financial defenses by bringing debt exposure down. Figure 1.4.17 shows the evolution of credit (as a percentage of GDP) to the private sector over the period 1995–2005.

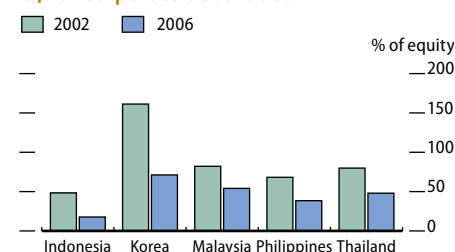
#### 1.4.15 Equity price indexes



Sources: CEIC Data Company Ltd.; International Monetary Fund, *International Financial Statistics* online database, both downloaded 12 February 2007.

[Click here for figure data](#)

#### 1.4.16 Corporate debt ratios

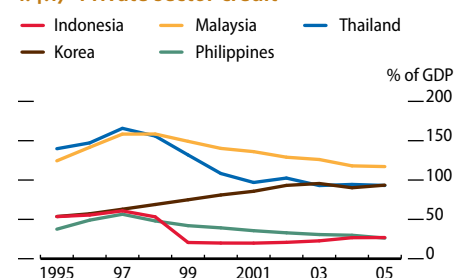


Note: In market value terms.

Source: <http://pages.stern.nyu.edu/~adamodar/>, downloaded 16 February 2007.

[Click here for figure data](#)

#### 1.4.17 Private sector credit



Sources: International Monetary Fund, *International Financial Statistics* online database; World Bank, *World Development Indicators* online database; both downloaded 2 March 2007.

[Click here for figure data](#)



## 1.4.1 Economist Intelligence Unit business environment ratings

	Indonesia		Korea		Malaysia		Philippines		Thailand	
	1995	2002	1995	2002	1995	2002	1995	2002	1995	2002
Overall business environment rating	6.4	5.5	6.6	6.7	6.5	6.8	5.9	5.8	6.5	6.7
Market opportunities rating	7.0	6.6	7.9	7.9	6.7	6.3	8.2	5.5	7.0	6.9
Macroeconomic environment rating	5.8	7.9	6.7	9.3	6.4	8.1	5.6	6.9	6.2	9.4
Labour market rating	6.2	5.6	5.7	5.7	6.5	6.2	5.7	6.9	6.0	6.6
Political environment rating	5.2	3.9	6.7	6.5	5.7	6.9	4.7	4.9	5.2	6.3
Infrastructure rating	4.3	3.9	5.9	6.2	4.8	5.1	3.6	2.8	4.6	4.4
Policy towards private enterprise rating	7.8	3.5	8.4	6.3	6.9	5.8	6.5	5.2	7.5	5.2
Tax regime rating	8.6	6.1	5.8	6.8	7.0	7.6	5.9	6.9	7.5	7.2
Financing rating	7.8	4.4	7.4	5.5	7.1	7.0	6.6	5.5	6.9	5.9
Foreign trade and exchange regime rating	6.5	7.8	6.2	6.6	7.2	8.3	6.1	7.2	7.2	8.3
Policy environment for foreign investment rating	4.3	4.9	6.6	6.1	5.7	7.2	5.5	6.1	5.6	7.2

Note: The ratings run from 1 to 10, 1 being low and 10 being high.

Source: Economist Intelligence Unit, "Market Indicators and Forecasts" online database, downloaded 9 March 2007.

Except in Korea, credit-to-GDP ratios have fallen relative to the precrisis period and would be consistent with heightened prudence. As credit to the household sector has been brisk in some countries, these data probably overstate flows of credit to the business sector.

## Economist Intelligence Unit business rating and risk indicators

There is a wide variety of data on the business environment and risks. The Economist Intelligence Unit (EIU) has been collating these data for the crisis countries over an extended period. Unfortunately, EIU does not provide measures of the reliability of these indicators, which rest largely on the judgments of in-country analysts and experts. Table 1.4.1 presents EIU business environment ratings. These ratings are centered 5-year averages, so the score for 1995 covers the period 1993–1997 and the rating for 2002, the period 2000–2004. These are used as approximations for the pre- and postcrisis periods. The more heavily shaded cells indicate where

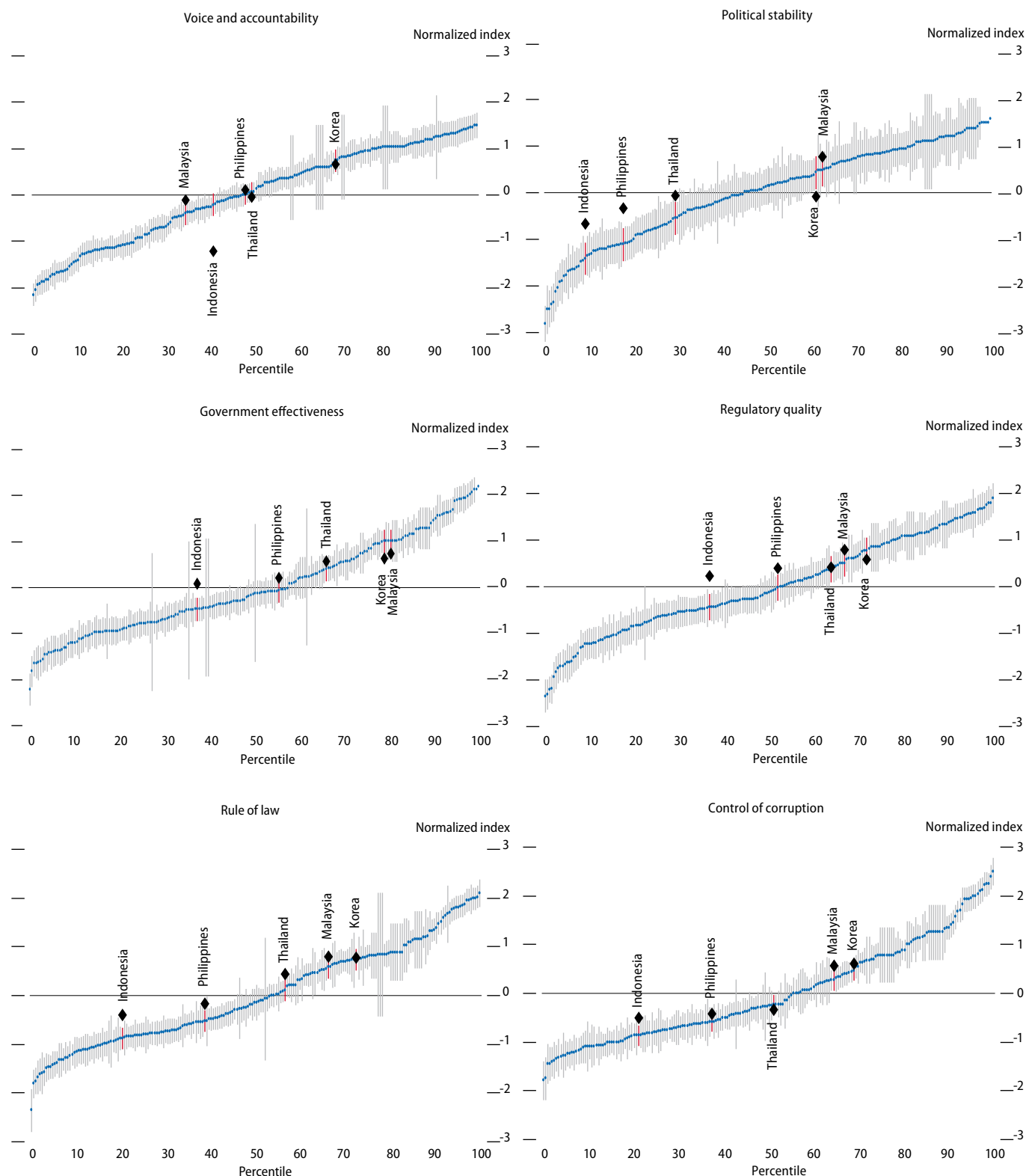
## 1.4.2 Economist Intelligence Unit political and institutional environment ratings

	Indonesia		Korea		Malaysia		Philippines		Thailand	
	1997	Post-crisis	1997	Post-crisis	1997	Post-crisis	1997	Post-crisis	1997	Post-crisis
<b>Overall risk score</b>	51.6	59.9	24.5	26.7	36.7	31.4	48.9	49.3	46.4	39.9
<b>Overall: Political risk</b>	61.4	79.2	27.3	41.6	38.6	49.0	43.2	66.2	43.2	53.6
Overall: Political instability risk	65.0	82.1	15.0	40.0	30.0	48.6	30.0	72.9	30.0	45.7
Overall: Political inefficacy risk	58.3	76.8	37.5	42.9	45.8	49.4	54.2	60.7	54.2	60.1
<b>Overall: Economic policy risk</b>	41.8	50.9	20.5	21.1	32.3	29.9	41.2	44.3	30.3	35.2
Overall: Monetary policy risk	47.2	62.7	22.2	31.8	41.7	29.0	41.7	46.0	47.2	43.7
Overall: Fiscal policy risk	20.0	39.3	5.0	16.4	20.0	38.6	5.0	63.6	10.0	37.1
Overall: Exchange rate policy risk	32.1	23.5	14.3	13.3	42.9	23.5	53.6	21.4	50.0	17.3
Overall: Trade policy risk	75.0	73.2	50.0	17.9	12.5	21.4	62.5	51.8	12.5	42.9
Overall: Regulatory policy risk	31.3	58.9	6.3	28.6	50.0	41.1	43.8	36.6	31.3	35.7
<b>Overall: Economic structure risk</b>	47.0	58.6	24.0	27.6	41.0	29.7	48.2	46.8	46.1	36.8
Overall: Global environment risk	43.8	63.4	25.0	43.8	50.0	59.8	43.8	64.3	43.8	56.3
Overall: Economic growth risk	10.7	62.8	14.3	32.1	17.9	40.3	42.9	49.5	25.0	49.0
Overall: Current account risk	57.1	27.6	42.9	7.6	75.0	10.7	57.1	21.4	75.0	12.3
Overall: Debt structure risk	56.3	59.8	6.3	1.8	6.3	0.0	31.3	41.1	12.5	12.5
Overall: Financial structure risk	78.6	89.8	35.7	69.4	67.9	53.6	71.4	70.4	85.7	68.4
<b>Overall: Liquidity risk</b>	60.0	53.9	27.5	18.2	35.0	18.2	65.0	42.1	70.0	36.1

Note: The ratings run from 1 to 100, 1 being low risk and 100 being high risk.

Source: Economist Intelligence Unit, "Market Indicators and Forecasts" online database, downloaded 9 March 2007.

## 1.4.18 Kaufmann, Kraay, and Mastruzzi governance ratings, 1996 and 2005



Note: The blue dotted line presents estimates for the 2005 governance ratings for each of the more than 200 countries in the worldwide sample, arranged by the percentile rank of countries from the lowest (worst) to the highest (best) rating. The thin black vertical lines represent the 90% confidence interval around the estimated 2005 ratings for each country. Black diamonds identify the corresponding ratings in 1996 for the five countries most directly affected by the crisis. These observations are (vertically) aligned with the 2005 percentile rankings for ease of comparison. A black diamond above (below) the blue dotted line indicates deterioration (improvement) in the governance rating for that country from 1996 to 2005. The 2005 confidence intervals for each of the five countries is identified by the red vertical lines.

Source: Kaufmann, Kraay, and Mastruzzi (2006).

[Click here for figure data](#)

scores deteriorate over the comparison period. The checkered pattern of ratings speaks for itself, but it is noticeable that on “policy towards private sector enterprise” and on “financing,” EIU ratings get worse in all countries. If these expert opinions or perceptions are widely shared, it would suggest that the environment for investment in the postcrisis period is now less favorable than before the crisis.

EIU also produces ratings that cover political as well as economic risks. Table 1.4.2 (above) presents these data. They, too, show a seesaw pattern, with improvements in some areas and regression in others.

## Governance indicators

Many empirical studies have found that the quality of governance has an important effect on investment and on economic growth (Aron 2000). The measurement of governance quality and performance is an inexact science though, and a wide variety of sources have been used to examine linkages to investment. The most comprehensive and reliable source of information is the so-called “KK” indicators, which were first released by Kaufmann, Kraay, and Lobatón (1999a and b).

The newly released KK survey data (Kaufmann, Kraay, and Mastruzzi [KKM] 2006) updates indicators to 2005, and revises earlier estimates to take account of new information and the inclusion of a larger number of countries in later samples. Consistent and revised data are available for 1996, 1998, 2000, and for 2002–2005.

Drawing together information from over 200 different sources, the KK indicators measure governance performance in six separate dimensions: voice and accountability; political stability; government effectiveness; regulatory quality; the rule of law; and control of corruption. The KK scores are distributed normally around a mean of zero with a standard deviation of one. This means that virtually all scores lie in a range from -2.5 to +2.5, with larger values signifying a better score. Estimates of the accuracy of the indicators are also available and these suggest that accuracy has improved.

A particularly useful feature of the KK indicators is that they allow international comparisons on a consistent basis. In Figure 1.4.18 a comparison of ratings on each indicator for each country in 1996 and 2005 is shown. The vertical lines show the 90% confidence intervals constructed using estimated standard errors from 2005. It is striking that out of 30 comparisons, governance ratings have fallen in 22 cases. For all countries, other than Korea, raw scores fall in three or more dimensions. On regulatory and corruption indicators there is a general pattern of deterioration, with only two exceptions (Thailand on corruption, Korea on regulation). Korea stands out as having improved in four of six possible categories. If ranks are compared across time, ranks fall in 28 cases. In 1996, the crisis countries were in the top half of all countries in 21 out of the 30 indicator values, but by 2005 they ranked in the top half in 17 indicators.

But are these changes in governance performance statistically significant? Of the 22 cases where governance scores get worse, 15 differences lie outside a 90% confidence interval using 2005 standard errors. In 4 of the 8 cases of improvement, ratings lie outside the 90%

confidence interval. *T*-tests of the statistical significance of differences suggest that 5 differences are significant at 90% (1 of which is an improvement). At a 75% confidence level, this number rises to 8.

A stricter measure still of the significance of differences is whether each of the paired scores lie outside each other's 90% (or 75%) confidence intervals. KKM (2005) observe that this test emulates a test for differences using a dynamic unobserved components estimator. At the 90% confidence interval, out of 30 comparisons, there are only 3 pairs that meet this criteria (including 1 improvement) and at the 75% interval this rises to 9 pairs (including 3 improvements).

KKM (2005) note that in the global sample, the proportions of changes in ratings that lie outside each other's 90% (75%) confidence interval is quite small. In the global sample, only 8.5% of changes qualify at the 90% confidence interval and 19.3% at 75% confidence interval. In the sample of crisis countries, the corresponding numbers are 10% and 30%. On balance, the KK measures suggest deterioration both absolutely and in terms of comparisons with other countries. However, it is possible that some of the observed changes may have occurred by chance.

## Conclusion

Real equity prices, EIU risk indicators, and KK governance indicators all point in the same broad direction, and suggest that firms and investors may now be more circumspect than a decade ago. Elevated precautionary behavior is also suggested by rapidly falling debt-equity ratios and slow growth of real credit to the private sector. And at least until 2004, there would also appear to have been more dissonance about the macroeconomic outlook than before.

But the crisis countries show significant differences in circumstances. The decline in Korea's investment rate and a lower growth trajectory is consistent with the maturation that occurs as income levels approach those of the richest countries in the world. Controlling for per capita income, Korea's postcrisis investment rates and growth may not be unusual.

In the case of Malaysia and Thailand, postcrisis growth and investment rates are possibly "too low." Although the evidence suggests that the overall business climate in both countries compares favorably internationally, increased uncertainty may have led investors to sit on the sidelines to wait for clearer direction. It is also possible that bottlenecks in the supply of complementary factors, particularly skilled technical and scientific workers, may have clipped growth.

The picture for Indonesia and the Philippines is somewhat different. Although performance on macroeconomic management has improved, their investment climate ratings and governance performance generally compare unfavorably in a wide international setting. There is also evidence of regression on a number of indicators, especially those related to economic regulation. It may be that earlier reforms need more time to gain traction, but the presence of deeply embedded institutional constraints, including high levels of corruption, may slow progress even then.

Looking ahead, Indonesia, Malaysia, Philippines, and Thailand all have ambitions to lift their growth rates, but not quite to the lofty heights

that were envisaged a decade ago. Indonesia's Medium-Term Development Plan aims to rack growth up to 7.6% by 2009 and anticipates a steady rise in the ratio of investment to GDP. Malaysia's Ninth Five-Year Plan sets a target of 6% growth over 2006–2010, an acceleration of 1.5% a year relative to the outcome during the Eighth Plan. In the Philippines, the National Economic Development Authority has set its sights on a GDP growth rate of 7–8% by 2009. By that time, investment in fixed capital is expected to be growing at a much faster clip of around 14–15% a year. Thailand, too, anticipates an acceleration of growth to around 6% which, it is anticipated, will be accompanied by strong investment growth.

But what needs to be done to encourage investment, and accelerate growth on a sustainable basis?

Macroeconomic policy appears to offer little maneuver for stimulating investment. Policy interest rates are now more firmly set with inflation prospects in sight in Indonesia, Philippines, and Thailand. Even in Malaysia, which has no formal adherence to “inflation targeting,” prospects for inflation are a significant concern in charting monetary policy. If the inflationary pressures were to retreat further, allowing policy rates to come down, this could stimulate investment, but real interest rates are already low by historical standards (Figure 1.4.10).

Fiscal options are also somewhat constrained. Infrastructure spending plans, particularly in Malaysia and Thailand, will have to be assessed in the context of other priorities and domestic debt levels that are still quite high. One possibility might be to deploy some portion of low-yielding foreign exchange reserves to help finance the import content of investment projects. Because a critical element in any assessment of country risk and uncertainty is the macroeconomic environment, continued adherence to prudent policies is what will help investment most.

Improvements in the investment climate are clearly needed, but priorities differ by country. The successful migration to higher-productivity industrial and services activities depends critically on having a pool of versatile workers with the right skills. In both Malaysia and Thailand businesses complain loudly of bottlenecks in the supply of workers with relevant skills. In Malaysia, the presence of a growing number of unemployed graduates alongside increasing vacancies for technical and managerial workers suggests that there is a mismatch between what is being taught at upper-secondary and tertiary levels and what firms need. Investment in quality and relevance, including high-quality business-oriented vocational training, is what is needed. Success in building a modern knowledge economy will depend critically on better educated teachers and relevant curricula. Thailand performs poorly on various infrastructure indicators.

Malaysia and Thailand also need to improve their regulatory environments. Labor market regulations, customs procedures, and ordinary bureaucratic requirements are widely cited as sources of uncertainty. In Malaysia, these burdens fall disproportionately on the largest and best performing firms, and the growth of the services sector is hobbled by lack of competition. In Thailand, tax, customs, labor, and ownership regulations are regarded as problematic by the business community. Improvement in these areas and in the quality of enforcing laws would reduce the risks and costs for business investors.

For Indonesia and the Philippines, where improvements have already taken place in the macroeconomic policy environment, the key to sustaining growth is likely to lie in improving the quality and performance of key institutions that influence investor perceptions about uncertainties, risks, and the costs of doing business. Clearly, useful advice needs refinement and has to be tailored to the country context, though in both countries (outside the financial sector) lighter regulation—but with much improved implementation—is required.

The *Investment Climate* report for Indonesia identifies “risks” as the leading concern among investors. Policy and regulatory risks are singled out. Although clarity on policy has improved, regulatory risks remain a problem. A second significant concern is the costs of doing business, which include the costs of corruption, as well as poor contract enforcement and regulation. Indonesia ranks poorly by international standards, and has seen no improvement in the past decade. Poor infrastructure also raises business costs in the country.

In the Philippines, too, governance issues are to the fore. Contract enforcement, corruption, and crime and security are of particular concern. The *Investment Climate* report suggests that added and avoidable costs in the Philippines place it at a disadvantage to the PRC. Poor infrastructure, particularly in power and transportation, add most to costs. Generally, the institutions of government are weak and this has slowed the pace of progress. Complex rules and regulations do not adequately address competition issues and continue to create fertile ground for rent seeking. In a variety of dimensions, prospects for raising investment and accelerated growth will depend on the capacity of institutions to move ahead and implement the changes that are required to reduce uncertainty and risk.

Finally in all countries, although a pickup in investment may not be sufficient for faster growth, it will help growth to accelerate if new investments raise aggregate productivity. Fundamental to this will be the ability of financial systems to direct resources to the best projects. This will not only require continuing improvements in banking regulation and supervision, but also the expansion of capital markets that price risks efficiently, improve information flows, and enhance liquidity. The opening of sectors that are still sheltered from competition (especially in services) could also help lift investment and growth. Lying at the intersection of these difficult challenges will be more effective institutions and improved governance.



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# Uncoupling Asia: Myth and reality

## Introduction

Traditionally, developing Asia has been viewed as a region that relies heavily on exports for growth. As an important corollary of this, it has been considered vulnerable to external demand shocks. Developing Asia—more precisely the economies of East and Southeast Asia<sup>1</sup>—have registered average growth of 6.5% a year over the last decade. These economies now account for 9.9% of world gross domestic product (GDP) measured in real US dollar terms, compared with 30.6% for the United States (US), 14.0% for Japan, and 24.9% for the 25 countries of the European Union (EU-25). (The US, Japan, and EU are referred to henceforth as the G3 economies or simply G3.)

The fast-growing Asian region and its potentially large spending power raise the hope that its own growing demand may help it both weather the adverse consequences of a US slowdown and ease the impact of a global downturn. Indeed, the visible slowing in the US economy in the second half of 2006 notwithstanding, the continued strength of Asian exports has been marked. This has set off heated debate on whether or not the Asian economy is uncoupling from the global business cycle on the back of its rapidly growing domestic economy and the strengthening of intra-Asian economic ties.

“Uncoupling” can be defined as the emergence of a business-cycle dynamic that is relatively independent of global demand trends and that is driven mainly by autonomous changes in internal demand. Proponents of the “uncoupling Asia” view base their arguments on the emergence of a strong regional economy that is increasingly independent from changing economic conditions in the world’s major industrial countries.

A major reason, some believe, that Asia’s business cycle is uncoupling is the emergence of the People’s Republic of China (PRC) with a consumer market of 1.3 billion. Trade growth between the PRC and the countries of East and Southeast Asia has been extremely rapid in the last decade and this is also seen as possibly replacing industrial country consumer demand. (See the chapter, *Trade and structural change in East and Southeast Asia: Implications for growth and industrialization*, also in Part 1.)

Despite the emergence of the PRC economy and the increase in the Asian region’s share in global production and trade, evidence presented in this chapter of *Asian Development Outlook 2007* indicates that the rise in intra-Asian economic interdependence through investment and trade is being *driven* by the globalization process. For example, much

intra-Asian trade is conducted by multinational corporations (MNCs) and their affiliates in the form of intrafirm and intra-industry trade that involves fragmentation of production. The production networks in Asia respond to global demands from consumers outside the region rather than being independent of them. Therefore, the G3 economies are still an important source of external demand for Asia, and so the region remains vulnerable to shocks coming from this quarter. Analysis of business-cycle co-movements, both within Asia and between G3 and Asia, generally affirms the linkage between growth in G3 and Asia, indicating that the regional integration process in Asia is intimately linked to global economic activity.

The following sections investigate the structure of Asian trade both in terms of inter- and intraregional trade linkages. In the next section, *Is intra-Asian trade growth driven by independent regional demand?*, a close relationship between Asian exports and final demand from the G3 economies is demonstrated. Although Asia's direct exposure to G3 is on a decline, final demand from G3 plays an important role underneath the surface of rising intra-Asian trade. Much of this trade is dominated by intra-industry and intrafirm shipments of intermediate goods that are eventually consumed outside the region. Although production sharing arrangements across Asia have given a strong push to regional economic and trade integration since the 1990s, such integration is structurally linked to the international business networks of MNCs.

The PRC has a special role to play. At the center of MNCs' regional supply networks, it is important in boosting both intra- and interregional trade. But this nexus role has deepened economic interdependence between the PRC and the rest of Asia as well as between the PRC and G3.

The penultimate section, *Is Asia's business cycle gaining independence?*, examines whether, and to what extent, ongoing regional integration has affected the degree of dependence of the Asian economy on G3 business cycles. The patterns of Asian business cycles changed quite significantly before and after the Asian crisis of 1997–98, reflecting structural changes in the regional economy. Evidence based on correlation analysis of business cycles supports the view that Asia's increasing trade openness and economic integration, within itself and with G3, have led to higher degrees of both inter- and intraregional business cycle synchronization. There is clear evidence pointing to increasing business cycle co-movements among Asian economies, particularly between the PRC and the rest of Asia. But there is no mutual exclusivity between inter- and intraregional economic integration—it is not one or the other. In fact, deepening regional integration appears to reinforce Asia's integration into the world economy. For this reason, Asia remains exposed to cyclical downturns in the G3 economies.

In *Conclusions*, some policy issues are discussed in light of the global nature of Asia's regional integration. The Asian economy remains sensitive to business cycles in the G3 economies, giving rise to an important policy agenda for Asia's economies, both at the regional and national level. To the extent that regionalization is tied to globalization, Asia's economic activity is also exposed to global competition. Globalization of MNCs' production networks underlines the region's need

for greater economic flexibility to maintain strong productivity growth and global competitiveness.

## Is intra-Asian trade growth driven by independent regional demand?

### The final destination of intra-Asian trade

Asia is undergoing a process of rapid economic expansion accompanied by growing regional trade, investment, and financial linkages. Since the 1990s in particular, growth in intra-Asian trade has been remarkable (Figure 1.5.1). Trade is often an important channel through which economic shocks can be transmitted from one country to another, but it may not be the whole story. Indeed, export-driven growth tends to make a country's economy vulnerable to the cyclical movements in economic activity of major trading partners. The rapid expansion of intraregional trade may indicate that Asian countries are strengthening their mutual economic ties. At the same time, the relative decline in Asia's trade with the rest of the world suggests Asia's reliance on external trading partners might be diminishing.

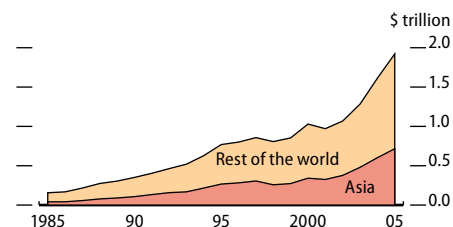
Overall, Asia's reliance on external demand remains strong. The export-to-GDP ratio has continued to trend upward, reaching nearly 55% of GDP in 2005 (Figure 1.5.2) compared with the world average of 28.5%. The incremental export-to-GDP ratio, measured by the year-on-year increment in exports over that in GDP, has also been on an upward trend. Steady increases of both ratios illustrate the importance of the export sector as the engine of growth in developing Asia.

Asia's increasing trade openness has been accompanied by significant progress in the diversification of its export base. Figure 1.5.3 shows the composition of Asian exports by destination. The share of intraregional trade in total exports rose from 26.2% in 1985 to 37.3% in 2005. The geographic composition of Asia's export market has become much less concentrated, with the share of the single largest market, the US, at only 17.6% in 2005, down from 23.2% in 1985. Japan and the EU-25 now account for 25.8% of Asia's total export market, much larger than the US share. But taken together, the G3 economies (the major export destination of global exports) account for only 43.3% of Asia's total exports, down from 53.2% two decades ago.

Greater diversification in the geographic composition of Asian exports suggests that an external demand shock stemming from a downturn in G3 could be mitigated to some extent by stronger growth in the rest of Asia's export markets, including Asia itself. This increasing degree of trade diversification, along with strong growth in intra-Asian trade, is often taken as evidence of an increase in Asia's resilience to a slowing of growth in the world's major economies.

However, changing demand conditions in these economies—particularly the US—appear to remain a dominant factor in Asia's export growth. Figure 1.5.4 demonstrates a close relationship between US non-oil import growth and that of Asian exports. G3 non-oil imports are also included for the period where data are available. US non-oil

### 1.5.1 Destinations for Asian exports

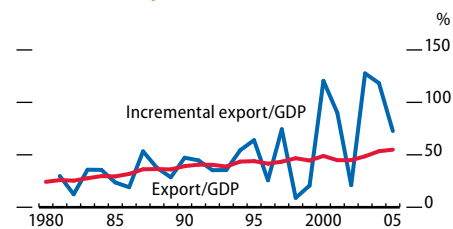


Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; and Thailand.

Source: International Monetary Fund, *Direction of Trade Statistics* CD, January 2007.

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### 1.5.2 Asian export ratios

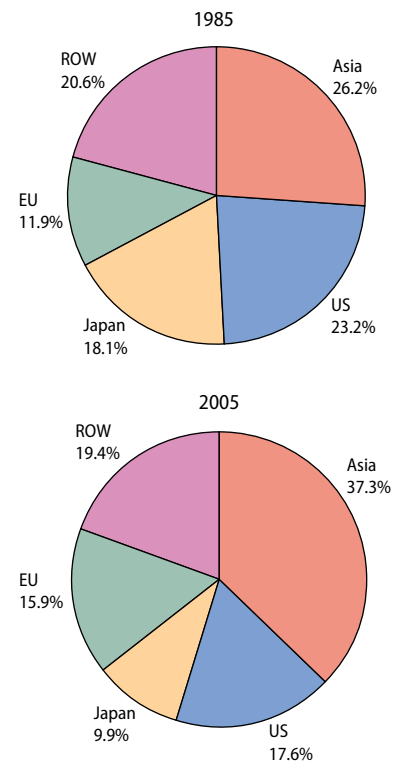


Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.

Source: Oxford Economics, *Quarterly Model*, February 2007.

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### 1.5.3 Composition of Asian exports



ROW = rest of the world.

Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; and Thailand.

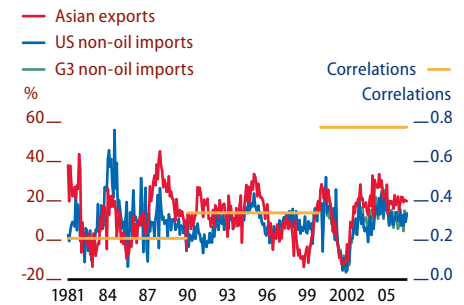
Source: International Monetary Fund, *Direction of Trade Statistics* CD, January 2007.

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imports account for nearly 50% of total G3 non-oil imports and are highly synchronized with movements of G3 non-oil imports. Consequently, the correlation between Asian exports and G3 non-oil imports is also quite significant. Although the share of G3 markets in terms of Asia's total export market is on a decline, the figure indicates that the relationship in growth rates rather than levels has strengthened over time. The decadal correlations between growth rates of US non-oil imports and Asian exports confirm that this linkage has been significant and tighter in the first years of this century.

Underlying this strong linkage is the nature of intra-Asian trade. A notable feature of such trade is that it is driven by vertical integration of production chains, whose final output is destined for final demand outside the region (see the chapter *Trade and structural change in East and Southeast Asia: Implications for growth and industrialization*). Figure 1.5.5 shows a breakdown of Asian exports in terms of exports that are destined for other countries within the region and of exports that leave the region, on the basis of the input-output structure of global

#### 1.5.4 Correlations between growth in Asian exports and G3 non-oil imports

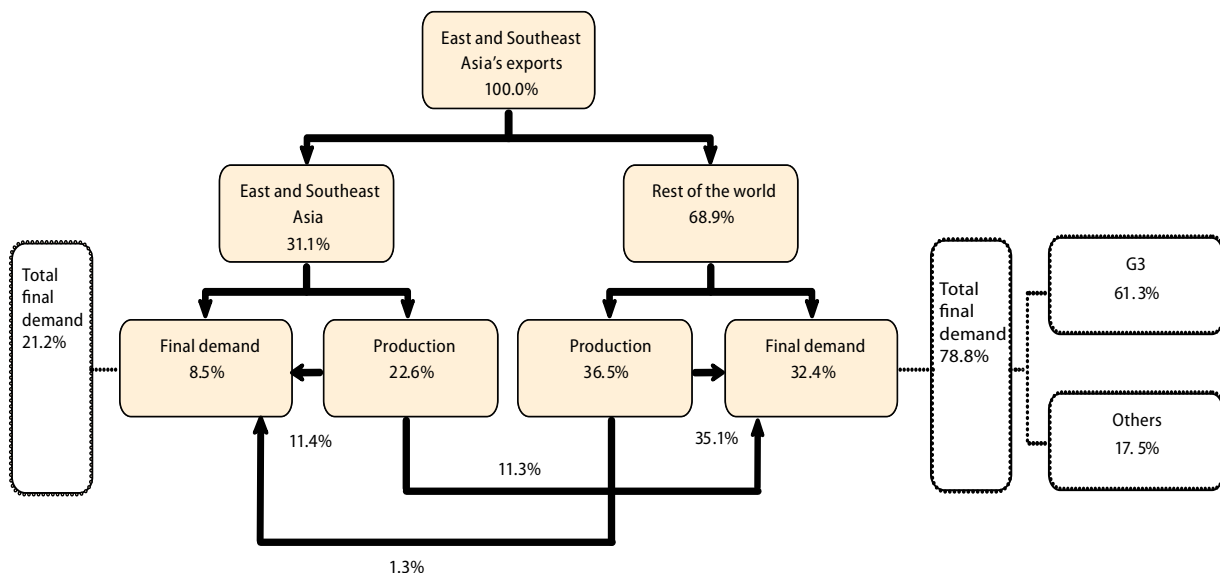


Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; and Thailand.

Sources: International Monetary Fund, *Direction of Trade Statistics* CD, January 2007; US Census Bureau, available: [www.census.gov](http://www.census.gov); CEIC Data Company Ltd.; Eurostat, available: <http://epp.eurostat.ec.europa.eu>; all downloaded 28 February 2007.

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#### 1.5.5 Share of exports from East and Southeast Asia



Source: Staff estimates.

production and trade. Intra-Asian trade is then factored into the region's final demand and what is used in the production process. A similar decomposition is made in the trade among the rest of the world. On both ends are reported total final demand by different regions, which take into account the trade in intermediate goods in the production process.

The decomposition, which is based on the latest release of the Global Trade Analysis Project database,<sup>2</sup> shows that more than 70% of intra-Asian trade consists of intermediate goods used in production, and of this, half is driven by final demand outside Asia. Consequently, about 61.3% of total Asian exports (instead of 43% of total exports as shown in Figure 1.5.3) is eventually consumed in G3 countries.

Within Asia, the PRC is the largest driver of regional exports, but its final demand accounted for only 6.4% of total Asian trade, which was



only half the contribution from Japan and slightly below a quarter of that from the US.<sup>3</sup> The results show that the G3 economies are still the main ultimate export destinations for final goods leaving Asia, when taking into account the share of intermediate goods trade that is for assembly and production within the region but that is eventually shipped out of the region.

This is confirmed by other sources. The Monetary Authority of Singapore (2003) estimates that only about 22% of total Asian exports are eventually absorbed by the region's domestic demand, based on the 1995 Asian Input-Output table (AIO table). According to Citigroup (2006), based on the newly released 2000 AIO table, only 11% of Asian exports are now destined for consumption within Asia. Meng et al. (2006) also conclude that, comparing the 2000 AIO table with the 1995 AIO table, the dependence of Asian production on overseas markets strengthened rather than weakened. Using a slightly different approach, Goldman Sachs (2002) estimates that Asia's domestic demand accounts for only one fifth of Asia's total export growth. Rough estimates based on these sources indicate that about 60% of Asia's total exports are ultimately headed for G3.

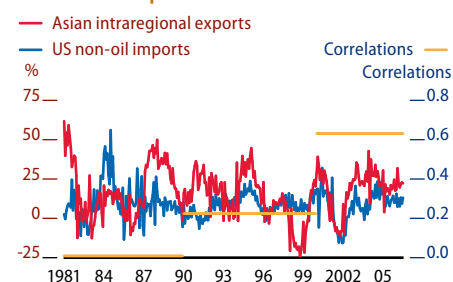
Figure 1.5.6 highlights the significance of G3 demand as final demand for intraregional trade by demonstrating that intraregional trade dynamics are tightly associated with the US non-oil import cycle. In the same vein, the relationship between Asia's private domestic demand and Asian imports has weakened, despite rising intraregional trade. Figure 1.5.7 shows that the correlation between Asia's private demand and its imports has trended downward.

As intra-Asian trade originates from demand outside the region, growth of intraregional trade's share in total Asian exports does not automatically lead to Asia's insulation from an external demand shock. On the contrary, the extent to which intraregional trade is dictated by intrafirm and intra-industry processing and assembly through vertically integrated production chains determines how vulnerable the Asian economy can be to a shock, particularly an industry-specific one emanating from major demand destinations. For example, the last US slowdown in 2001–2002 originated in the information technology (IT) industry, and its ripple effects through the global IT industry to Asian manufacturers was a vivid example of such vulnerability. The next section explores the structure of intra-industry trade within Asia.

### Vertical supply networks and the role of the People's Republic of China

Figure 1.5.8 shows that intra-industry trade has been rising in Asia's trade with the rest of the world, along with increasing intraregional trade since the 1990s.<sup>4</sup> Beneath this picture lie intricately interconnected supply chains among Asian economies. ADB (2006) reports that strong growth in intrafirm and intra-industry trade through MNCs' vertical supply networks has boosted intra- and interregional Asian trade. It suggests that regional production sharing networks established by MNCs to take advantage of specific local conditions and low-cost labor might have been an underlying force behind intraregional trade in intermediate goods destined for final consumption outside the region. Fukao et al. (2003) provide supporting evidence, namely that Asian affiliates of Japanese

### 1.5.6 Correlations between growth in Asian intraregional exports and US non-oil imports

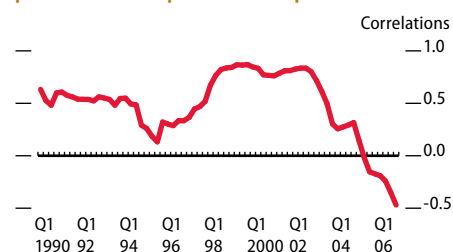


Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; and Thailand.

Sources: International Monetary Fund, *Direction of Trade Statistics* CD, January 2007; US Census Bureau, available: [www.census.gov](http://www.census.gov), downloaded 28 February 2007.

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### 1.5.7 Correlations between Asian private consumption and imports

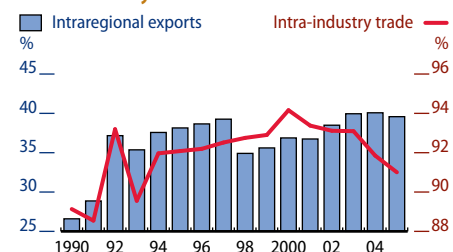


Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.

Source: Oxford Economics, *Quarterly Model*, February 2007.

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### 1.5.8 Asian intraregional exports and intra-industry trade



Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; and Thailand.

Source: United Nations, *Commodity Trade Statistics* database, downloaded 28 February 2007.

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### 1.5.1 Sales by destination of foreign manufacturing subsidiaries of Japanese and US firms, by location, 1999 (share in total sales)

Destination	Location of operation					
	East Asia (excl. Japan)	PRC	Japan	Europe	US	All econ- omies
US subsidiaries						
Local market	39.6	50.4	90.1	56.7	-	57.7
Exports	60.4	49.6	9.9	43.3	-	42.3
Japanese subsidiaries						
Local market	48.2	47.0	-	60.1	90.4	70.0
Exports	51.8	53.0	-	39.9	9.6	30.0

Source: Fukao et al. (2003).

and US firms export more than 50% of their products to destinations outside Asia, much higher than the export-sales ratios for other locations (Table 1.5.1). The subsidiaries of US firms in Japan export only about 10% of sales, similar to the share of exports in total sales by Japanese subsidiaries operating in the US.

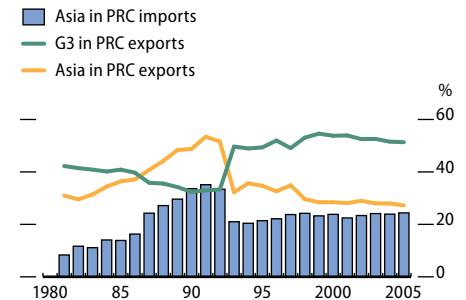
The PRC appears to be at the center of this growing intrafirm and intra-industry trade as the region's main production base. The country's accession to the World Trade Organization (WTO) in 2001 has also played a catalytic role in its emergence as a major player on the world trading scene. With its strong commitment to implementation of WTO agreements, the PRC has removed trade barriers in virtually all product markets and further opened its market to foreign companies. In just two decades between 1985 and 2005, the PRC's exports (imports) grew from \$27.3 billion (\$42.5 billion) to \$762.3 billion (\$660.2 billion).

During this period of rapid growth, the pattern of PRC trade changed significantly (Figure 1.5.9). In the 1980s, the share of Asian neighbors in the PRC's total exports rose steadily, while that of G3 markets declined (similar to the export pattern of the rest of Asia, as previously mentioned). However, since the 1990s, the share of G3 markets has started to increase in terms of total PRC exports, reaching over 50% by 2005. Meanwhile, the PRC continued to import more from the rest of Asia in the 1990s, even with the declining share of Asian neighbors in its total exports.

Figure 1.5.10 shows that the growth rates of PRC exports to G3 have been highly correlated with those of PRC imports from the rest of Asia since the late 1990s. The basic pattern of PRC trade can be characterized as increasing exports to the global economy, while importing more intermediate goods from the rest of Asia. This trend is particularly pronounced in the electronics and automobile industries. For example, 15.5% of the PRC's total exports consisted of machinery and transportation equipment in 1992. By 2005, this figure had risen to 46.2%. In the same period, the share of machinery and transportation equipment in the PRC's total non-oil imports increased from 39.7% to 48.4%.

There is little doubt that foreign direct investment (FDI) has played an important role in promoting Asian growth via encouraging intra- and interregional trade of host countries. Growth in FDI inflows to the region has been substantial, rising from \$21.3 billion in 1990 to \$151.3 billion in

### 1.5.9 Shares in PRC trade

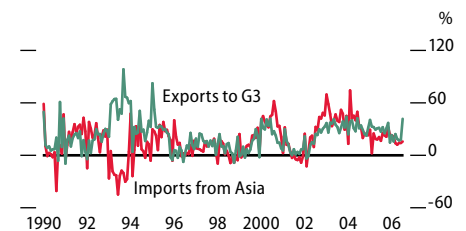


Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; and Thailand.

Source: International Monetary Fund, *Direction of Trade Statistics* CD, January 2007.

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### 1.5.10 Growth in PRC trade



Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; and Thailand.

Source: International Monetary Fund, *Direction of Trade Statistics* CD, January 2007.

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2005. But the pattern of FDI flows to Asia is quite different from those to the rest of the world. As noted previously, foreign affiliates in Asia established by FDI inflows tend to export a large share of sales, whereas FDI flows to other regions tend to serve local demand by getting around trade barriers protecting firms that compete in local markets.

This reflects the fact that the rapid expansion of FDI inflows to Asia has been closely associated with the establishment of regional production networks by MNCs (Fukao et al. 2003, Kawai and Urata 2004). Eichengreen and Tong (2005) also find that rapid growth in FDI inflows to the PRC has positive spillovers to other Asian economies, as these form part of the same global production networks. Indeed, the rise of the PRC as Asia's main assembly and production center appears to have influenced the region's cross-border investment flows as well. Growth in FDI inflows to the PRC has been marked and, more importantly, the share of FDI flows from regional economies to the PRC has been noteworthy (Figure 1.5.11).

As the PRC emerges as an important nexus between intra- and interregional trade and financial linkages for Asia, economic interdependence arises between the PRC and the rest of Asia as well as between the PRC and G3. To the extent that rapid growth in trade and investment has been a driving force behind PRC growth, a sharp fall in exports and a subsequent reduction in FDI may present a significant downside risk to the PRC economy, and thus to the rest of Asia. Because the PRC imports a large share of intermediate goods from the rest of Asia to serve final demand from G3, a slowdown in the G3 economies could have a negative impact on PRC exports and consequently PRC imports from the rest of Asia.

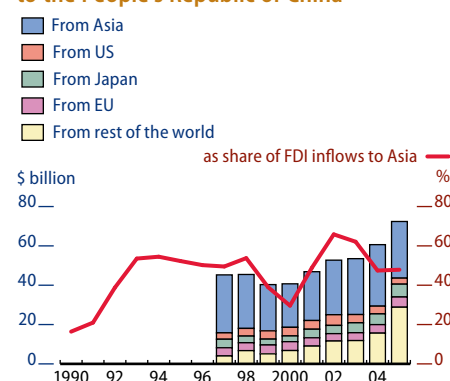
At the same time, to the extent that FDI flows are related to intrafirm and intraregional trade to serve external demand, FDI flows are likely to be responsive to the prospect of export growth. In turn, a sharp and prolonged reduction in external demand might also hold back FDI inflows to the region.

## Is Asia's business cycle gaining independence?

This section sets out to identify some stylized facts about Asian business cycles and examine their co-movements both within the region and with G3 business cycles. An interesting question is whether, and to what extent, the region's strong growth and tightening trade linkages have affected the dynamics of Asia's business cycles in relation to each other and to the rest of the world.

Traditionally, business cycles are characterized as periodic phases of expansion and contraction in economic activity (Burns and Mitchell 1946). In the traditional approach, the business cycle is defined over movements or changes in the level of an important economic variable, such as GDP or employment. Although recessions (defined as two consecutive quarters of contraction in GDP) have become less frequent, the business cycle approach may be used to examine changes in growth rates to understand turning points of an economy. Business cycles can be also defined as "movements about the trend" in output accompanied by "co-movements" of the deviations from the trend among different

**1.5.11 Foreign direct investment inflows to the People's Republic of China**



Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.

Sources: National Bureau of Statistics, *China Statistical Yearbook*, various issues; United Nations Conference on Trade and Development, *World Investment Report 2006*.

[Click here for figure data](#)

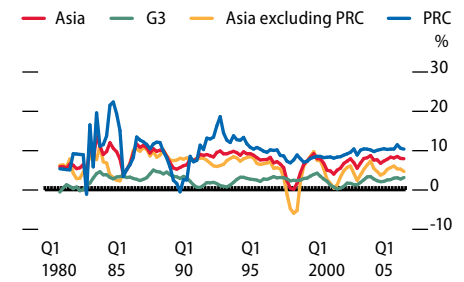
economic variables (Lucas 1977). Following modern business cycle theory, the cyclical components in economic activity can be extracted for the business cycles, using the appropriate statistical filtering techniques (Box 1.5.1).

### Changing patterns of Asian business cycles

Figures 1.5.12 and 1.5.13 illustrate the movements of real GDP of Asian and G3 economies in terms of, respectively, growth rates and cyclical components. Both figures show that Asian business cycles are generally the more volatile, but also that their amplitude has narrowed visibly over time.

Judging from the patterns of growth fluctuations, Asian business cycles tend to have longer expansionary periods followed by relatively shorter but much sharper contractions than those of G3. These patterns are much more pronounced in most of the 1990s, when Asia experienced an extended period of rapid growth prior to the crisis. Strong growth, accompanied by generally positive macroeconomic indicators, also made

1.5.12 GDP growth



Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.

Source: Oxford Economics, *Quarterly Model*, February 2007.

[Click here for figure data](#)

### 1.5.1 Measuring business cycles

The appropriate measurement of business cycles is essential to establish stylized facts about cyclical movements. Empirically, however, separating the trend from the cyclical components of a series is highly controversial. The potential rate of trend growth is unobservable and has to be inferred from actual output data by adopting a detrending procedure. But there is no consensus on how best to decompose a series into its trend and cyclical components. Although business cycles are sensitive to the specific method adopted, no single methodology has been universally accepted as superior.

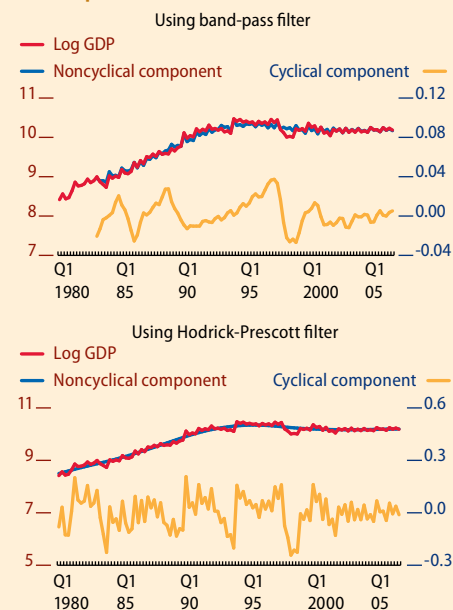
Typically, a decomposition methodology that is widely used applies time-series techniques to allow a stochastic (time-varying) trend. The most frequently used procedure is the method developed by Hodrick and Prescott (1981). The Hodrick-Prescott (HP) filter is a smoothing method that suppresses short-term fluctuations in a time series. Once the trend component is obtained, the residuals of the actual data from the smoothed series represent the business cycle.

Another popular method is the band-pass filter introduced by Baxter and King (1995). This is based on the idea that business cycles may be defined as movements of a certain periodic fluctuation. The band-pass filter eliminates both long-term trends (of more than 32 quarters) and high-frequency fluctuations (of less than 6 quarters) while retaining only the cyclical components of a series. This approach is often preferred to the HP filter, as the series is free of highly irregular short-term fluctuations (the residual series from the HP filter is not). The band-pass filter is also the filter of choice in this chapter. As its moving-average procedure produces no values for the

first and last 12 quarters, data series have been extended to 2009 using the latest short-term economic projections from the Oxford Economics Global Model to generate the business cycle up to 2006.

The box figure illustrates results of using these two filtering methods for the Asian economy.

Decomposition of Asian GDP



Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.

Source: Oxford Economics, *Quarterly Model*, February 2007.

Asia a magnet for foreign capital during this period. With more open capital markets since the early 1990s, capital inflows to the region have risen sharply, further boosting economic activity.

Interestingly, this period appears to present a case for Asia's uncoupling, since Asian business cycles seem fairly detached from those of G3 through most of the 1990s. Movements in the cyclical components paint broadly similar pictures. The relatively long span of expansion followed by a sharp contraction in the 1990s is even more visible in the cyclical component. It is also clear that the upturn phase was relatively unaffected by the G3 cycle.

These patterns of Asia's business cycles have changed quite significantly in the postcrisis period. Although exhibiting still higher volatility than those in G3, Asia's business cycles have become much more stable. Even more interestingly, they resemble those of G3 in that they become more periodic in terms of upturns and downturns. A notable exception to this new pattern is the PRC: it appears to beat the business cycle by continuing robust growth regardless of ups and downs of both regional and international economies.

The visibly reduced amplitude of Asian business cycles in the postcrisis period may be attributed to the resumption of strong growth and development reinforced by a strengthened institutional framework and reforms to establish efficient financial markets in the crisis-afflicted countries. Although reforms have yet to be completed in some areas, significant progress has been made in banking supervision and regulation. Countries have made efforts to introduce more market discipline in the overall financial system, through enhanced governance and market transparency.

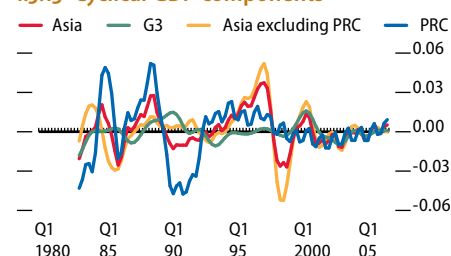
Better economic policies in the crisis countries may have also contributed to macroeconomic stabilization, while underpinning strong growth. Four of the five economies have adopted inflation targeting since the crisis. The first mover in this direction was the Republic of Korea in 1998, followed by Indonesia in 1999, Thailand in 2000, and the Philippines in 2001 (see Cavoli and Rajan 2006). Inflation targeting has increased the degree of freedom in foreign exchange policies to mitigate the impact of external shocks, while enhancing the effectiveness of monetary policy responding to cyclical fluctuations.

Improved fiscal positions with more effective public debt management since the crisis have also allowed room for appropriate fiscal policies. To this end, fiscal reforms are under way in many countries, especially the strengthening of institutional frameworks for public debt management and taxation, which will further enhance the functioning of automatic stabilizers.

### Regional and international business cycle synchronization

Tables 1.5.2 and 1.5.3 report the correlation coefficients of the Asian business cycles with each other and with G3 for the precrisis (1983–1996) and postcrisis (1999–2006) periods. The crisis period is omitted intentionally. The previous analysis on business cycles suggests significant differences in co-movements both within Asia, and between Asia and G3, before and after the crisis. The Asian crisis is also perhaps the most significant common shock for Asia, leading to positive correlations for

1.5.13 Cyclical GDP components



Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.

Source: Oxford Economics, *Quarterly Model*, February 2007.

[Click here for figure data](#)



the crisis period. But the same event is also likely to damp the correlation between the Asian and G3 business cycles. In order to see clearly the synchronicity of Asian business cycles without the crisis effect, the correlations for the pre- and postcrisis periods are reported separately.

The correlation analysis of the cyclical components shows that the correlations of Asian business cycles increased markedly, both with each other and with the G3 cycle, between the pre- and postcrisis periods. Table 1.5.2 presents the average of the bilateral correlations between all the pairs of nine Asian economies in the sample over the two periods. If the Asian business cycles co-move, the average of the bilateral correlations would be high. A similar approach is taken to calculate the average correlations for the Asian economies excluding the PRC.

For both Asia and Asia excluding the PRC, the average correlations rose significantly. This may reflect greater intraregional integration. In both periods, the average correlation for Asia excluding the PRC is higher than that for Asia, reflecting the PRC's independent cyclical behavior from the rest of the region. Interestingly, however, the average correlation grew much faster among the Asian economies including the PRC than excluding the PRC. This clearly indicates that the PRC business cycle is increasingly moving in tandem with the rest of Asia.

Similarly, Table 1.5.3 reports the correlations between Asia and G3. Asian business cycles are much more synchronized with those of G3 in the postcrisis period. Again, the correlation between Asia excluding the PRC and G3 is higher than that between Asia and G3, and may be attributed to a generally independent business cycle of the PRC relative to G3.

In view of the PRC's generally independent dynamics, its business cycle correlations with the rest of Asia and G3 are shown in Table 1.5.4. As expected, the correlations of the PRC cycle with both regional and international economies are low, although both correlations have become positive in the postcrisis period, pointing to an increasing synchronization with those economies. This reflects the fact that the PRC's rapid growth has been driven so far largely by domestic factors: the major force has been intensive capital accumulation combined with the release of massive amounts of labor from the agriculture sector (see Woo 1998). Nevertheless, the results also suggest that the PRC is rapidly integrating with the region, while using its regional economic ties as a platform for global integration.

Figure 1.5.14 illustrates the evolution of the average correlation coefficients for Asia and for Asia excluding the PRC, using 5-year rolling windows. For example, the correlation average in 2006 is calculated as the average of the bilateral correlations for each pair of all the Asian economies over a 5-year period ending in 2006. The average correlation among the Asian economies rose sharply from nearly zero in 1991 (for the period 1987–1991) to over 0.5 in 1996 (for the period 1992–1996). The latter period largely coincides with the expansion phase of the Asian economy in the 1990s, prior to the crisis. It is noteworthy that this phase was also accompanied by strong growth in intraregional trade (Figure 1.5.8 above), reflecting rapid regional economic integration.

The correlation trend for international business cycle co-movements also confirms generally high synchronicity between the Asian business cycle and the G3 cycle in the postcrisis period (Figure 1.5.15). What is

#### 1.5.2 Intraregional business cycle correlation (nine Asian economies)

	Precrisis	Postcrisis
Asia	0.33	0.48
Asia excluding PRC	0.43	0.54

Source: Oxford Economics, *Quarterly Model*, February 2007.

#### 1.5.3 Interregional business cycle correlation

	Precrisis	Postcrisis
Asia–G3	0.06	0.62
Asia excluding PRC–G3	0.09	0.68

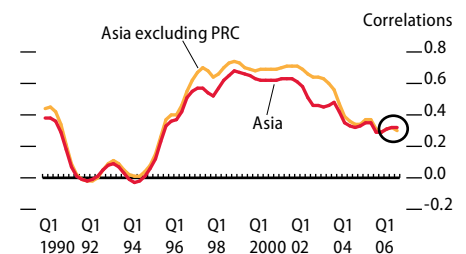
Source: Oxford Economics, *Quarterly Model*, February 2007.

#### 1.5.4 Business cycle correlation with the People's Republic of China

	Precrisis	Postcrisis
Asia excluding PRC	-0.03	0.27
G3	-0.07	0.14

Source: Oxford Economics, *Quarterly Model*, February 2007.

#### 1.5.14 Average intraregional business cycle correlations



Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.

Source: Oxford Economics, *Quarterly Model*, February 2007.

[Click here for figure data](#)



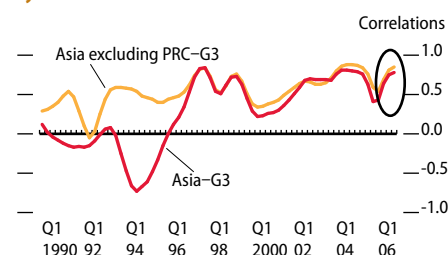
interesting here is that the correlations between Asian and G3 cycles were negative between 1993 (for the period 1989–1993) and 1995 (1991–1995). The latter period again largely coincides with the strong expansion phase in Asia. As suggested in the previous section, Asian business cycles seemed to have experienced an “uncoupling” from those of G3 during the precrisis period of rapid growth in the 1990s. Robust economic expansion and strengthening regional ties may have contributed to the region’s resilience through ups and downs of the G3 business cycles.

Is this “uncoupling” in the 1990s repeating itself in the recent period? It is unclear if the same pattern is emerging on the basis of these figures. There are similarities in general economic conditions. Although registering slightly slower growth compared to the fast precrisis expansion phase in the 1990s, most Asian economies have resumed relatively strong growth since then. More importantly, it has become much more stable (as seen in the previous section). There have also been renewed increases in intra-Asian trade and regional integration. However, cyclical co-movements between Asia and G3 have visibly strengthened since the crisis, while business cycle synchronicity among Asian economies has weakened.

A simple causality test<sup>5</sup> between G3 and Asian business cycles shows that G3 cyclical movements precede Asia’s. Table 1.5.5 reports the results of a Granger causality test between G3 and Asian business cycles for the precrisis (1983–1996) and postcrisis (1999–2006) periods. The test has been performed for both directions between G3 and Asian business cycles using quarterly data with different lags from 4 quarters (or 1 year) to 12 quarters (or 3 years). Test results are often sensitive to the number of lags used. Here the reported results are for the tests using at least a 1-year lag, because domestic factors tend to dominate business cycles in periods shorter than 1 year. Thus the transmission effect of external shocks may be offset by spurious common domestic factors.

The test results suggest that, in the postcrisis period, movements in the G3 cycle “Granger-cause” movements in the Asian business cycle at 2- and 3-year lags (but not the other way round). The results also show

**1.5.15 Average interregional business cycle correlations**



Note: Asia comprises People’s Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.

Source: Oxford Economics, *Quarterly Model*, February 2007.

[Click here for figure data](#)

### 1.5.5 Granger causality test results

	Precrisis period null hypothesis		Postcrisis period null hypothesis	
Number of lags (years)	G3 business cycles do not Granger-cause Asian business cycles	Asian business cycles do not Granger-cause G3 business cycles	G3 business cycles do not Granger-cause Asian business cycles	Asian business cycles do not Granger-cause G3 business cycles
1	1.75	4.73*	3.83*	3.69*
2	2.18	1.39	11.18*	1.62
3	3.90*	1.65	10.95*	2.25

\* Indicates significance of F-statistics at the 5% level for a rejection of the null.

Note: The results report F-statistics, which form the basis for which the null hypothesis is accepted or rejected. In terms of the actual numbers reported, a higher number represents greater statistical significance, thus leading to rejection of the null. For example, in column 2 with a 1-year lag, the test statistic (F-stat) is 1.75, which is statistically insignificant, thus leading to non-rejection of the null that G3 business cycles do not Granger-cause Asian business cycles. However, in column 3 with a 1-year lag, the test statistic is 4.73, which is statistically significant, thus implying a rejection of the null that Asian business cycles do not Granger-cause G3 business cycles.

Source: Staff calculations.

dramatic increases in the explanatory power and statistical significance for the direction of cyclical influence from G3 to Asia when the pre- and postcrisis periods are compared. This suggests that Asian business cycles have become more responsive to the cyclicality of G3 in the postcrisis period.

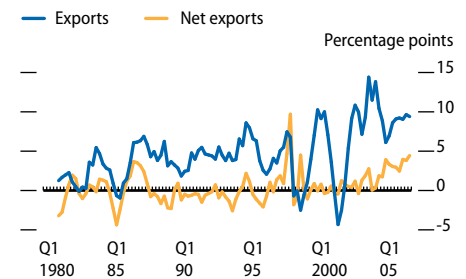
A significant departure from the 1990s' pattern may be explained by Asia's renewed export-led growth since the crisis. Despite some notable efforts to strengthen domestic demand in the postcrisis period, evidence suggests that Asia's reliance on exports for growth remains significant. Figure 1.5.16 illustrates the contribution of exports and net exports to GDP growth since the 1980s. ADB (2005) also finds that Asia's export-oriented growth strategy is sustained, if not further strengthened, in the postcrisis period, based on demand-side growth accounting. As intraregional trade is to serve external demand, not regional demand, Asia's export-led growth should result in greater interdependence between Asia and its G3 trading partners.

The dynamics of regional economic and trade integration are also evolving. To the extent that the PRC functions as an assembly and production center for the rest of Asia, the trade linkages would be more direct and stronger between the PRC and each member of the rest of Asia than the cross-relationships among the rest of Asia. Indeed, for the 5-year period 2002–2006, the average correlation for Asia including the PRC is higher than that for Asia excluding the PRC (Figure 1.5.14 above). This reflects the PRC's integration into the regional economy, facilitated by vertical specialization in the rest of Asia. With rapid technological advances, production processes can be further divided and taken up by different countries based on their comparative advantages. While vertical specialization and scale economies will continue to help raise the region's productivity, this may also leave the individual countries exposed to different subsector shocks, as well as to economic shocks originating within the region, particularly the PRC.

The correlation analysis presents positive evidence for greater synchronization among Asian business cycles. There is also clear evidence pointing to increasing business cycle synchronization between the PRC and the rest of Asia. However, a marked feature of Asia's regional integration is its global nature. In many respects, Asia's regionalization is a force behind its globalization, just as its successful integration with the global economy has been a key driver of regional integration through stimulating the region's trade and financial flows.

Recent years have thrown up no evidence pointing to Asia's uncoupling from G3 cycles. In the postcrisis period, strengthening regional ties appear to reinforce business cycle co-movements between Asia and G3. Underlying this interdependence is the structure of rising intra-Asian trade, which is centered on the PRC as a production base. The tighter intra-industry trade linkages between the PRC and each of the other Asian economies might have contributed to the higher business cycle synchronization between the PRC and the rest of Asia. But the cyclicality of the Asian economy remains sensitive to movements in G3.

**1.5.16 Contributions to Asian GDP growth**



Note: Asia comprises People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.

Source: Oxford Economics, *Quarterly Model*, February 2007.

[Click here for figure data](#)

## Conclusions

Exactly a decade after the financial crisis, the Asian economy is enjoying rapid growth. Over the past decade, Asia has maintained an annual average growth rate of 6.5%. Underpinning this performance has been the strength of the emerging PRC, adding more than two full percentage points to Asian growth during the period. This remarkable economic performance has elicited much enthusiasm for rising regionalization and related optimism for the region's independent business cycle dynamics.

The findings of this chapter may surprise those who believe that stronger intraregional trade integration is evidence of uncoupling. There is no evidence pointing to Asia's uncoupling—structurally or cyclically. A renewed process of rapid economic growth and development has been accompanied by increasing economic integration, both within Asia and between G3 and Asia.

Regionalization of economic activities has gained strong momentum through progress in sharing of production processes across the region. Increased vertical specialization and the rise in intra-industry trade have led to strong ties among Asian economies, but this regional integration remains structurally linked to final demand from major industrial countries.

However, regionalization that is tied to globalization is potentially a transmission channel for a global shock. Increased trade openness and economic integration with the global economy could induce greater business cycle synchronization among the regional economies by exposing them all to a common global shock. Further, strong regional economic integration could propagate a shock rapidly across regional economies.

To the extent that Asian business cycles are sensitive to the vagaries of external demand, it is important for Asian economies to maintain sound macroeconomic conditions and ensure coherent policy management. A stable macroeconomic environment—of low inflation and prudent fiscal balances with modest levels of debt—provides an important backdrop for sustaining high growth. It also allows room for policy makers to take measures of macroeconomic stabilization when necessary.

Greater economic interdependence and tighter trade linkages between Asian economies also require greater cooperation in trade, finance, and exchange rate policies at the regional level. As economic and financial shocks travel rapidly from a country to its trading partners through increased trade and financial linkages, it is to all Asian economies' benefit that, nationally, they maintain sound macroeconomic conditions with prudent economic management. Synchronization of real growth and inflation in the region should also generate regional common interests to ensure close cooperation in macroeconomic and exchange rate policies.

Globalization, including the rapid relocation of production networks across borders, underscores the region's need for greater economic flexibility. Along with increasing openness to trade, globalization has allowed greater factor mobility, particularly MNCs that can choose the most cost-efficient locations, facilitating both vertical specialization and a tightly webbed regional production network across borders. The rise in intra-industry trade and trade integration has a positive impact on economic growth by promoting efficiency and productivity growth.

But easier relocation of production and greater factor mobility imply that Asian economies should ensure a high degree of flexibility in both product and factor markets to maintain their regional and global competitiveness. Further structural reforms will have to move forward to improve overall economic flexibility and competitiveness.

Such reforms should include the successful completion of corporate and financial sector restructuring by deepening the reforms on governance and legal infrastructure, creating an investment-friendly environment through minimizing unnecessary regulatory barriers in business activities, encouraging private incentives toward more dynamic market economies, opening domestic markets to international competition, and creating a level playing field across all sectors. This will also help attract FDI.

Continued rapid growth of the PRC, and its deeper integration with the regional and global economies, will continue to shape opportunities and challenges for other countries. For those competing head to head with the PRC, and who are now seeing their market shares (and/or terms of trade) eroded, sustaining growth will depend on their success in promoting economic agility and carving out new areas of competitive advantage (see Part 3, *Growth amid change*). For primary commodity producers that sell to the PRC, or for those countries that can profitably manufacture the consumer durables demanded by the PRC's quickly expanding middle class or the equipment needed to support its industrialization, the PRC's growth is likely to prove directly beneficial. Likewise, further fragmentation and refinement of supply chain activities should ultimately strengthen complementarities among the economies of East and Southeast Asia, though the gains are unlikely to be automatic and will depend on the capacity to adjust and to develop new capabilities. Finally, the logic of fast growth in a country as vast as the PRC, as well as a rebalancing of spending towards domestic consumption, foreshadows not just a more prominent role for regional incomes in forging closer regional integration but also the emergence of developing Asia as an additional engine of global demand.

## Endnotes

- 1 “Asia” generally refers to nine economies in East and Southeast Asia, namely: People’s Republic of China (PRC); Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.
- 2 The latest Global Trade Analysis Project database (version 6.2) corresponds to the world economy in 2001. The database provides “detailed bilateral trade characterizing economic linkages among regions, together with individual country input-output databases which account for inter-sectoral linkages within regions” (Hertel 1998, p. 2). The latest version disaggregates the world economy into 87 regions (including all the nine economies in East and Southeast Asia in this chapter) and 57 sectors.
- 3 The role of PRC’s final demand in Asia’s exports would likely be bigger if more recent data were used.
- 4 The intra-industry trade index is based on the Grubel-Lloyd methodology, using SITC 2-digit data from the United Nations *Commodity Trade Statistics* database. Using the share of industry  $i$  in terms of total industry trade as a weight, the intra-industry trade between countries A and B is calculated as (see OECD 2002):

$$ITT_{AB} = \sum_i \left[ \frac{(X_i + M_i) - |X_i - M_i|}{(X_i + M_i)} \right] \cdot \left[ \frac{(X_i + M_i)}{\sum_i (X_i + M_i)} \right] \cdot 100$$

While the ratio takes a value between 0 and 100, with a higher number associated with greater intra-industry trade in theory, this ratio tends to increase with the level of aggregation in terms of both the number of countries and product classes in the sample.

- 5 The Granger causality test is simply to see if lagged values of one variable (X) have any statistically significant information on future values of the other variable (Y) given the lagged values of Y. If it does, X is said to “Granger-cause” Y.

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# Trade and structural change in East and Southeast Asia: Implications for growth and industrialization

## Introduction

East and Southeast Asian economies have been among the most dynamic participants in global trade, particularly trade in manufactures, led initially by Japan, then by the newly industrialized economies (NIEs) of Hong Kong, China; Korea; Singapore; and Taipei, China, and more recently by the People's Republic of China (PRC) and five members of the Association of Southeast Asian Nations (ASEAN-5—Indonesia, Malaysia, Philippines, Thailand, and Viet Nam). In contrast, India and South and Central Asia have not yet made much of an impact and to date remain small players in global manufacturing trade.<sup>1</sup>

The latter half of the 20th century for the first time provided a worldwide institutional framework for open trade under the auspices of the General Agreement on Tariffs and Trade (GATT) and its successor the World Trade Organization (WTO). At the same time that global tariffs were being cut in successive rounds of GATT/WTO negotiations, more and more countries experimented with bilateral and regional preferential trade agreements, particularly after the completion of the Uruguay Round in 1995.

The *Asian Development Outlook 2006* (ADB 2006) provided a detailed discussion of the global trend toward bilateralism in trade and some forward-looking estimates of the possible impact of various liberalization scenarios for the Asian region. It found that the region's trade opportunities could best be obtained through the combination of unilateral reforms and multilateral, nondiscriminatory reduction of trade barriers. Deeper integration in the region could also provide additional scope for growth provided it was done in a manner that avoided emergence of hub-and-spoke systems that are based upon bilateral agreements with inconsistent coverage and rules.

This chapter provides a review of trade and structural change in the region and examines the state of regional integration in manufacturing trade using recent historical data with a focus on East and Southeast Asia. The key issues addressed include the role trade plays in facilitating structural change and industrial development, the rising share of intraregional trade and intra-industry trade, and the controversies relating to the role of the PRC regarding the impacts of Asia's giant on manufacturing competition for foreign direct investment (FDI) and trade. It also addresses the question of whether East and Southeast Asian trade and growth are uncoupling from global trade and growth.

## Patterns of trade in East and Southeast Asia and the world, 1995–2004

Japan, followed by the NIEs, first adopted export-oriented manufacturing as a growth strategy in the 1960s. Trade growth was rapid as the world economy expanded with recovery in Western Europe and strong growth in the United States (US).

Japan itself recorded double-digit real rates of growth from 1960 up until the first oil shock of 1973. During this period of rapid growth, industrial structure also changed as exports shifted away from labor-intensive to more sophisticated products. Japan's movement into higher technology exports opened the way for the NIEs to themselves adopt an export-oriented manufacturing growth strategy. These economies were able to expand production and exports in labor-intensive industries such as apparel and footwear in the 1960s and then to develop more capital-intensive industries following Japan in the 1970s and 1980s.

A third wave of trade-led industrial growth then began to take hold as Southeast Asian economies adopted export-oriented policies in the mid-1970s and early 1980s, with rapid growth in exports of labor-intensive manufactures. By the mid-1980s, the ASEAN countries started exporting electrical and nonelectrical machinery and other more sophisticated products. Finally, the PRC and Viet Nam emerged as fast-growing exporters of labor-intensive manufactures in the late 1980s and early 1990s. International trade provided an environment conducive to rapid industrial growth and transformation of the predominantly agricultural economies of East and Southeast Asia into modern industrial economies in a remarkably short period of time by historical standards. Openness to trade is still a catalyst for further industrial growth in East and Southeast Asia today as the following sections will demonstrate.

World trade shares of East and Southeast Asia are presented by Harmonized System (HS) chapter categories for 1995 and 2004 (the latest year that data are available) in Appendix Table A1.6.1.<sup>2</sup>

The major HS chapter categories are given in Table 1.6.1. These categories' shares in total world trade for 1995 and 2004 are shown in Table 1.6.2.<sup>3</sup> The most striking changes in shares in the current dollar value of global trade over the decade are in HS 27 (mineral fuels) with a huge jump from under 7% to over 10% and in HS 28–38 (chemicals and allied products) with an increase to nearly 11% from 9.5%. Other than minerals (HS 25–26), the only categories to show increases are in machinery sectors: HS 85 (electrical machinery), HS 86–89 (transportation machinery), and HS 90–91 (precision instruments). It should be kept in mind that the declining shares of HS 50–60 (textiles) and HS 61–63 (apparel) are likely to be artificial as most of these products remained under global quotas during the period in question, despite integration of about half the tariff lines under the Agreement on Textiles and Clothing (GATT 1994) over the period in question.<sup>4</sup> Machinery sectors (HS 84, HS 85, and HS 86–89) were by far the most important in terms of world trade shares with 38% in 1995 and 39% in 2004.

The East and Southeast Asian region shows a remarkable concentration in these machinery sectors over 1995–2004. The share of East and Southeast Asia in world exports rose from 31% to 35% in HS 84;

### 1.6.1 Harmonized System categories

HS 01–05	Live animals (meat, fish, poultry, livestock)
HS 06–10	Unprocessed fruit and vegetable products
HS 11–24	Processed agricultural products (food, beverages and tobacco)
HS 25–26	Mineral products (including cement)
HS 27	Mineral fuels (including petroleum and coal)
HS 28–38	Chemicals and allied industries (organic and inorganic chemicals)
HS 39–40	Plastic and rubber products (articles of plastic, articles of rubber)
HS 41–43	Leather products (articles of leather, manufactures of fur)
HS 44–46	Wood and cork (articles of wood, cork and straw)
HS 47–49	Pulp and paper (including printed matter of paper)
HS 50–60	Textiles (natural and manmade fiber yarn and fabric, carpets)
HS 61–63	Apparel (including other made-up textile articles)
HS 64–67	Footwear, headgear and umbrellas (including articles of human hair)
HS 68–70	Articles of stone, glass and ceramic products
HS 71	Gems and jewelry (including precious stones and precious metals, and coin)
HS 72–83	Base metals (articles of base metal)
HS 84	Nonelectrical machinery (including plant and capital equipment, office machinery and computers)
HS 85	Electrical machinery (including television receivers, sound recorders and reproducers, and telecommunications equipment)
HS 86–89	Transportation machinery (vehicles and parts)
HS 90–91	Precision instruments (optical, medical, measuring equipment)
HS 92	Musical instruments (parts and accessories)
HS 93	Arms and ammunition (parts and accessories)
HS 94–97	Miscellaneous manufactures (furniture, toys, sports equipment and art)

from 48% to 54% in HS 85 and from 21% to 22% in HS 86–89. East and Southeast Asia also managed to increase the share of exports in three of the other main expanding sectors: HS 25–26 from 10% to 11%; HS 28–38 from 16% to 17%; and HS 90–91 from 33% to 36%. Hence, it can be seen that aside from HS 27 (mineral fuels), East and Southeast Asia have concentrated their exports on the fastest growing segments of global trade over the most recent decade. Export shares of East and Southeast Asia in world trade have also increased in HS 50–63 (from 38% to 39% for textiles and from 42% to 43% in apparel). Figure 1.6.1 shows that East and Southeast Asia have lifted their share of world exports over the decade from 25% to almost 28% when Japan is included and from 17% to 21% when Japan is excluded. The increase in the PRC exports relative to world trade has been particularly impressive over 1995–2004.

Import shares of East and Southeast Asia are shown in Figure 1.6.2 and are roughly constant when Japan is included but rise from about 17% to 18% when Japan is excluded. The PRC share in world imports nearly doubled over 1995–2004, from 3% to 6%. The share of East and Southeast Asia in world imports of electrical machinery (HS 85) increased sharply over 1995–2004 from 34% to 39%. There was also a sharp jump in the share of the region in world imports of precision instruments from 26% to 34%. The world import share of the region in nonelectrical machinery (HS 84) also increased modestly from 23% to 24%. In contrast, the share of the region in world imports of transportation goods fell very sharply from 12% to 8% (9% to 6% excluding Japan) reflecting the relatively slow growth of imports in the region (Table 1.6.3) of around 2% annually. Only the PRC experienced high import growth in transport equipment during 1995–2004 within the region. Still the period has seen the emergence of the region as a supplier of markets outside the region of transportation equipment.

These data on world export and import market shares of East and Southeast Asia indicate that the region has a huge surplus on the trade account in the balance of payments and this surplus has built up following the recovery from the Asian financial crisis of 1997–1998. The ASEAN-5 countries' decline in world import share is mirrored by their increase in world export share and move from deficit to surplus in 2004 compared with 1995. The PRC shows a similar pattern of shift from trade deficit to surplus. The NIEs increase the surplus of export shares over import shares in global trade. These surpluses help explain the large increase in foreign exchange reserve holdings of East and Southeast Asia.

The PRC has become a dominant force in global trade in labor-intensive manufactures (HS 50–60 [textiles], HS 61–63 [apparel], HS 64–67 [footwear, headgear and umbrellas]) but has also become a player in HS 84 (nonelectrical machinery) and HS 85 (electrical machinery) (especially in office and computing equipment) and HS 90–91 (precision instruments). Japan remains a dominant player in HS 86–89 (transportation equipment).

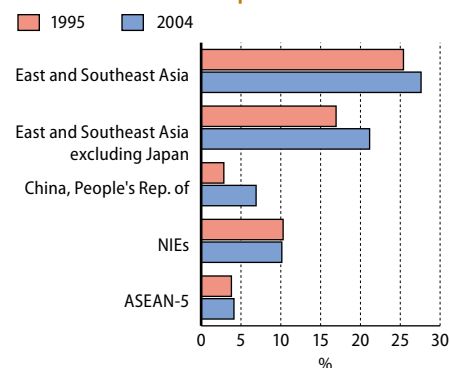
Growth in world trade by HS chapter categories and growth in East and Southeast Asia (1995–2004), measured as compound annual growth rates are shown in Table 1.6.3. Setting aside mineral fuels, growth over the period is fastest in manufacturing sectors: (1) HS 28–38 (chemicals); (2) HS 85 (electrical machinery); (3) HS 90–91 (precision instruments); and (4) HS 86–89 (transport equipment). The PRC has double-digit growth

### 1.6.2 Shares in world trade by HS category, 1995 and 2004

HS category	1995	2004
01–05	2.78	2.06
06–10	3.26	2.39
11–24	2.96	2.38
25–26	1.32	1.41
27	6.81	10.35
28–38	9.48	10.81
39–40	1.03	0.97
41–43	0.60	0.43
44–46	1.35	1.05
47–49	2.54	1.76
50–60	3.39	2.17
61–63	3.84	3.62
64–67	0.82	0.62
68–70	0.86	0.72
71	0.84	0.82
72–83	7.21	6.86
84	14.86	14.46
85	12.13	13.45
86–89	11.11	11.27
90–91	3.15	3.32
92	0.59	0.50
93	0.14	0.06
94–97	4.69	4.49

Source: Statistics Canada, World Trade Analyzer.

### 1.6.1 Share of world exports

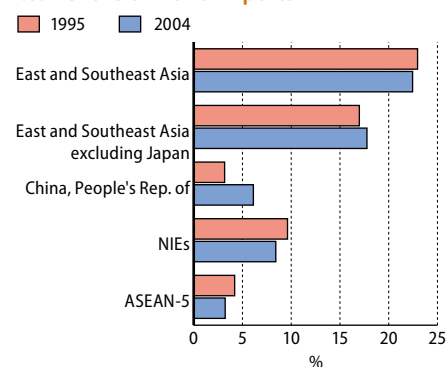


Note: ASEAN-5 comprises Indonesia, Malaysia, Philippines, Thailand, and Viet Nam.

Source: Statistics Canada, World Trade Analyzer.

[Click here for figure data](#)

### 1.6.2 Share of world imports



Note: ASEAN-5 comprises Indonesia, Malaysia, Philippines, Thailand, and Viet Nam.

Source: Statistics Canada, World Trade Analyzer.

[Click here for figure data](#)

## 1.6.3 Growth in trade by HS category

HS category	Growth in world trade	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excl. Japan
<b>Imports</b>							
01-05	3.22	-2.03	11.46	2.46	4.58	0.38	4.26
06-10	3.12	0.57	0.24	-0.39	1.31	0.38	0.25
11-24	4.17	0.44	9.26	-1.72	3.85	2.42	3.26
25-26	7.48	3.29	22.44	6.06	3.03	9.03	12.25
27	11.80	7.01	25.28	9.72	9.77	10.21	12.64
28-38	8.28	4.67	13.37	4.16	4.35	6.72	7.19
39-40	6.02	2.41	14.94	1.21	4.43	5.23	6.04
41-43	2.81	-1.86	8.50	1.14	0.32	3.78	4.15
44-46	3.73	-2.87	8.67	-4.33	-1.88	-1.48	0.43
47-49	2.45	-2.48	10.43	-2.91	1.42	1.31	2.28
50-60	1.55	-3.49	3.18	-2.73	0.69	-0.07	0.26
61-63	6.00	2.58	8.96	5.26	6.72	4.17	5.90
64-67	3.51	0.37	13.14	3.66	8.20	2.29	4.50
68-70	4.62	3.70	11.26	3.58	-1.06	3.85	3.88
71	6.34	-7.97	26.61	6.55	0.76	3.46	6.87
72-83	6.14	2.19	13.81	4.62	2.27	5.59	6.36
84	6.40	6.73	13.79	5.49	1.54	6.87	6.90
85	7.95	7.31	21.44	7.60	5.63	9.56	9.89
86-89	6.89	2.37	13.18	-0.43	-1.26	2.19	2.13
90-91	7.35	6.53	23.39	7.94	4.89	10.29	11.26
92	4.65	5.11	19.63	1.30	1.08	4.59	4.40
93	-2.90	0.25	5.61	-0.27	-22.31	-3.28	-4.96
94-97	6.19	3.17	8.03	3.28	3.24	3.78	4.09
<b>All sectors</b>	<b>6.72</b>	<b>3.88</b>	<b>14.83</b>	<b>5.15</b>	<b>3.64</b>	<b>6.45</b>	<b>7.25</b>
<b>Exports</b>							
01-05		5.20	7.51	-5.75	2.11	1.95	1.82
06-10		1.28	7.68	-4.19	2.65	3.07	3.12
11-24		1.92	2.81	-3.29	5.94	3.06	3.12
25-26		12.93	14.77	0.66	6.25	8.18	7.05
27		0.78	12.70	11.64	8.22	9.70	10.18
28-38		6.14	12.93	8.92	13.07	8.97	10.34
39-40		3.70	20.52	4.11	4.29	5.32	6.05
41-43		-2.91	13.66	2.43	0.02	4.23	4.47
44-46		0.19	16.41	-5.39	-2.03	1.14	1.15
47-49		2.94	14.16	1.70	8.79	5.33	5.97
50-60		0.19	9.85	-1.14	2.15	2.10	2.34
61-63		2.64	12.16	0.45	3.95	6.30	6.34
64-67		-9.63	10.94	-4.92	3.83	3.72	3.75
68-70		1.58	14.01	1.03	7.68	5.32	7.65
71		4.98	12.01	11.97	-1.46	8.07	8.28
72-83		3.56	16.74	5.73	10.13	7.77	9.76
84		1.61	34.14	6.16	12.92	8.12	12.21
85		2.26	25.75	9.83	8.24	9.37	11.86
86-89		5.04	21.79	10.88	9.63	7.47	12.53
90-91		4.68	18.76	8.95	10.66	8.25	11.30
92		3.17	14.33	10.24	8.94	8.11	10.78
93		1.58	-11.81	9.31	-8.12	4.48	5.89
94-97		2.32	15.66	0.75	5.27	6.32	6.71
<b>All sectors</b>		<b>3.56</b>	<b>17.73</b>	<b>6.53</b>	<b>7.71</b>	<b>7.71</b>	<b>9.38</b>

Note: Table shows compounded annual growth rates between 1995 and 2004.

Source: Statistics Canada, World Trade Analyzer.

across the machinery sectors with imports growing alongside exports suggesting trade in parts and components may be expanding rapidly. Growth rates of some machinery exports of the NIEs and ASEAN-5 are double digits as well suggesting complementary growth with PRC exports in these sectors. Export growth of East and Southeast Asia in these categories thus surpassed growth in world trade (Figure 1.6.3).

It is important to ascertain the relative importance and roles of intermediate and components trade versus final demand growth in this dynamic Asian trade (see below). Growth rates of exports of labor-intensive manufactures from East and Southeast Asia (excluding Japan) also exceeded world trade growth in these sectors, indicating that East and Southeast Asia continued to gain market share in these segments (Figure 1.6.4). This performance was related to the entry of the PRC into WTO in late 2001 and to Viet Nam's emergence at the same time. Viet Nam concluded a bilateral trade agreement (BTA) with the United

States in late 2001 that facilitated entry of its clothing exports into the large US market.

National import and export baskets of East and Southeast Asia are shown in detail in HS categories in Appendix Table A.1.6.2 (% share of total imports and exports for each country/customs territory). Shares of electrical and nonelectrical machinery in imports and exports are rising in most East and Southeast Asian countries. Korea shows dynamic gains in export share of transport equipment as does Japan. Despite PRC dominance in world exports of textiles and clothing, these sectors have become less important in the PRC's national export basket indicating that the PRC is evolving in line with the previously observed pattern of industrial development of Japan, the NIEs, and ASEAN by moving into higher skill and technology exports. This again reinforces the view that international trade is facilitating industrialization and structural change in the region. Asia is well-positioned given the rapid global growth in the machinery sectors and the recent freeing up of trade in textiles and apparel.<sup>5</sup>

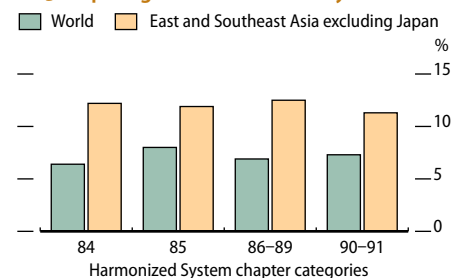
The parallel rise in imports and exports in electrical machinery (HS 85) and nonelectrical machinery (HS 84) in East and Southeast Asia underscores the rising importance of intraregional trade in intermediate parts and components. The Philippines; Malaysia; Singapore; Hong Kong, China; and Taipei, China all have very high import and export shares in HS 84 and HS 85, with the Philippines having more than three quarters of total exports in just these two sectors. In contrast, Viet Nam has a low but fast growing share of exports in HS 84 and HS 85 (1% in 1995 up to close to 7% in 2004) but has even higher import shares of HS 84 and HS 85. Indonesia, like Viet Nam, has fairly low shares of electrical and nonelectrical machinery in its export basket, but the shares have grown rapidly and the combined sectors' share rose from 7% to 16% of total exports between 1995 and 2004.

Viet Nam has high and rising shares of exports in HS 61–63 (apparel) and HS 64–67 (footwear, headgear and umbrellas), reflecting the importance of labor-intensive manufactures in its export basket. Viet Nam also has a relatively high share of HS 50–60 (textiles) in its import basket (9% in both years) reflecting its reliance on imported yarns and fabrics to support its export of apparel. Viet Nam also has among the highest share of mineral fuels (HS 27) in its export basket in the region (with about 20% in 1995 and 21% in 2004). In contrast to Viet Nam, Indonesia had a drop in its share of mineral fuels in exports from over 25% in 1995 to under 18% in 2004. Viet Nam also had the largest share of unprocessed agricultural exports in its export basket but these shares (over 31% for HS 01–10 in 1995) were down very sharply in 2004, reflecting the rapid growth of manufacturing there.

## The role of intraregional trade

It was shown above that East and Southeast Asia (excluding Japan) experienced more rapid growth in trade (both imports and exports) than the world economy over 1995–2004. Intra-Asian trade has grown at the same pace as trade with the world between 1995 and 2004 implying that it also has been highly dynamic. The emergence of the PRC has proven the most dynamic element in intraregional trade growth in 1995–2004.

### 1.6.3 Export growth in machinery sectors

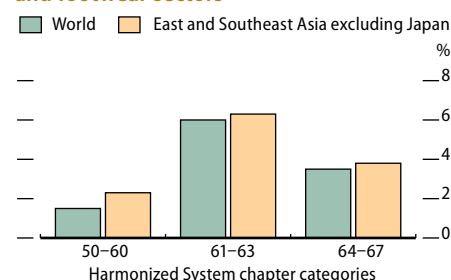


84 = Nonelectrical machinery; 85 = Electrical machinery; 86–89 = Transportation machinery; 90–91 = Precision instruments.

Source: Statistics Canada, World Trade Analyzer.

[Click here for figure data](#)

### 1.6.4 Export growth in textile, clothing, and footwear sectors



50–60 = Textiles; 61–63 = Clothing; 64–67 = Footwear, headgear, and umbrellas.

Source: Statistics Canada, World Trade Analyzer.

[Click here for figure data](#)



The PRC's growth has been both as an importer and an exporter. The PRC growth in trade with Japan, the NIEs, and ASEAN-5 was 14% per year over the period 1995 to 2004 (Table 1.6.4) implying a more than tripling in the value of trade between the PRC and the other countries in the region (Table 1.6.5) from \$199 billion in 1995 to \$655 billion in 2004. Moreover, the PRC has imported more than it exports within the region, implying that its global trade is dependent on access to world markets outside the region, given its overall trade surplus. This pattern of rapid expansion of intraregional trade based on the PRC as an assembly point for final products destined for the markets of Europe and the Americas (and elsewhere outside the region) indicates that far from decoupling from globalization, the region is becoming more oriented toward the global economy than ever before.

Intraregional trade doubled in value between 1995 and 2004 from \$651 billion to \$1,296 billion. Intraregional trade shares (over 60%) in both years in East and Southeast Asia including Japan (Table 1.6.6) are as high as in the EU despite the relatively limited institutional basis for regional integration in Asia. Apart from the ASEAN free trade agreement, other regional and bilateral initiatives have only recently been negotiated within the region and are still quite limited in their impact on the direction of trade. Hence, the growth in intra-Asian trade and its trade growth with the world have been largely driven by market forces rather than by discriminatory trade agreements.

If the growth of intraregional trade has been very rapid, does this provide a case for the view that greater regional integration efforts will enable Asia to break its dependence on final demand in industrial countries? Or is it the case that intraregional trade is being driven by global integration with final demand for exports of East and Southeast Asia largely lying outside the region for the key manufacturing sectors?

#### 1.6.4 Growth of intra-Asian trade, all sectors, 1995–2004

Exporter/importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excluding Japan
Japan	-	16.3	2.8	0.5	4.9	-
PRC	12.9	-	13.9	19.0	14.0	14.5
NIEs	2.7	12.8	5.8	3.9	7.6	8.6
ASEAN-5	4.3	21.8	4.8	12.1	7.5	8.9
East and Southeast Asia	6.4	14.2	6.5	5.0	8.0	-
East and Southeast Asia excluding Japan	-	13.6	8.4	7.4	-	9.8

Source: Statistics Canada, World Trade Analyzer.

#### 1.6.5 Intra-Asian trade, all sectors (\$ billion), 1995 and 2004

Exporter/importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excluding Japan
<b>1995</b>						
Japan	-	23	113	53	189	-
PRC	29	-	51	6	85	57
NIEs	51	85	77	59	272	221
ASEAN-5	36	6	49	13	104	68
East and Southeast Asia	116	114	290	131	651	-
East and Southeast Asia excluding Japan	-	91	177	78	-	346
Total market	314	167	344	221	1,047	733
<b>2004</b>						
Japan	-	90	144	55	289	-
PRC	86	-	164	29	278	193
NIEs	65	252	128	84	528	464
ASEAN-5	53	36	75	36	200	147
East and Southeast Asia	204	377	511	204	1,296	-
East and Southeast Asia excluding Japan	-	288	367	148	-	803
Total market	443	579	796	305	2,123	1,680

Source: Statistics Canada, World Trade Analyzer.

#### 1.6.6 Intra-Asian trade, all sectors (% share of world total), 1995 and 2004

Exporter/importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excluding Japan
<b>1995</b>						
Japan	-	13.80	32.76	23.90	18.03	-
PRC	9.13	-	14.74	2.69	8.16	7.74
NIEs	16.26	50.91	22.30	26.86	26.01	30.19
ASEAN-5	11.55	3.69	14.30	5.75	9.98	9.30
East and Southeast Asia	36.94	68.40	84.10	59.21	62.17	-
East and Southeast Asia excluding Japan	-	54.60	51.34	35.30	-	47.23
Total market	100.00	100.00	100.00	100.00	100.00	100.00
<b>2004</b>						
Japan	-	15.46	18.15	18.11	13.62	-
PRC	19.33	-	20.61	9.36	13.10	11.46
NIEs	14.64	43.45	16.06	27.57	24.89	27.59
ASEAN-5	12.02	6.27	9.43	11.69	9.44	8.76
East and Southeast Asia	45.99	65.19	64.25	66.74	61.05	-
East and Southeast Asia excluding Japan	-	49.73	46.10	48.62	-	47.81
Total market	100.00	100.00	100.00	100.00	100.00	100.00

Source: Statistics Canada, World Trade Analyzer.



One way to address these issues is to simply compare the share of East and Southeast Asia in world imports and world exports to verify that markets outside the immediate region are still essential in providing the demand growth for the region's overall exports. Recall that world exports and imports are identical in the database. This implies that a region with export shares greater than import shares in its world trade has a global trade surplus.

Furthermore, by definition intraregional trade, like world trade, when summed up must balance (imports and exports within the region or the world are equal when summed across members). Then it follows that extraregional trade of a region with a global trade surplus must be in surplus and that external demand from outside the region is important in final demand for the region's global exports. For example in HS 61–63 (apparel), the region's imports from the world were \$39.2 billion (\$17.4 billion if Japan is excluded) with a world share of 19% in 1995 but exports to the world were \$84.6 billion (\$83.6 billion excluding Japan) or 42% of the world total. This implies that exports were largely dependent on external demand.

In 2004 the region's share of imports of HS 61–63 amounted to less than 17% of the world total (\$56.5 billion; \$29.2 billion excluding Japan) while exports rose to \$146.7 billion (\$145.3 billion excluding Japan) or 43% of world total—implying that final demand outside the region was the driving force in the expansion of exports. In the case of HS 85 (electrical machinery) the share of East and Southeast Asia in world imports increased from 34% to 39% yet the region's export share in the world increased by more, from 48% to 54%, so even on the margin it was external final demand outside the region that was most important for growth. Similarly in nonelectrical machinery (HS 84) the import share rose moderately from 23% to 24% over the period but the share in world exports rose sharply from 31% to 35%. For each of these sectors, external final demand had to be relied upon for export expansion between 1995 and 2004.

## **Intra-industry trade in manufactures**

Intra-industry trade—trade in which a country simultaneously imports and exports similar products (defined as belonging to the same Standard International Trade Classification (SITC) 3-digit product group) is an indicator of the sophistication of consumer markets and industrial development (OECD 2002). As barriers to trade and investment are reduced, multinational enterprises increasingly engage in production activities across a range of locations seeking to apply their firm's assets with location-specific advantages, including abundance of particular types of resources or a favorable geographic position.

More open economies are likely to have a high ratio of intra-industry trade in manufactures, particularly in sophisticated and technology-intensive products like chemicals, office machinery, transport equipment, and electronics. Increased variety and choice in production and consumption is associated with intra-industry trade. In theory intra-industry trade in similar but differentiated products takes place in markets characterized by monopolistic competition (many producers and consumers, consumer tastes favor variety, and firms have

some market power) as opposed to perfect competition where firms produce homogeneous products and are price-takers and consumers are indifferent between firms supplying the homogeneous product. Intra-industry trade may also arise where fragmentation of the production process in order to minimize costs across locations is taking place. Intra-industry trade (IIT) is measured by an index designed by Grubel and Lloyd (1975) varying in value between zero and one:

$$ITT_i = 1 - \frac{|X_i - M_i|}{(X_i + M_i)}$$

If the country only imports or exports products in sector *i*, the second term on the right side of the equation is equal to one and the whole expression collapses to zero signifying pure inter-industry trade. Similarly, if the country simultaneously imports and exports the same amounts of products in sector *i*, the second term is zero and the whole expression is equal to one, signifying pure intra-industry trade.

Intra-industry trade in East and Southeast Asian manufacturing is evaluated by factor intensity between 1995 and 2004 (Table 1.6.7) using SITC 3-digit product categories. There are four types of manufacturing industries: unskilled labor-intensive; natural resource-intensive; human capital-intensive; and technology-intensive.

Trade-weighted values of the IIT index have been calculated for each group of manufactured products for Japan, PRC, NIEs, ASEAN-5, East and Southeast Asia, and East and Southeast Asia excluding Japan. These are weighted by the amount of trade in each of the 3-digit product groups compared with the sum of trade in the product group as a whole. The summary IIT indexes for natural resource-intensive, technology-intensive, and human capital-intensive manufactures are quite large and rising over the period 1995–2004. The exception is unskilled labor-intensive manufactures, where the IIT indexes generally fell. This reflects predominantly a decline in intra-industry trade in textiles. The reasons for this decline are beyond the immediate scope of this report but may reflect declines in PRC imports of intermediate textiles associated with the rapidly increasing capacity in textile production that has occurred since it joined WTO (Anson and Brocklehurst 2006). One may distinguish between horizontal IIT in which countries import and export products at a similar level of processing with vertical IIT where countries import and export goods at differing levels of processing. The latter is thought to take place where production is fragmented so that each manufacturing operation in the value chain takes place in the lowest cost or most advantageous location. The IIT in technology-intensive and human capital-intensive products in East and Southeast Asia most likely is of the vertical type associated with the rise in trade in machinery parts and components.

**1.6.7 Grubel-Lloyd intra-industry trade indexes, 1995 and 2004**

	Year	Labor-intensive manufacturing	Natural resource-intensive manufacturing	Human-capital intensive manufacturing	Technology-intensive manufacturing
Japan	1995	0.38	0.78	0.40	0.46
	2004	0.34	0.71	0.37	0.60
China, People's Rep. of	1995	0.47	0.51	0.75	0.58
	2004	0.32	0.74	0.73	0.64
NIEs	1995	0.60	0.82	0.85	0.80
	2004	0.65	0.80	0.76	0.81
ASEAN-5	1995	0.47	0.63	0.36	0.63
	2004	0.47	0.71	0.67	0.78
East and Southeast Asia	1995	0.68	0.80	0.72	0.84
	2004	0.58	0.85	0.68	0.85
East and Southeast Asia excl. Japan	1995	0.58	0.80	0.77	0.77
	2004	0.48	0.88	0.77	0.81

Source: Statistics Canada, World Trade Analyzer.

## The rise of trade in parts and components in machinery sectors

Trade in intermediate products has become very important for East and Southeast Asian trade in electrical machinery, transportation equipment, and nonelectrical machinery. This phenomenon may be observed by looking at more detailed SITC 4-digit products within these sectors. For example, in electrical machinery the number one 4-digit product group traded is SITC 7649 (parts of apparatus of division 76—electrical machinery) in the imports and exports of Japan, PRC, NIEs, and ASEAN-5 taken individually and as a whole. Whereas trade in intermediates accounts for one half of world trade in electrical machinery in 2004, it accounts for 56% of imports and 60% of exports of East and Southeast Asia (including Japan). Growth of trade in SITC 7649 in East and Southeast Asia has exceeded 14% a year between 1995 and 2004 compared with 12% globally.

Growth of exports has been even more dynamic—if one excludes Japan, the growth rate of exports is nearly 18% in East and Southeast Asia. Thus, the share of trade in parts and components in this one 4-digit category in East and Southeast Asia rose from 50% of imports of electrical machinery and 45% of exports of electrical machinery to 57% and 61% of such imports and exports, respectively. In global trade the shares increased from 38% to 50% over the same time period indicating that East and Southeast Asia trade even more intensively in these intermediate goods than does the rest of the world. These figures actually understate the importance of trade in intermediate goods as certain other 4-digit SITC groups (i.e., SITC 7757 and SITC 7783 are aggregates of parts and final goods that cannot be broken down further in the data).

In transportation equipment, SITC 7849 (other parts and accessories of motor vehicles) is the leading 4-digit product group in the imports of transport equipment in PRC, NIEs, and ASEAN-5 individually and is the second largest category in Japan. SITC 7849 is the second largest category within transportation equipment exports in Japan and the NIEs and is the largest category in both the PRC and ASEAN-5. The share of SITC 7849 in total imports of transportation machinery in East and Southeast Asia rose to 43% in 2004 from 28% in 1995 (excluding Japan the increase was from 33% to 46%). In terms of exports, the share of SITC 7849 was constant over the period at 23%, but if Japan is excluded the increase was from 17% in 1995 to 27% in 2004. In global trade the share of SITC 7849 actually fell from 27% to 26%. Growth in exports of SITC 7849 in East and Southeast Asia excluding Japan was 20% per year over 1995–2004 compared with global growth of 7% per year.

It is more difficult to disaggregate trade in intermediate products in the other machinery sectors. However, within nonelectrical machinery, SITC categories 7414, 7492, 7591, 7499, and 7139 consist wholly or partially of parts and components and accounted for 17% of exports of East and Southeast Asia (excluding Japan) in 2004 compared with 15% in 1995. Growth in exports of these 4-digit product groups from East and Southeast Asia excluding Japan exceeded world growth in each category.

The PRC is a real source of growth of intraregional trade and is known as the assembly point of final goods for export to third markets

outside the region. The growth in intraregional trade in electrical machinery parts and components (SITC 7649) has been most rapid with the PRC (Table 1.6.8). The value of this trade in terms of PRC imports increased fourfold between 1995 and 2004 (from \$5.1 billion to \$25.4 billion—see Table 1.6.9). The share of the region in the total amount of East and Southeast Asian trade in electrical machinery parts and components rose from 84% to 86% over this period and from 63% to 72% if Japan is excluded (Table 1.6.10). The integration of the region in parts and components trade is driven however, by final demand outside the region. This can be seen in the aggregate data for HS 85 with exports to the world rising from \$307.5 billion in 1995 to \$688.5 billion in 2004 compared with imports rising from \$215.5 billion in 1995 to \$490.0 billion in 2004.

At the individual product level, dependence on final demand outside the region also appears to loom large in electrical machinery. For example, SITC 774 (electrical apparatus for medical purposes) is a fast rising export sector with exports from East and Southeast Asia to the world rising from \$0.7 billion in 1995 to \$1.8 billion in 2004 but intraregional share actually fell from 26% in 1995 to 22% in 2004, implying extraregional demand was critical for export expansion in this type of final good.

In transportation equipment, growth in intraregional trade in automotive and vehicular parts and components (SITC 7849) has also been most rapid in the PRC (Table 1.6.11). Intra-Asian trade in vehicular components doubled in value between 1995 and 2004 (rising from \$7.0 billion in 1995 to \$14.9 billion in 2004—Table 1.6.12).

Intraregional trade in East and Southeast Asia as a share of East and Southeast Asia's global trade in SITC 7649 rose from 59% in 1995 to 65% in 2004 (Table 1.6.13). The most significant final demand product in the transportation machinery sector at the

#### 1.6.8 Growth of intra-Asian trade: Electrical machinery parts and components (SITC 7649), 1995–2004

Exporter\importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excluding Japan
Japan	-	18.9	4.5	(2.2)	6.0	-
PRC	23.6	-	32.0	37.9	30.0	32.4
NIEs	8.8	19.1	9.8	4.0	12.5	13.0
ASEAN-5	7.9	45.0	0.0	8.1	5.2	4.0
East and Southeast Asia	13.4	19.5	12.4	5.0	13.1	-
East and Southeast Asia excluding Japan		19.6	15.3	7.2	-	15.2

Source: Statistics Canada, World Trade Analyzer.

#### 1.6.9 Intra-Asian trade: Electrical machinery parts and components (SITC 7649) (\$000), 1995 and 2004

Exporter\importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excluding Japan
<b>1995</b>						
Japan	-	745,947	4,350,156	1,650,792	6,746,895	-
PRC	748,606	-	1,419,578	92,528	2,260,712	1,512,106
NIEs	1,502,023	4,312,381	3,869,722	3,351,760	13,035,886	11,533,863
ASEAN-5	1,181,742	36,537	2,769,200	329,912	4,317,391	3,135,649
East and Southeast Asia	3,432,371	5,094,865	12,408,656	5,424,992	26,360,884	-
East and Southeast Asia excluding Japan	-	4,348,918	8,058,500	3,774,200	-	16,181,618
Total market	5,972,511	7,868,311	9,393,819	8,283,293	31,517,934	25,545,423
<b>2004</b>						
Japan	-	3,533,424	6,481,482	1,348,845	11,363,751	-
PRC	5,056,522	-	17,303,201	1,663,198	24,022,921	18,966,399
NIEs	3,208,235	20,794,825	8,983,998	4,752,485	37,739,543	34,531,308
ASEAN-5	2,338,339	1,032,787	2,770,534	662,903	6,804,563	4,466,224
East and Southeast Asia	10,603,096	25,361,036	35,539,215	8,427,431	79,930,778	-
East and Southeast Asia excl. Japan	-	21,827,612	29,057,733	7,078,586	-	57,963,931
Total market	12,190,940	28,944,100	40,706,065	10,675,982	92,517,087	80,326,147

Source: Statistics Canada, World Trade Analyzer.

#### 1.6.10 Intra-Asian trade: Electrical machinery parts and components (SITC 7649) (% share of world total), 1995 and 2004

Exporter\importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excluding Japan
<b>1995</b>						
Japan	-	9.48	46.31	19.93	21.41	-
PRC	12.53	-	15.11	1.12	7.17	5.92
NIEs	25.15	54.81	41.19	40.46	41.36	45.15
ASEAN-5	19.79	0.46	29.48	3.98	13.70	12.27
East and Southeast Asia	57.47	64.75	132.09	65.49	83.64	-
East and Southeast Asia excluding Japan	-	55.27	85.79	45.56	-	63.34
Total market	100.00	100.00	100.00	100.00	100.00	100.00
<b>2004</b>						
Japan	-	12.21	15.92	12.63	12.28	-
PRC	41.48	-	42.51	15.58	25.97	23.61
NIEs	26.32	71.84	22.07	44.52	40.79	42.99
ASEAN-5	19.18	3.57	6.81	6.21	7.35	5.56
East and Southeast Asia	86.98	87.62	87.31	78.94	86.40	-
East and Southeast Asia excluding Japan	-	75.41	71.38	66.30	-	72.16
Total market	100.00	100.00	100.00	100.00	100.00	100.00

Source: Statistics Canada, World Trade Analyzer.

SITC 4-digit level is passenger motor cars for transport of passengers and goods (SITC 7810). The amount of trade in passenger cars by country in the region grew by 9% per year over 1995–2004 (Table 1.6.14), or by 18% if Japan is excluded. The value of trade more than doubled from \$3.9 to \$8.8 billion (Table 1.6.15). However, intraregional trade in passenger cars accounted for only 21% of the total in 1995 and rose to around 41% in 2004, implying that the greatest share of final demand for motor cars produced in the region still lay outside the region (Table 1.6.16) even though growth in final demand within the region was strong in this case.

It is particularly clear that final demand in the PRC has been a motive force for expansion in intraregional trade in motor cars with PRC accounting for \$3.2 billion in 2004—a tenfold increase over the value of trade in 1995 (Table 1.6.15). Auto exports from Japan and the NIEs to the PRC made huge gains between 1995 and 2004. By way of contrast, exports from the PRC of final passenger cars to East and Southeast Asia were just \$12 million in 1995 and grew to \$49 million in 2004 and these accounted for 37% of all cars exported by the PRC in 1995 but just 13% in 2004—again indicating that final demand outside the region was predominant. This indicates that the PRC plays a role as both an assembler and exporter of final demand goods in some sectors but serves as a major source of final demand in others.

In considering the role of the PRC in the region's trade and industrialization, it is important to keep in mind the rise in intra-industry trade (based largely upon intrafirm trade of multinational enterprises and their affiliates in the region and beyond) and to understand the PRC's own industrial transition toward more sophisticated manufactures despite its apparent dominance in labor-intensive industries. The PRC imports capital equipment and components in machinery (HS 84–85) from within

#### 1.6.11 Growth of intra-Asian trade: Other parts and accessories of motor vehicles (SITC 7849), 1995–2004

Exporter\importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excluding Japan
Japan	-	32.5	(0.1)	0.1	4.1	-
PRC	36.7	-	19.1	27.4	29.6	22.5
NIEs	11.6	18.9	8.4	8.5	14.2	14.7
ASEAN-5	29.5	53.7	17.3	24.8	25.5	23.8
East and Southeast Asia	23.5	24.5	2.2	3.8	8.8	-
East and Southeast Asia excluding Japan	-	19.4	12.8	16.8	-	17.1

Source: Statistics Canada, World Trade Analyzer.

#### 1.6.12 Intra-Asian trade: Other parts and accessories of motor vehicles (SITC 7849) (in \$000), 1995 and 2004

Exporter\importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excluding Japan
<b>1995</b>						
Japan	-	204,834	2,294,285	2,981,531	5,480,650	-
PRC	49,738	-	49,634	26,088	125,460	75,722
NIEs	185,237	484,193	180,191	280,680	1,130,301	945,064
ASEAN-5	68,315	2,003	55,983	129,434	255,735	187,420
East and Southeast Asia	303,290	691,030	2,580,093	3,417,733	6,992,146	-
East and Southeast Asia excl. Japan	-	486,196	285,808	436,202	-	1,208,206
Total market	1,926,526	1,892,966	3,946,387	4,058,327	11,824,206	9,897,680
<b>2004</b>						
Japan	-	2,573,019	2,282,347	3,018,418	7,873,784	-
PRC	827,237	-	240,214	230,556	1,298,007	470,770
NIEs	495,840	2,293,580	373,358	583,068	3,745,846	3,250,006
ASEAN-5	699,294	95,693	234,541	952,010	1,981,538	1,282,244
East and Southeast Asia	2,022,371	4,962,292	3,130,460	4,784,052	14,899,175	-
East and Southeast Asia excl. Japan	-	2,389,273	848,113	1,765,634	-	5,003,020
Total market	4,695,064	8,055,204	4,959,877	5,304,336	23,014,481	18,319,417

Source: Statistics Canada, World Trade Analyzer.

#### 1.6.13 Intra-Asian trade: Other parts and accessories of motor vehicles (SITC 7849) (% share of world total), 1995 and 2004

Exporter\importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excluding Japan
<b>1995</b>						
Japan	-	10.82	58.14	73.47	46.35	-
PRC	2.58	-	1.26	0.64	1.06	0.77
NIEs	9.62	25.58	4.57	6.92	9.56	9.55
ASEAN-5	3.55	0.11	1.42	3.19	2.16	1.89
East and Southeast Asia	15.74	36.51	65.38	84.22	59.13	-
East and Southeast Asia excluding Japan	-	25.68	7.24	10.75	-	12.21
Total market	100.00	100.00	100.00	100.00	100.00	100.00
<b>2004</b>						
Japan	-	31.94	46.02	56.90	34.21	-
PRC	17.62	-	4.84	4.35	5.64	2.57
NIEs	10.56	28.47	7.53	10.99	16.28	17.74
ASEAN-5	14.89	1.19	4.73	17.95	8.61	7.00
East and Southeast Asia	43.07	61.60	63.12	90.19	64.74	-
East and Southeast Asia excluding Japan	-	29.66	17.10	33.29	-	27.31
Total market	100.00	100.00	100.00	100.00	100.00	100.00

Source: Statistics Canada, World Trade Analyzer.



the region that are greater than its own intraregional exports of these items. However, its global exports in these sectors exceed its global imports indicating that it is reliant on external demand as an assembly point for final goods within the production chain of the multinationals. Thus, one can make the case that the PRC, far from being responsible for “de-industrialization” is providing a complementary role to the rest of the region. These issues are examined in the following section.

## The challenge of the PRC for industrialization in Southeast Asia

It is sometimes argued that industrial development in the PRC is different from previous industrializations in East and Southeast Asia. The former pattern of industrial development—the “flying geese” pattern where Japan was in the lead and after beginning with development of manufacturing of processed products and labor-intensive goods such as textiles, clothing, and footwear, subsequently moved into more capital-intensive and sophisticated industries allowing first the NIEs and then the ASEAN-5 to follow suit—in this view is no longer valid. The shriller members of this chorus (NCTO 2004), for example fear that the PRC will completely dominate world production and trade in labor-intensive manufactures (textiles, apparel, footwear, travel goods) and will deprive smaller developing countries the option of moving into manufacturing as a result. Others fear that the PRC will simultaneously dominate all types of manufacturing, including those at mid- and high-levels of technology. De-industrialization of Southeast Asian nations resulting from the PRC’s entry into WTO (in late 2001) and

### 1.6.14 Growth of intra-Asian trade: Passenger cars (SITC 7810), 1995–2004

Exporter\importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excluding Japan
Japan	-	33.6	6.2	(3.5)	5.2	-
PRC	51.7	-	18.7	(4.3)	16.8	14.9
NIEs	24.4	26.1	8.7	7.2	14.6	14.5
ASEAN-5	44.9	7.0	25.8	43.5	36.8	36.4
East and Southeast Asia	35.5	29.4	7.7	2.7	9.3	-
East and Southeast Asia excluding Japan	-	25.9	13.5	14.6	-	17.7

Source: Statistics Canada, World Trade Analyzer.

### 1.6.15 Intra-Asian trade: Passenger cars (SITC 7810) (\$000), 1995 and 2004

Exporter\importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excluding Japan
<b>1995</b>						
Japan	-	124,229	1,027,231	1,916,991	3,068,451	-
PRC	170	-	8,398	3,522	12,090	11,920
NIEs	5,213	188,888	160,505	445,419	800,025	794,812
ASEAN-5	3,019	2,711	31,147	31,351	68,228	65,209
East and Southeast Asia	8,402	315,828	1,227,281	2,397,283	3,948,794	-
East and Southeast Asia excl. Japan	-	191,599	200,050	480,292	-	871,941
Total market	9,870,655	1,085,831	3,646,370	3,802,067	18,404,923	8,534,268
<b>2004</b>						
Japan	-	1,684,735	1,761,775	1,390,586	4,837,096	-
PRC	7,240	-	39,158	2,362	48,760	41,520
NIEs	37,314	1,520,472	339,598	829,825	2,727,209	2,689,895
ASEAN-5	85,036	4,996	246,380	811,065	1,147,477	1,062,441
East and Southeast Asia	129,590	3,210,203	2,386,911	3,033,838	8,760,542	-
East and Southeast Asia excl. Japan	-	1,525,468	625,136	1,643,252	-	3,793,856
Total market	7,759,686	5,258,810	4,922,321	3,602,937	21,543,754	13,784,068

Source: Statistics Canada, World Trade Analyzer.

### 1.6.16 Intra-Asian trade: Passenger cars (SITC 7810) (% share of world total), 1995 and 2004

Exporter\importer	Japan	PRC	NIEs	ASEAN-5	East and Southeast Asia	East and Southeast Asia excl. Japan
<b>1995</b>						
Japan	-	11.44	28.17	50.42	16.67	-
PRC	0.00	-	0.23	0.09	0.07	0.14
NIEs	0.05	17.40	4.40	11.72	4.35	9.31
ASEAN-5	0.03	0.25	0.85	0.82	0.37	0.76
East and Southeast Asia	0.09	29.09	33.66	63.05	21.46	-
East and Southeast Asia excl. Japan	-	17.65	5.49	12.63	-	10.22
Total market	100.00	100.00	100.00	100.00	100.00	100.00
<b>2004</b>						
Japan	-	32.04	35.79	38.60	22.45	-
PRC	0.09	-	0.80	0.07	0.23	0.30
NIEs	0.48	28.91	6.90	23.03	12.66	19.51
ASEAN-5	1.10	0.10	5.01	22.51	5.33	7.71
East and Southeast Asia	1.67	61.04	48.49	84.20	40.66	-
East and Southeast Asia excl. Japan	-	29.01	12.70	45.61	-	27.52
Total market	100.00	100.00	100.00	100.00	100.00	100.00

Source: Statistics Canada, World Trade Analyzer.



improving access to capital inflows and markets abroad are particular concerns (McKibbin and Woo 2003).

The more optimistic about the emergence of the PRC make almost equally fallacious arguments—to the extent of claiming that Asia can soon jettison its reliance on US consumer spending (and to a lesser extent, spending by Western European and Japanese consumers) because of the phenomenal growth in the PRC. Uncoupling of Asia from the US and EU in this view will be occurring rapidly as Asia shifts its focus in favor of fast-growing insatiable demand in the 1.3 billion strong PRC consumer market.

A careful analysis based upon the data paints a much more nuanced view of the role that the PRC is likely to take (assuming it avoids the disastrous collapse predicted for it by pundits such as Gordon Chang). The data presented in this section tend to support this more nuanced view—the PRC may take some of the lunch from Southeast Asia this afternoon but is likely to need to invite the same countries to dine with it in the evening. That is, the PRC prowess in labor-intensive manufacturing may lead it to gain market share in trade and FDI at the expense of countries such as Thailand, Indonesia, Viet Nam, and the Philippines. However, rapid growth in the PRC economy will also depend on increased imports of raw materials and intermediate inputs from Southeast Asia as well as capital equipment and technology from the NIEs. Eichengreen and Tong (2005) argue that the trade and FDI impact of the PRC's emergence will be negative for producers in low-income countries in Southeast Asia that specialize in labor-intensive manufactures and other consumer goods but positive for high-income countries in East Asia that export high-technology components and capital goods.

McKibbin and Woo (2003) estimate that if the PRC's membership in WTO increases its attractiveness as a destination for FDI, this is likely to come at the expense of Southeast Asia and result in losses in GDP of significant amounts for Thailand, Malaysia, Philippines, and Indonesia—unless these countries can rapidly upgrade their human resources in order to move more rapidly into sophisticated manufacturing where productivity growth is likely. Srinivasan (2006) makes the argument that competition for resources between the PRC and India will provide a large dividend for exporters in some of the poorer countries and regions of the world and that any negative effects (such as congestion in demand for shipping) will be short term.

The real danger is that the PRC's success (followed by emergence of India in complementary activities) might set off a protectionist backlash that will have negative global repercussions. Srinivasan (2006) cites the “blatantly protectionist response” of the EU and US to competition from the PRC in their textile and clothing industries as well as threats by US politicians to impose an across the board discriminatory tariff against products from the PRC unless the authorities there revalue the yuan. In addition, threats of increased use of antidumping measures appear to be legitimate as the EU has moved to impose antidumping duties on footwear from the PRC and the US on staple fiber exports from the PRC. Overall, the PRC's impact on the region and the world economy is positive and this is likely to continue, provided the PRC can constantly implement economic and political reforms necessary to sustain growth. A successful revival and conclusion to the Doha Round negotiations

in WTO would go a long way toward reducing protectionist threats to sustained growth in the region.

Does the rapid rise of manufacturing in the PRC led by booming exports of assembled machinery products and labor-intensive consumer goods imply that the rest of East and Southeast Asia will be displaced as manufacturing centers and as hosts for FDI? Data on global production shares show that the PRC doubled its share from 3.5% in 1994 to 7.0% in 2003, yet the NIEs and ASEAN-5 also increased their share in world production from 7.0% to 9.0% over the same decade (*The Economist* 2007). And as has been documented above, ASEAN-5 was able to lift its export share in world markets over roughly the same period, hardly lending support to the argument that the PRC poses a threat. In fact, *The Economist* argues that the PRC is losing favor relative to Southeast Asia as a manufacturing location and FDI host, as multinationals are adopting a “PRC plus one” strategy in which they invest in the PRC and in at least one ASEAN country simultaneously.

A recently released study for the World Bank (Winters and Yusuf 2007) also provides support for the nuanced view of assorted complementary and competitive impacts of the PRC on the exports and manufacturing competitiveness of ASEAN countries. Empirical data also tend to support the view of a complementary role for the PRC vis-à-vis ASEAN trade and manufacturing. For example, recent data show that ASEAN increased its market share in the US apparel market, in 2006 from 2005, to 19.3% from 17.3% in value and to 18.9% from 16.7% in volume.<sup>6</sup> In particular, low-income ASEAN members, such as Cambodia, Indonesia, and Lao People’s Democratic Republic, have done well in expanding their market shares in the US clothing market.

This indicates that the PRC is not closing off opportunities for low-income countries to enter the manufacturing process along the lines of the traditional “flying geese” pattern. Critical to this process is openness to trade and FDI, market-friendly policies, and institutional reforms at customs and tax departments (and elsewhere) so that export-oriented growth may take root and then bloom.

## Conclusion

The main findings of this chapter, based upon the empirical analysis of recent trade data, are broadly encouraging for the future prospects of the economies of East and Southeast Asia. Fundamentally, the processes of regional integration and regional cooperation are binding these economies closer together as trade and cross-border investments are mutually reinforcing. The key message from earlier sections is that globalization is the driving force behind increasing regional integration in Asia. Final demand emanating from outside the region is still crucial in the expansion of exports of manufactures from East and Southeast Asia. This is shown to be the case in traditional labor-intensive goods and in more sophisticated products, such as electrical machinery and motor cars. Thus, the economies of East and Southeast Asia are definitely not uncoupling from global markets, indeed they have become ever more closely linked with the large markets of the industrial economies.

East and Southeast Asia have concentrated their export manufactures

in the fastest-growing industries in world trade and this has allowed them to enhance their manufacturing capabilities in more sophisticated products while expanding their market shares. The rising trade shares of developing Asia in world trade underscores the fact that trade growth is indeed influenced by the composition of what countries export.

The pattern of trade and structural change in developing Asia has consistently followed the “flying geese” pattern and this remains the case for the PRC and emerging economies such as Indonesia and Viet Nam. The process of industrialization is being fostered by the rise in intra-industry trade. Although such trade has been stagnant or declining in traditional labor-intensive manufacturing (textiles, clothing, and footwear), it has been on the rise in more dynamic industrial branches, including in technology-intensive and human capital-intensive manufacturing sectors, as well as in natural resource-intensive products.

Most of the economies in the region initially stimulated openness by setting up special economic zones, export processing zones, and industrial bonded zones that encourage FDI and provide export-oriented firms with imported inputs free of tax and duty. Eventually they went further in cutting tariffs and opening the entire economy to trade and investment.

Within East and Southeast Asia, there has been explosive growth in trade in intermediate products—especially in parts and components of electrical machinery and transportation equipment centered on the PRC as the assembly point for final goods. The fact that intra-Asian trade has flourished indicates that multinational enterprises in the region tend to have high propensities to engage in vertical production sharing and have much higher export-sales ratios than in other parts of the world. The PRC has a nuanced impact on the process of industrialization elsewhere in the region. Southeast Asia competes in world markets with the PRC in labor-intensive manufacturing but the PRC is largely complementary to the rest of East and Southeast Asia in natural resource-based products and human capital- and technology-intensive manufactures.

Policy implications are as follows:

- Market access to third country markets, especially in North America and Europe, is vital to further export expansion in East and Southeast Asia and this means a successful and ambitious Doha Round is in the interest of the region.
- Globalization, technological change and competition requires the East and Southeast Asian economies to employ resources flexibly with ease of entry and exit.
- Countries may initiate the process of structural change by adopting or simulating open-economy policies that impart market discipline to firms and investors.
- Liberalization of trade and investment on a unilateral basis is still the most important route for reaping the gains from trade in the region and bilateral initiatives have not had much impact.
- Productivity improvements at the firm level have helped to ensure competitiveness and will continue to be essential to further develop global and regional integration through trade.
- Second generation reforms aimed at developing markets and institutions that are missing, incomplete, or inefficient are necessary to generalize open economy policies in the PRC and Southeast Asian economies.

## Endnotes

- 1 Although India is becoming a significant global supplier of services, particularly those associated with information technology outsourcing (Winters and Yusuf 2007), services are not covered in this chapter.
- 2 Data from World Trade Analyzer of Statistics Canada in Standard International Trade Classification format were mapped into HS chapter categories using a concordance from Jon Haveman: [www.haveman.org](http://www.haveman.org).
- 3 World imports are equal to world exports in the World Trade Analyzer database.
- 4 The Agreement on Textiles and Clothing (ATC) ended the system of global quotas on December 31, 2004. See ADB (2006), pp. 36–57 for an in-depth analysis of textiles and apparel trade in the region.
- 5 The United States and European Communities have both placed renewed quota restrictions on certain textile and clothing products from the PRC beginning in late 2005 (ADB 2006). These restrictions will be in place through 2008 and, although they are to be progressively loosened, they will limit the ability of the PRC to increase its shares of these items.
- 6 Data from the United States Office of Textiles and Apparel: <http://www.OTEXA.ita.doc.gov/>.

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**A.1.6.1 Structure of trade in East and Southeast Asia (% share of world total), 1995 and 2004**

HS category	Japan	China, People's Rep. of	NIEs	ASEAN-5	East and Southeast Asia
<b>1995 imports</b>					
28-38	4.52	4.57	9.13	4.28	22.50
39-40	4.10	2.53	6.63	3.20	16.47
41-43	3.01	12.89	19.31	4.41	39.62
44-46	19.03	2.87	7.38	1.88	31.16
47-49	3.85	2.78	6.79	2.97	16.39
50-60	3.50	11.53	15.16	5.17	35.35
61-63	10.73	0.87	7.24	0.51	19.34
64-67	6.06	0.14	3.95	0.35	10.51
68-70	3.65	2.17	8.94	4.56	19.32
71	8.11	0.47	11.79	3.34	23.72
72-83	4.97	3.59	9.73	5.61	23.90
84	3.57	4.24	10.04	5.58	23.43
85	4.78	3.68	17.42	7.86	33.73
86-89	2.82	1.22	4.80	3.31	12.15
90-91	6.20	3.04	13.72	3.40	26.36
92	6.25	1.54	11.58	3.77	23.13
93	4.96	0.05	7.73	5.12	17.87
94-97	5.44	1.54	7.20	1.71	15.89
<b>1995 exports</b>					
28-38	5.93	1.99	7.13	1.32	16.37
39-40	11.47	1.45	8.18	13.39	34.49
41-43	0.99	3.12	17.65	2.09	23.86
44-46	0.16	1.99	3.13	14.58	19.87
47-49	1.86	0.71	3.72	1.75	8.05
50-60	4.48	6.87	22.68	3.48	37.51
61-63	0.53	14.79	19.48	7.02	41.82
64-67	0.18	14.77	22.60	11.54	49.09
68-70	10.68	4.18	6.52	2.95	24.33
71	0.59	1.18	3.71	3.02	8.51
72-83	7.60	3.12	8.23	1.41	20.36
84	14.76	1.17	12.24	2.50	30.67
85	15.97	2.84	21.41	7.92	48.14
86-89	15.45	0.65	4.21	0.72	21.03
90-91	17.24	2.64	11.49	1.61	32.99
92	11.94	2.48	12.13	2.09	28.65
93	0.54	0.14	0.65	0.14	1.48
94-97	3.11	6.54	16.03	4.19	29.88
<b>2004 imports</b>					
28-38	3.33	6.91	6.44	3.07	19.75
39-40	3.00	5.23	4.37	2.80	15.39
41-43	1.98	20.92	16.67	3.54	43.11
44-46	10.53	4.36	3.56	1.14	19.60
47-49	2.47	5.45	4.18	2.72	14.82
50-60	2.21	13.31	10.29	4.79	30.61
61-63	7.99	1.21	6.80	0.54	16.53
64-67	4.60	0.32	4.01	0.51	9.44
68-70	3.37	3.77	8.17	2.76	18.07
71	2.21	2.26	12.00	2.06	18.53
72-83	3.53	6.72	8.55	4.02	22.82
84	3.67	7.76	9.30	3.67	24.39
85	4.53	10.61	16.91	6.46	38.52
86-89	1.91	2.03	2.54	1.62	8.10
90-91	5.79	10.66	14.42	2.76	33.62
92	6.50	5.13	8.64	2.76	23.02
93	6.61	0.12	9.84	0.69	17.25
94-97	4.19	1.80	5.61	1.33	12.92
<b>2004 exports</b>					
28-38	4.96	2.90	7.52	1.94	17.33
39-40	9.40	4.59	6.94	11.55	32.47
41-43	0.59	7.70	17.07	1.63	27.00
44-46	0.12	5.62	1.37	8.72	15.83
47-49	1.95	1.89	3.49	3.01	10.33
50-60	3.97	13.94	17.81	3.68	39.40
61-63	0.40	24.59	12.00	5.89	42.87
64-67	0.05	27.57	10.52	11.87	50.01
68-70	8.19	9.06	4.77	3.82	25.83
71	0.53	1.88	5.91	1.52	9.84
72-83	6.10	7.34	7.95	1.96	23.35
84	9.75	9.42	12.00	4.27	35.44
85	9.81	11.20	25.01	8.11	54.13
86-89	13.21	2.11	5.86	0.90	22.08
90-91	13.75	6.56	13.13	2.11	35.56
92	10.50	5.51	19.38	2.99	38.38
93	0.81	0.06	1.90	0.09	2.85
94-97	2.23	14.10	9.98	3.88	30.19

Source: Statistics Canada, World Trade Analyzer.

## A.1.6.2 Composition of trade: East and Southeast Asia (% share to total imports/exports), 1995 and 2004

HS category	Japan	PRC	Korea, Rep. of	Taipei, China	Hong Kong, China	Singapore	Indonesia	Malaysia	Philippines	Thailand	Viet Nam
<b>1995 imports</b>											
01-05	8.57	0.86	1.41	1.71	2.35	1.17	1.01	1.14	2.45	1.25	0.97
06-10	4.05	2.38	2.24	2.29	1.55	1.25	5.02	2.10	3.23	0.80	2.42
11-24	3.48	3.49	2.33	2.71	2.34	1.82	3.73	1.75	4.99	1.45	7.98
25-26	2.84	1.85	2.44	1.18	0.78	0.54	1.61	0.84	2.11	0.47	1.38
27	15.60	3.66	14.08	3.77	2.17	8.37	5.43	2.18	10.02	6.39	9.47
28-38	7.18	13.68	9.91	12.54	8.57	5.86	14.64	6.48	10.32	9.75	15.91
39-40	0.71	0.82	0.82	0.74	0.56	0.77	0.97	0.74	0.87	0.65	1.18
41-43	0.30	2.44	1.61	0.86	1.91	0.11	1.38	0.22	0.48	0.72	1.01
44-46	4.32	1.23	1.79	1.48	0.69	0.38	0.22	0.15	0.66	1.36	0.17
47-49	1.64	2.22	2.08	2.24	1.89	0.99	2.53	1.55	1.93	1.65	1.70
50-60	1.99	12.34	4.13	2.58	10.69	1.65	6.65	2.86	5.21	3.37	9.39
61-63	6.91	1.05	1.18	1.45	6.14	1.49	0.50	0.49	0.62	0.28	1.10
64-67	0.83	0.04	0.15	0.23	0.60	0.26	0.02	0.10	0.13	0.03	0.05
68-70	0.53	0.59	0.96	0.85	0.75	0.67	0.65	1.17	0.80	0.89	0.74
71	1.14	0.13	0.10	0.16	2.72	0.43	0.04	0.21	0.01	1.81	0.25
72-83	6.00	8.16	9.27	9.98	5.54	5.48	10.08	7.87	8.58	12.01	7.42
84	8.88	19.89	18.56	15.31	10.65	18.99	24.15	18.72	14.85	20.97	14.62
85	9.71	14.08	13.48	22.47	21.26	31.38	7.90	36.27	19.30	17.63	8.91
86-89	5.24	4.26	4.19	7.79	5.42	5.37	8.65	7.63	8.10	10.24	9.44
90-91	3.27	3.03	4.77	4.07	5.18	3.63	1.77	2.94	2.07	2.72	2.11
92	0.62	0.29	0.46	0.38	0.59	1.39	0.16	0.43	0.23	0.96	0.42
93	0.12	0.00	0.20	0.27	0.00	0.05	0.34	0.07	0.33	0.16	0.00
94-97	4.27	2.28	1.69	2.41	5.27	3.93	1.62	1.75	2.34	2.02	2.36
<b>1995 exports</b>											
01-05	0.17	3.68	1.36	2.91	0.75	0.64	3.85	0.92	2.94	9.01	10.61
06-10	0.12	3.27	0.71	0.56	0.71	1.16	3.02	0.70	4.07	6.98	20.93
11-24	0.24	2.17	0.43	0.29	1.73	2.18	3.99	7.58	6.03	3.45	2.67
25-26	0.26	0.80	0.31	0.31	0.52	0.31	4.13	0.37	1.70	0.55	0.31
27	0.62	3.58	1.99	0.21	0.97	6.91	25.52	7.01	1.51	0.73	19.55
28-38	6.65	6.62	7.15	7.58	6.28	5.27	3.59	3.06	1.98	4.01	0.74
39-40	1.39	0.52	1.35	0.90	0.33	0.88	4.85	2.67	0.27	5.14	1.47
41-43	0.07	0.66	1.47	1.10	1.28	0.09	0.23	0.07	0.03	0.84	0.28
44-46	0.03	0.95	0.13	0.54	0.57	0.35	11.13	6.32	1.00	0.72	1.40
47-49	0.56	0.64	0.95	0.87	1.18	0.53	3.20	0.51	0.50	0.74	0.07
50-60	1.80	8.17	10.20	9.70	7.99	1.30	5.89	1.66	1.15	3.56	1.33
61-63	0.24	19.94	5.03	3.67	15.44	1.38	8.25	3.20	7.20	10.09	18.61
64-67	0.02	4.22	1.00	0.73	4.26	0.11	4.43	0.15	0.89	3.70	9.71
68-70	1.09	1.26	0.27	0.78	0.70	0.37	0.64	0.60	0.52	0.82	0.82
71	0.06	0.35	0.02	0.03	0.83	0.13	0.03	0.14	0.04	2.10	0.31
72-83	6.48	7.88	8.11	7.82	4.21	3.33	3.06	2.71	3.26	2.33	0.66
84	25.92	6.10	9.68	24.08	9.72	31.34	1.95	13.50	2.92	14.28	0.59
85	22.89	12.07	29.85	19.65	20.87	32.92	5.39	38.80	56.22	16.67	0.52
86-89	20.28	2.54	12.83	3.37	1.21	1.84	1.05	2.83	1.38	2.40	0.33
90-91	6.42	2.92	1.47	2.31	6.23	3.00	0.49	1.62	0.36	2.06	0.17
92	0.84	0.52	1.11	0.52	0.53	0.70	0.23	0.41	0.07	0.40	0.01
93	0.01	0.01	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01
94-97	1.72	10.76	2.60	8.39	13.05	2.62	4.30	3.52	4.73	8.42	2.82
<b>2004 imports</b>											
01-05	5.06	0.66	1.63	0.97	1.57	0.98	1.94	1.24	1.66	1.17	1.42
06-10	3.02	0.70	1.53	1.34	0.79	0.79	3.55	1.72	2.18	1.00	1.79
11-24	2.57	2.23	1.42	1.66	0.93	1.12	4.06	1.98	3.20	1.99	3.95
25-26	2.69	3.30	3.33	1.44	0.23	0.22	1.38	0.88	1.27	0.84	0.45
27	20.37	8.03	20.63	3.85	2.43	14.85	18.37	5.70	10.25	6.01	11.12
28-38	7.68	12.20	9.08	12.78	6.18	6.43	15.74	7.53	7.59	11.52	13.67
39-40	0.62	0.83	0.61	0.49	0.40	0.55	1.02	0.82	0.85	0.76	0.86
41-43	0.18	1.46	0.53	0.38	1.82	0.08	0.40	0.13	0.12	0.60	2.27
44-46	2.36	0.75	0.70	0.64	0.31	0.14	0.32	0.24	0.37	0.40	0.95
47-49	0.93	1.56	0.98	1.19	0.81	0.53	2.57	1.16	1.42	1.27	1.68
50-60	1.02	4.71	1.88	0.96	5.41	0.65	5.40	1.25	3.33	2.70	9.33
61-63	6.17	0.71	1.67	1.12	5.88	1.35	0.61	0.52	0.56	0.51	1.29
64-67	0.61	0.03	0.20	0.17	0.52	0.17	0.04	0.15	0.12	0.07	0.02
68-70	0.52	0.44	0.91	0.93	0.58	0.40	0.57	0.62	0.59	0.68	0.50
71	0.38	0.30	0.04	0.12	3.11	0.42	0.01	0.08	0.03	1.84	0.19
72-83	5.17	7.54	9.24	10.53	4.69	4.32	9.16	6.95	4.60	11.67	11.93
84	11.32	18.33	12.29	17.76	15.83	19.66	14.38	17.02	11.31	19.99	15.58
85	13.01	23.31	19.03	25.83	32.14	30.63	6.25	37.17	42.53	21.13	8.23
86-89	4.59	3.74	2.90	4.37	2.24	5.12	7.70	4.97	3.66	5.93	7.90
90-91	4.11	5.79	5.27	8.58	5.20	4.39	1.30	3.55	2.09	3.39	2.08
92	0.69	0.42	0.50	0.39	0.37	0.86	0.18	0.36	0.32	0.79	0.18
93	0.08	0.00	0.14	0.14	0.00	0.03	0.02	0.01	0.01	0.02	0.00
94-97	4.01	1.32	1.71	1.77	5.21	2.15	1.50	1.86	1.55	2.08	2.16
<b>2004 exports</b>											
01-05	0.19	1.63	0.47	0.70	0.34	0.32	2.84	0.65	1.24	4.39	7.93
06-10	0.10	1.47	0.33	0.20	0.22	0.48	1.86	0.57	2.43	4.30	7.11
11-24	0.20	0.64	0.48	0.16	0.50	0.95	8.13	6.40	2.31	1.90	0.62
25-26	0.56	0.64	0.23	0.28	0.19	0.21	4.72	0.27	0.75	0.54	0.63
27	0.48	2.42	4.16	1.39	0.27	9.83	17.94	11.52	1.04	2.65	21.23
28-38	8.30	4.55	9.03	7.70	4.83	11.59	6.30	5.61	1.81	6.01	1.13
39-40	1.41	0.64	1.19	0.77	0.22	0.41	4.52	1.56	0.37	4.23	1.59
41-43	0.04	0.48	0.54	0.41	1.62	0.07	0.25	0.03	0.02	0.32	0.27
44-46	0.02	0.85	0.04	0.15	0.27	0.09	5.09	2.78	0.38	0.79	0.73
47-49	0.53	0.48	0.86	0.46	0.67	0.31	4.40	0.56	0.33	0.83	0.23
50-60	1.33	4.38	4.37	4.24	5.25	0.39	4.93	0.96	0.63	1.94	1.14
61-63	0.22	12.90	1.68	1.44	11.48	1.12	7.47	1.94	3.56	4.88	18.81
64-67	0.01	2.48	0.06	0.16	2.02	0.09	1.95	0.19	0.07	0.84	15.48
68-70	0.91	0.95	0.40	0.42	0.30	0.21	0.89	0.42	0.26	0.92	0.96
71	0.07	0.22	0.01	0.02	1.52	0.20	0.01	0.01	0.03	1.00	0.11
72-83	6.48	7.30	7.56	8.00	3.26	2.12	4.70	3.51	2.16	2.98	1.28
84	21.84	19.75	15.25	18.89	14.86	21.10	6.30	19.18	17.49	17.48	2.59
85	20.43	21.85	28.76	34.78	33.12	38.04	9.56	34.34	58.51	20.29	4.34
86-89	23.05	3.44	18.82	2.48	0.76	1.71	1.63	1.08	3.75	4.56	1.16
90-91	7.08	3.16	2.37	5.65	5.74	3.46	0.37	2.47	0.65	2.33	0.47
92	0.81	0.40	0.53	1.68	0.41	1.46	0.54	0.59	0.11	0.14	0.03
93	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94-97	1.55	9.17	1.68	3.49	9.62	2.01	4.31	3.52	1.94	5.14	7.31

Source: Statistics Canada, World Trade Analyzer.







# Part 2

**Economic trends and prospects  
in developing Asia**



# Central Asia

**Armenia**

**Azerbaijan**

**Kazakhstan**

**Kyrgyz Republic**

**Tajikistan**

**Turkmenistan**

**Uzbekistan**



# Armenia

Largely on account of the rapidly growing nontradable sectors of construction and services, the economy continued to grow beyond expectations, at 13.4% in 2006. The fiscal deficit was kept in check through expenditure rationalization and tax reforms. Higher remittances, public spending, and private investment supported growth in domestic demand. Rising fuel prices and a poor agricultural harvest put some pressure on prices, but inflation remained generally contained. A moderate deceleration is expected in 2007–2008 as production capacity limits are reached and the pace of growth in construction and services eases. Prospects are promising, but structural reforms have to continue, parliamentary and presidential elections must be seen to be democratic, and regional conflicts need to be resolved to allow closed trade routes to open.

## Economic performance

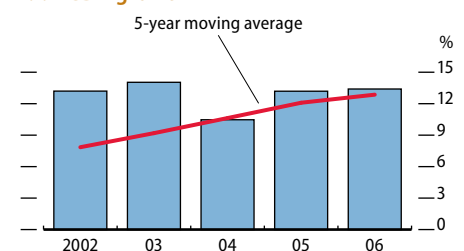
The economy showed substantial resilience as GDP grew by 13.4% in 2006, against the 11.0% projected in the 2006 budget program, continuing the double-digit growth trend of the past half decade (Figure 2.1.1). On the supply side, the main contributions came from rapid growth (37.1%) in industrial construction (for roads, mining, and energy infrastructure) and residential construction; services (20.2%); and retail trade (10.5%) (Figure 2.1.2). The share of construction in GDP now exceeds 20%.

GDP expansion would have been higher still but for the poor performance of manufacturing and agriculture. Manufacturing activity declined mainly due to disruptions in the external supply of raw diamonds for processing, but also due to low growth rates of jewelry, light industry, and chemicals, all reflecting low external demand. A narrow manufacturing production base remains a structural weakness and a constraint to sustaining high growth. Agriculture posted low growth of 0.4% on account of a poor harvest. On the demand side, government consumption and investment supported higher social and capital spending. Rapidly rising wages and remittance inflows bolstered private consumption.

The expansion in services and construction activities continued to help bring down the official level of unemployment from 8.1% in 2005 to 7.4% in 2006. Average monthly nominal wages rose by 23.5% in 2006, boosted by strong growth in public and private sector wages. Revised official estimates put poverty in 2004 at 35%, lower than the previous estimate of 39%. Sustained economic reforms, strong growth, and single-digit inflation reduced poverty further to 30% in 2005. Per capita GDP in US dollars has tripled since 2000, reaching almost \$2,000 in 2006 compared with \$1,524 in 2005, partly on account of the dram's appreciation (Figure 2.1.3).

Year-on-year inflation accelerated to 6.8% in July, reflecting a poor agricultural harvest, higher telecoms and other utilities tariffs, rises in import prices of energy and raw materials, as well as accelerated

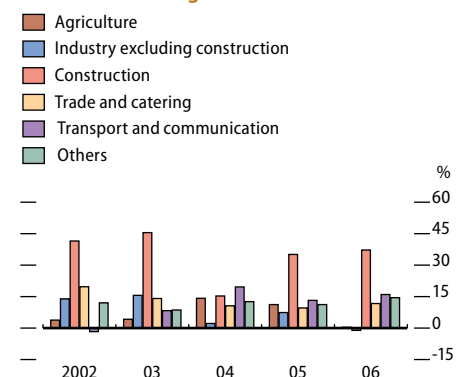
2.1.1 GDP growth



Source: National Statistical Service of the Republic of Armenia, available: <http://www.armstat.am>, downloaded 9 January 2007.

[Click here for figure data](#)

2.1.2 Sector GDP growth



Source: Ministry of Finance and Economy, available: <http://www.mfe.gov.am>, downloaded 12 March 2007.

[Click here for figure data](#)

monetary growth (Figure 2.1.4) (due to sustained inflows of foreign exchange and limited ability to sterilize their impact). But inflation moderated to 5.2% by end-2006 on account of seasonal fluctuations in food prices and drops in sugar, gasoline, and diesel prices. Given deflation in the first quarter (Figure 2.1.5), average inflation for the year came in at 2.9%, just below the targeted 3.0%. In early 2006, the Central Bank of Armenia began a switch to a policy of inflation targeting from monetary targeting. It now issues regular inflation reports and is using a quarterly model for forecasting; it will shift to full-fledged inflation targeting over the medium term. The authorities will use short-term interest rates, central bank bonds, and monetary aggregates as control mechanisms.

The Government has pursued prudent fiscal policies and is now shifting its focus from expenditure contraction to revenue generation. The fiscal deficit continued its sustained reduction from over 5% of GDP in 1999 to 1.9% in 2005, falling to 0.6% of GDP in 2006 (Figure 2.1.6), well below the budgeted 2.9%. Lower than programmed budget expenditures and higher than expected GDP growth that helped boost tax receipts contributed to this outcome.

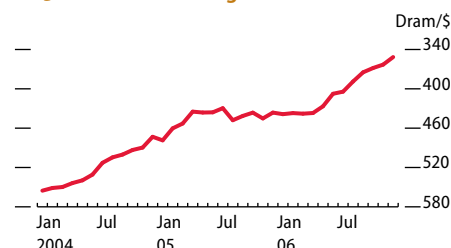
Although nominal tax revenues have been rising gradually, the tax-to-GDP ratio remains essentially stable (at about 14% of GDP) because of widespread tax evasion, weakness in tax administration, excessive exemptions that limit the tax base, and heavy reliance on indirect taxes (about 60% of total tax revenues). Consequently, the major contributors to economic growth—construction, services, and agriculture—have largely escaped the tax net. Lack of buoyancy in the services tax is partly because it is specific rather than ad valorem. Agriculture is not taxable until 2009, in accordance with an agreement with the World Trade Organization. According to the World Bank's *Doing Business 2007*, foreign and joint-venture companies form the top taxpayers while many large domestic enterprises avoid the tax net.

In 2006, the Government implemented several measures to boost tax revenues to finance higher spending in infrastructure and social services in line with commitments made in its poverty reduction strategy paper (PRSP). These included moves to broaden the tax base by reducing exemptions and loopholes and to improve the efficiency of tax administration. The State Tax Service amended the law to tax property above a threshold limit. The authorities prepared a draft bill to tax construction projects. With improved collection from value-added, income, and profit taxes, tax receipts improved marginally to an estimated 14.4% of GDP in 2006 from 14.3% the year before.

Recognizing that reducing the size of the shadow economy is vital to improve compliance, the parliament approved a financial disclosure bill making income and property declaration mandatory for citizens earning more than \$19,000 per year, an amount that is more than 10 times the official average salary. The law is expected to come into force in 2008. The Tax Inspection Unit published the list of the 1,000 largest taxpayers. The Government envisages lowering dependence on external grants and meeting the budget targets through internally collected revenues to enhance sustainability of its resources.

Imports showed robust 21.8% growth in 2006, largely owing to a pickup in capital goods and mineral products, which reflected the

### 2.1.3 Nominal exchange rate



Source: Central Bank of Armenia, available: <http://www.cba.am>, downloaded 21 February 2007.

[Click here for figure data](#)

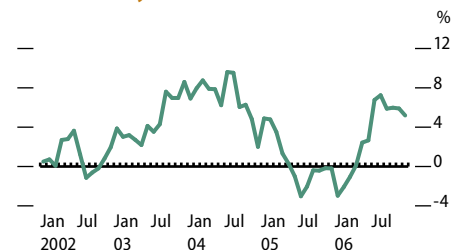
### 2.1.4 Money supply (M2x) growth



Sources: International Monetary Fund, *International Financial Statistics* online database; Central Bank of Armenia, available: <http://www.cba.am>; both downloaded 10 March 2007.

[Click here for figure data](#)

### 2.1.5 Monthly inflation



Sources: International Monetary Fund, *International Financial Statistics* online database; National Statistical Service of the Republic of Armenia, available: <http://www.armstat.am>; both downloaded 10 March 2007.

[Click here for figure data](#)

expansion in construction and investment activity as well as higher commodity prices. Exports, though, achieved only low 3.1% growth, mainly because of a fall in base-metal exports (as modernization programs restricted activity), a drop in the diamond-processing trade (amid supply disruptions and stiffer competition from other countries), and stagnant foodstuff exports. The upshot was a widening of the trade deficit to \$1,190 million or 18.6% of GDP (Figure 2.1.7). Considerable inflows of transfers and income from abroad helped narrow the current account deficit to about 5% of GDP. Gross official international reserves increased by \$402 million in 2006 and stood at about 5 months of imports of goods and services.

Continued official emphasis on a sustainable debt-management policy has seen a marked reduction in external public debt as share of GDP in recent years. It remained at 20.5% of GDP in 2006 (Figure 2.1.8), while the debt service ratio was only 4.2%, as essentially all outstanding debt is on concessional terms.

In 2006, Armenia received an international credit rating for the first time. Moody's assigned a BA2 grade of foreign and local currency rating which signifies a medium level of creditworthiness and a stable outlook. Fitch's assigned a lower BB- sovereign credit rating indicating a relatively high risk of doing business, as the economy remains vulnerable to shocks due to its high degree of dollarization, underdeveloped financial services, low value-added economic activity, as well as the Nagorno-Karabakh conflict.

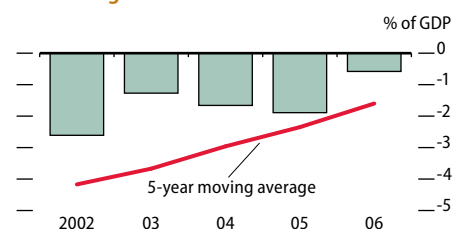
The banking sector has improved but the nonbank financial services market needs attention. The diaspora seems keen to maintain the significant flow of investment spending seen in the last several years. But owing to continuing weaknesses in business procedures, foreign direct investment (FDI) not only fell from 5.1% of GDP in 2005 to an estimated 3.1% in 2006, it has become lower than the mean levels of neighboring countries. Higher inflows of FDI, especially into the tradable sector, would support greater export volumes as well as upward labor mobility and international integration. Further efforts are needed to address corruption and other weaknesses (Box 2.1.1).

## Economic prospects

Robust economic growth of the first few years of this century is providing the necessary support for building a coherent macroeconomic policy framework and pushing through wide-ranging structural reforms. It is expected that the PRSP update for 2007 and the recently released Medium-Term Expenditure Framework 2007–2009 (MTEF) will guide economic policy making in the coming years.

The average exchange rate is assumed to be stable in 2007–2008. The narrow export base will keep exports susceptible to changes in international prices. The general parliamentary election in May 2007 and presidential election in early 2008 are not expected to adversely influence the pace of economic reforms. Major bilateral donors, however, have stressed that proper conduct of the elections is an important concern. Prospect for securing an agreement with Azerbaijan in the long-standing dispute over Nagorno-Karabakh remain gloomy.

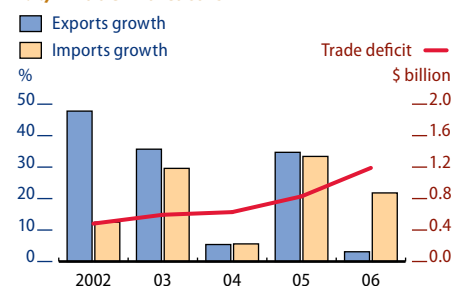
### 2.1.6 Budget balance



Source: National Statistical Service of the Republic of Armenia, available: <http://www.armstat.am>, downloaded 10 March 2007.

[Click here for figure data](#)

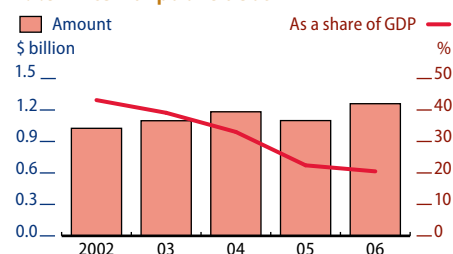
### 2.1.7 Trade indicators



Source: Ministry of Finance and Economy, available: <http://www.mfe.gov.am>, downloaded 12 March 2007.

[Click here for figure data](#)

### 2.1.8 External public debt



Source: National Statistical Service of the Republic of Armenia, available: <http://www.armstat.am>, downloaded 12 March 2007.

[Click here for figure data](#)

### 2.1.1 Selected economic indicators

	2007	2008
GDP growth	10.0	9.0
Inflation	4.0	4.0
Current account balance (% of GDP)	-5.0	-5.0

Source: Staff estimates.



The economic outlook is positive. However, growth momentum is expected to moderate, to 10% in 2007 and 9% in 2008, as a result of a high base and a deceleration in growth that has already begun in construction, services, and retail trade. The central bank forecasts falls in the growth rates of construction to 12.9% and services to 11.3% this year, and these declines are unlikely to be offset by higher production in agriculture and industry. However, output in these two sectors is set to rise on account of planned investments in irrigation, transport and communications, energy, mining, metallurgy, machine building, and chemicals, boosted by greater availability of private credit and external assistance. Higher public and private wages together with rising remittances will continue to support high growth in consumption spending.

Some inflationary pressures will result from growing domestic demand. Against this, the central bank's monetary program has set a 4.0% annual inflation target, which should be achievable if there is adherence to budgetary targets for financing, some recovery in the agriculture sector, and easing in international prices pressures. Further appreciation of the dram could damp inflationary pressures, though this outcome has not been assumed in the forecast.

Trade deficits will remain large in the forecast period as there will only be a slight improvement in export growth in the face of a continued rapid expansion in imports to support higher construction and investment activity as well as the necessary high volumes of food imports. Sugar importers will have to deal with higher world price while oil importers would benefit from the easing pressure of world prices.

The narrow base of the export basket will keep exports susceptible to changes in international prices. In particular, exporters will face mixed trends in global commodity prices as metal prices are expected to rise and the price of diamonds to fall. Export growth is limited because little relief appears in sight to end the structural problems in the diamond-processing sector and the narrow manufacturing base, though mining and metallurgy exports are expected to accelerate because of new investment.

If the trends of the last few years are maintained, increases in net income from abroad and large foreign transfers are expected to partly offset the trade deficit and contain the current account deficit at about 5% of GDP over the forecast period. Inflows of capital grants, FDI, and foreign development assistance are expected to be sufficient to allow a moderate increase in official reserves.

Fiscal deficits will widen from levels of the past few years to accommodate a rapid rise in defense spending and commitments to higher social and capital spending under the PRSP. This is also reflected in the MTEF. Based on a 9% assumed increase in GDP, the parliament has approved a 16% increase in 2007's budget spending, which includes a 40% rise in the military budget. More than one third of expenditures are earmarked for education, health care, social security, and other public services, with the average monthly wage of civil servants rising by 20% and full-time schoolteachers' salaries by 27%.

The proposed public investment program under MTEF will help streamline investment spending. Higher revenue collection through tax reforms and improvements in tax administration are expected to raise the

### 2.1.1 Poverty and corruption

The most important development challenges are high levels of poverty, especially in rural areas, and of corruption. Weak investment and productivity increases have led to low farm incomes and a high poverty risk in agriculture. With limited nonfarm employment opportunities, any trickle-down of economic growth to rural households through job hires and self-employment has been minimal.

The official unemployment figures mask the real situation as survey-based sources place unofficial estimates of national unemployment at 20–30%. This is largely due to low overall productivity and returns from farming activity, low growth in the off-farm rural sector, a dearth of well-paying jobs for the educated unemployed, and limited access and high cost of finance for rural enterprises. The public benefits and private transfers forming the bulk of rural households' income are inadequate. Lack of basic infrastructure and effective public services delivery are binding constraints.

Corruption is pervasive, especially in the public sector, and is encouraged by ineffective systems of accountability and weak tax administration in the civil service and the State Tax Service. It is manifested in bribery, tax evasion, and underreported profits. This has led to lower receipts from value-added, income, and profit taxes than in its neighbors, even with similar tax rates. Another stimulus is the stark disparity in wages between the public and private sectors, which too often encourages "inducements."

To its credit, the Government is improving tax administration and is considering performance-based pay system to retain high-quality staff in the civil service, and has signed up to various international anticorruption schemes. But the absence of legal sanctions against corrupt officials has left the public skeptical about the Government's capacity to curtail corruption. Deeper institutional reforms are key to moving forward.

tax-to-GDP ratio by about 1 percentage point, but this may not match the additional resource requirements. The budget deficit is targeted at 2.3% of GDP in 2007. This would be largely financed by external assistance and grants with a need for moderate deficit financing.

Until its initiatives generate adequate revenues, the Government will need alternative sources of financing to meet its rising spending commitments. While it is currently maintaining a zero limit on contracting new nonconcessional debt, robust economic growth and improved creditworthiness have strengthened its capacity for such borrowing. Its ability to repay external public debt is strong, as reflected in low and falling levels of the debt-to-GDP ratio and the debt service-to-exports ratio as well as in rapidly rising per capita incomes.

This observation is consistent with the positive results of the Government's debt-sustainability analysis. Improvements in sovereign credit ratings will promote Armenia's foreign partnerships and attract investment in large-scale projects. A favorable macroeconomic outlook and emerging investment opportunities bode well for the Government to borrow on nonconcessional terms.

The medium-term outlook clearly faces risks, among which external factors loom large. For example, heavy dependence on remittance flows, a limited export base, and a highly dollarized economy make Armenia vulnerable to shocks from external demand, international prices, and exchange rate fluctuations. Further appreciation of the dram poses difficult challenges for monetary management and, if sustained, could cause "Dutch disease," impinging on the international competitiveness of exports and import-competing goods. (These issues are discussed further in Box 2.1.2.)

The Russian Federation is the largest trading partner and a leading investor in energy. A 2006 bilateral agreement allows Armenia to pay the Russian company Gazprom a highly discounted price of \$56 per 1,000 cubic meters of gas until end-2008, a trade-off for the sale of a power plant to Gazprom. However, the start of 2009 may bring with it considerably higher gas prices. The Government has, though, incorporated the impact of such a possible rise in designing the targets in its 2007 budget.

### 2.1.2 Dynamics of the dram-dollar exchange rate

Armenia is a highly dollarized economy. An estimated \$1 billion is held in US currency notes by residents—about 16% of GDP and three times the value of dram notes in circulation. Close to 65% of bank deposits and 70% of bank loans are denominated in US dollars. Over 90% of total public debt (domestic and external) is denominated in foreign currency, increasing the vulnerability of public sector balance to exchange rate shocks.

Strengthening capital and financial accounts and rapidly growing remittances and foreign investments in real estate continue to fuel appreciation of the dram in a freely floating exchange rate regime. The dram has registered a substantial nominal appreciation in its dollar value since January 2004, rising by 15% in January–September 2006 alone. This has had a significant impact on trade and inflation.

A new law requiring certain transactions to be conducted only in local currency as part of the Government's drive toward dedollarization has led to an increase in the demand for dram, as has its recent marked appreciation. Given large foreign investment flows into real estate, a proposal to tax construction projects is expected to reduce the upward pressure on the currency.

The Central Bank of Armenia has been carrying out sterilization interventions since June 2006 to moderate short-term fluctuations in the exchange rate without trying to fix its level. The central bank's approach is to keep inflation low and the exchange rate floating without a predetermined path for the dram, which moves according to market forces.

International Monetary Fund estimates show that the real exchange rate against the dollar is now close to its market equilibrium level.

# Azerbaijan

Phenomenal economic growth was recorded in 2006, powered by soaring production and exports of oil and gas. Foreign investment, primarily for hydrocarbons, is beginning to taper off as large projects in the sector become operational. The Government is bullish that much higher domestic public investment, especially non-oil, will partly offset this decline. Yet rapid and deep structural reform is imperative for such investment and—along with controlling inflation and preventing excessive exchange rate appreciation—is the key challenge.

## Economic performance

GDP leaped by 32% in 2006 (Figure 2.2.1). The oil and gas sector, accounting for about 54% of GDP (a sizable rise from 42% in 2005), was the key contributor to the acceleration, as production and volume of exports surged by 48% and 60%, respectively. This was mainly due to a production upsurge at the Azeri-Chirag-Guneshi (ACG) oil fields, operated by the Azerbaijan International Operating Company (AIOC). The Baku-Tbilisi-Ceyhan (BTC) oil pipeline, which can transport up to 1 million barrels a day, was formally inaugurated in July. This pipeline greatly increased oil transportation capacity from the ACG fields to international markets—AIOC increased its oil production by 88% in 2006.

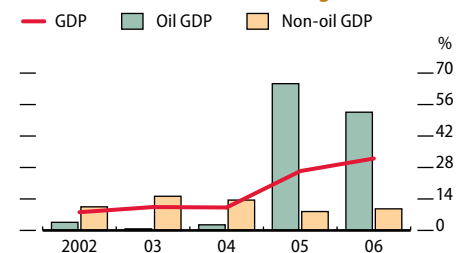
The huge growth in oil and gas completely dwarfed modest non-oil growth, and hydrocarbons' share of GDP is expected to rise further. Still, services grew respectably, at 12.6%, with communications and transport the main contributors. The former increased by 24% due mainly to tariff reforms and rapid expansion of services in the regions; the latter rose by 16%, predominately from transit activities through Azerbaijan and oil transport through the BTC pipeline, which is classified under transport. Construction activities decelerated to 14% from 16% growth in 2005, because of the completion of the BTC pipeline and tougher government regulations on residential construction.

Agriculture expanded by 9.5%, well above recent rates. The Government introduced concessional lending and assistance to the sector and established a state-owned agricultural leasing company to encourage adoption of new agricultural machinery.

In recent years, investment in hydrocarbons, most of it from foreign companies, has been the predominant driver in fast-growing total investment, which in turn has been the main stimulus to rapidly expanding GDP. In 2006, growth in total investment was 15%. With completion of the BTC pipeline and the scheduled completion of other major investment projects at the ACG oil field and the Shah Deniz gas fields in 2007, foreign direct investment (FDI) is expected to markedly scale down.

The Government, however, is optimistic that domestic public investment could cushion this fall. In 2006, such investment jumped

2.2.1 Real oil and non-oil GDP growth



Sources: International Monetary Fund, *Regional Economic Outlook*, Middle East and Central Asia, September 2006; Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

by 49% to \$3.5 billion, of which 75% was from state-owned enterprises (SOEs), 12% from the state budget, and 8% from commercial banks.

Domestic private investment by local businesses and individuals is modest. In recent years, most of this has been in residential dwellings. And given the limited progress made in improving the business environment, it is unlikely that domestic private investment will rise significantly.

The Government ran an expansionary fiscal policy in 2006. Rising by 67%, state spending was mainly on public sector wages, pensions, social services, defense, and infrastructure development. With substantial gains in both world prices for oil and in domestic production, tax revenues (mainly associated with oil and gas) surged by over 80%. About one third of budget revenues come from the State Oil Company of the Azerbaijan Republic, and 17% from transfers from the State Oil Fund of the Republic of Azerbaijan (SOFAZ). The general budget deficit amounted to 3.3% of GDP (Figure 2.2.2), most of which is attributed to increased infrastructure investment.

Financial assets of SOFAZ reached \$1.8 billion at the end of 2006. As well as outlays from the government budget, SOFAZ spent from the oil fund on infrastructure development, assistance to internally displaced persons, and investment in the BTC pipeline. SOFAZ derives its revenues mainly from oil sales, income from oil transport, bonuses paid by foreign oil companies, excess between market and projected oil prices, and income from financial investments. SOFAZ spends its oil revenues mainly on social programs and infrastructure, in compliance with the long-term strategy for managing oil and gas revenues.

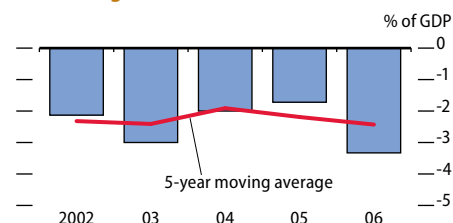
Average official consumer price inflation in 2006 was 8.3% (Figure 2.2.3). It accelerated over the year and averaged just over 11.3% year on year in the fourth quarter. However, independent analysts have suggested that it is much higher. Several factors ramped up prices, including the surge in petrodollars and the limited ability of the National Bank of Azerbaijan (NBA) to sterilize much of the inflow, leading to an excess supply of manat in the economy. M2 jumped by 87% (Figure 2.2.4); reserve money by about 130%; and M1, mostly currency in circulation, by 145%.

Buoyed by burgeoning oil-related revenues, the Government boosted spending on all fronts, putting further pressure on inflation. It issued several decrees to reduce subsidies for utilities services, such as electricity and gas. In response, public utility monopolies raised tariffs to consumers. While reducing subsidies was a positive step toward structural reform, the one-time price rise will pump up inflationary pressures this year. Private monopolies also took advantage of the strong economy to raise prices.

Recognizing the threat of accelerating inflation, the Government introduced various anti-inflationary measures, including agricultural product fairs and price controls on certain agricultural products. However, some of these measures are superficial in nature and distort the pricing mechanism. In addition, NBA tightened monetary policy, lifting the discount rate by 50 basis points to 9.5%. NBA also mopped up excess petrodollars by purchasing over \$1 billion in the foreign exchange market. Despite these moves, the manat appreciated by 5.4% in 2006 (Figure 2.2.5).

NBA faces two formidable challenges in controlling inflation. First,

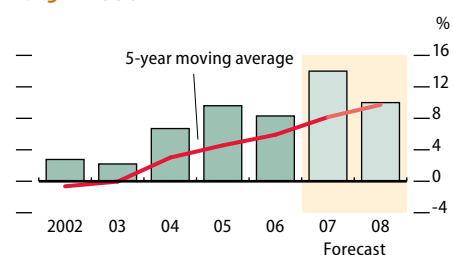
### 2.2.2 Budget balance



Sources: State Statistical Committee of Azerbaijan; Ministry of Finance.

[Click here for figure data](#)

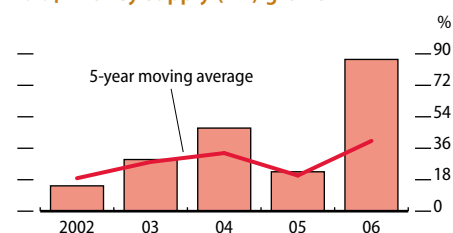
### 2.2.3 Inflation



Sources: State Statistical Committee of Azerbaijan; Ministry of Finance.

[Click here for figure data](#)

### 2.2.4 Money supply (M2) growth



Note: Includes foreign currency deposits.

Source: National Bank of Azerbaijan, available: <http://www.nba.az>, downloaded 19 February 2007.

[Click here for figure data](#)

Azerbaijan is still largely a “cash” economy, and therefore much economic activity will not be directly responsive to its measures (outstanding banking system credit is less than 15% of GDP). About two thirds of the monetary base is held as currency outside the banking system, mainly in the informal economy (which may account for as much as 60% of officially recorded GDP). Second, NBA has only limited capacity to conduct open-market operations, because of the rudimentary nature of domestic financial and capital markets. Given the limited monetary policy options, the authorities need to ensure closer coordination between monetary and fiscal policies, and to pay closer attention to expenditures of SOEs and SOFAZ.

Many analysts have called for a reduction in fiscal spending in the non-oil sector to a more sustainable level to combat the threat of escalating inflation, which could seriously jeopardize the good record of macroeconomic stability.

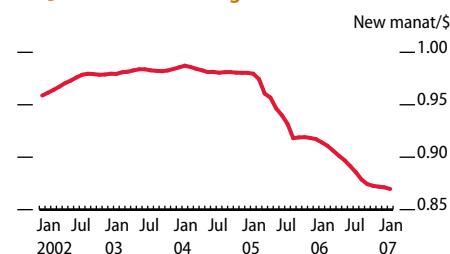
The trade account registered a record surplus of \$7.9 billion (Figure 2.2.6) in 2006, propelled by burgeoning oil exports, which contributed 84% of total exports. Total exports surged by 60.7%. Growth in imports slowed to 4.5% in 2006, as machinery and equipment imports eased and investment in major projects wound down. However, strong domestic demand kept growth in consumer goods imports on the rise. The current account recorded a surplus of \$1.8 billion (9.0% of GDP) in 2006. The capital account surplus fell significantly because of the steep drop in oil-driven net FDI. Gross official reserves more than doubled to \$2.5 billion (Figure 2.2.7).

The major structural issues are similar to those of previous years, including market distortions from anticompetitive behavior of SOEs, lack of corporate governance of SOEs, a weak banking and financial system, and a poor business environment. Most of the SOEs operate as monopolies in their respective markets, such as electricity and gas, agriculture, and sea and air transport. In addition, most operate inefficiently, and, as in the power sector, incur heavy losses that are subsidized by the Government.

The financial and business practices of SOEs need to be reformed urgently, including corporate governance reform, to ensure greater transparency and accountability. There have been positive steps taken to improve this situation; for example, the Government has recently reduced the subsidies to SOEs. SOEs such as the State Oil Company have begun to implement measures under the Extractive Industries Transparency Initiative to improve corporate governance.

Moreover, the banking and financial segment faces an urgent need to reform, so as to promote confidence and efficiency in mobilizing savings for investment, and ultimately to enhance economic growth. Banking is dominated by two state-owned banks: International Bank of Azerbaijan and Kapital Bank, which together control over half of the assets in the sector. They are significantly undercapitalized and not interested in playing a part in modernizing the banking system. One encouraging sign is that major commercial banks have begun to adopt the principles under Basel II. The market dominance of International Bank of Azerbaijan and Kapital Bank is being slowly whittled away through rapid growth of private banks, which are supported by foreign institutional investors

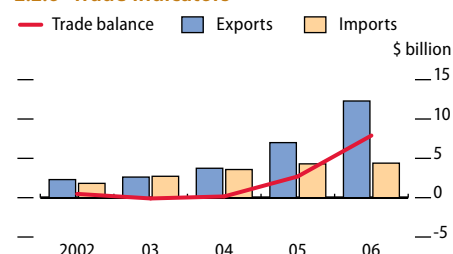
## 2.2.5 Nominal exchange rate



Source: National Bank of Azerbaijan, available: <http://www.nba.az>, downloaded 8 March 2007.

[Click here for figure data](#)

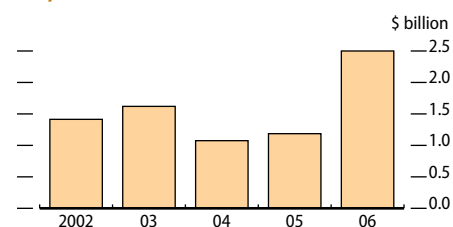
## 2.2.6 Trade indicators



Sources: Ministry of Economic Development; National Bank of Azerbaijan, available: <http://www.nba.az>, downloaded 30 January 2007.

[Click here for figure data](#)

## 2.2.7 Gross international reserves



Source: National Bank of Azerbaijan.

[Click here for figure data](#)



and multilateral development banks. Still, their market share and power remain largely intact.

Improving business conditions and the investment climate in the non-oil sector is crucial. While the business environment has improved slightly, according to the 2007 *Doing Business* report, the business climate in neighboring countries has improved much faster. In addition to other reforms required, intellectual property rights also need to be secured.

## Economic prospects

Forecasts of key economic variables are based on the following assumptions: NBA monetary policy will aim to keep inflation in check and continue a flexibly managed exchange rate policy; petrodollars will continue to flow into the country; and production and exports of hydrocarbons will make another jump. Given the exceedingly large government spending in previous years, huge growth of money supply from oil revenues, and capacity constraints in the domestic economy, raising government spending to an excessively high level in 2007 and beyond may put at risk macroeconomic stability.

Growth peaked in 2006. It is forecast to grow by a still-sizzling 25% in 2007 (Figure 2.2.8), driven by oil production (from the ACG fields) and expected gas output (coming on stream from the Shah Deniz field) and their export, as well as an expansionary fiscal policy. It is seen slowing further in 2008 to 17%, as growth in production of oil and gas moderates and FDI falls, as hydrocarbons move to a less intensive phase of development. Some of this deceleration will be offset by increased inflows of development assistance.

The Government envisages, optimistically, domestic public investment as a key driver of growth in the coming years (the Ministry of Economic Development foresees it rising by one third a year). Growth in domestic private investment will likely remain modest. To boost it substantially, the Government will need to advance the pace of structural reforms. It forecasts the non-oil sector growing at an average rate of about 9.6% a year through 2009.

Parliament approved the state budget for 2007 in autumn 2006. State spending is projected to increase by up to 42% in 2007. A large portion of the increase is to be spent, as in 2006, on public sector wages and on pensions, as well as defense and infrastructure. The share of military spending is also rising rapidly.

The general budget deficit is planned to be 1.5% of GDP in 2007. A major concern is whether the economy has the capacity to absorb this increase. However, due to the lagged impact of fiscal policy, the decision to reduce expenditure when inflation accelerates may be too late to combat the threat of a marked increase in inflation. The announcement of increases in the prices of utility services—such as electricity, gas, water, and public transport—by up to 50% will add considerable pressure to inflation in 2007, expected to be 14%.

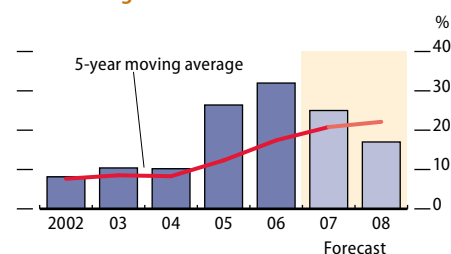
With the substantial increase in oil and gas export revenues, and as import growth is expected to ease, the current account surplus is set to rise to 20.5% of GDP in 2007 and 24.6% in 2008 (Figure 2.2.9). In addition, the authorities have said that there will be no imports of natural

### 2.2.1 Selected economic indicators

	2007	2008
GDP growth	25.0	17.0
Inflation	14.0	10.0
Current account balance (% of GDP)	20.5	24.6

Source: Staff estimates.

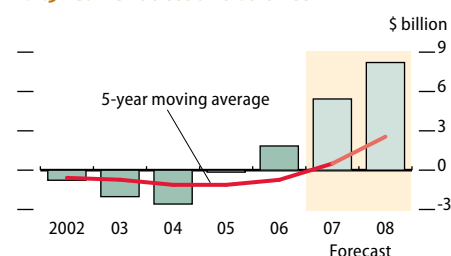
### 2.2.8 GDP growth



Sources: State Statistical Committee of Azerbaijan; staff estimates.

[Click here for figure data](#)

### 2.2.9 Current account balance



Sources: Ministry of Economic Development; National Bank of Azerbaijan, available: <http://www.nba.az>, downloaded 30 January 2007; staff estimates.

[Click here for figure data](#)



gas from Gazprom (a state-owned Russian gas company) in 2007, having rejected an increase in the price of natural gas from that company.

The income balance will likely deteriorate as rising oil and gas profits are repatriated. Moreover, the Russian Government issued a decree in November 2006, which restricts activities of migrant workers in its territory. With over 2 million Azerbaijani migrant workers there, this will likely stanch remittances from the Russian Federation.

While prospects remain positive, GDP growth is expected to trend downward to a less abnormal level, but still rely on oil and gas, and on transit activities. However, large and unfettered increases in government expenditures will likely stoke inflationary pressures if supply-side factors are not tackled—production capacity needs to be enhanced and productivity improved. The Government's key challenge is to create an enabling environment to attract private sector investment to the non-oil sector. To do this, it would need to lift the pace of domestic reform.

The major risk to the bright economic outlook centers on properly managing oil revenues to maintain macroeconomic stability and avoid excessive appreciation of the exchange rate. The latter would damage competitiveness in the non-oil sector and limit its development. A very sharp downturn in oil prices would put pressure on both the budget and the current account, and would constrain the rapid economic transformation needed to reduce unemployment and poverty.

## **Development challenges**

The country is now at a crossroads—the Government recognizes that it has to implement the necessary reforms and policies that would allow the economy to grow after the oil reserves are depleted. Expectations among the local populace are high, as the Government attempts to deliver on its promises for improved standards of living within the context of limited institutional capacity, highly centralized decision making, and an ineffective legal system. The presence of monopolies and corruption pose further challenges. With a severe gap between those living in Baku and the regions, the country faces the risk of immeasurable wealth with limited development.

# Kazakhstan

Strong prices for oil and gas, rapid growth of domestic consumption, and a rebound in investment continued to propel the economy. But these very strengths carry within them the seeds of future challenges—immediately, keeping rising inflation in check, and improving banks' risk management of their loan portfolios; further out, diversifying the economy, pushing through structural reforms, enhancing competitiveness, and ensuring more equitable development. These measures, plus fiscal and monetary policy coordination, are needed to ensure sustainable growth.

## Economic performance

The economy continued to expand at a high and steady rate in 2006. Soaring minerals prices (i.e., oil, gas, and mining), as well as robust private and public consumption and investment, were the main drivers of 10.6% GDP growth (Figure 2.3.1). The oil sector increased at around 5% year on year, after an average rate of about 14% in 2000–2004. Oil and gas play a crucial role in the economy, although growth in the non-oil sector has been faster over the last couple of years.

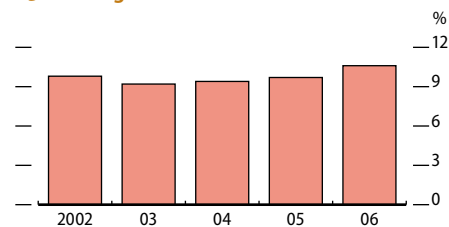
Wage increases and substantial expansion of bank credit fueled private consumption spending. Investment in the resources sector recovered from a recent slowdown and fixed capital investment rose by 18.0% in 2006. Most of this investment consisted of foreign direct investment in minerals, especially in the Kashagan oil and gas field. Fiscal expenditures were augmented to fund increases in minimum wages, pensions, and allowances as well as infrastructure development and social programs. High commodity prices for oil, gas, and metals have significantly raised the value of exports and contributed to raising aggregate demand.

On the supply side, industrial value added rose by 7.0% in 2006 (against 4.6% in 2005), mainly because of mining, industrial processing, and production and distribution of electricity, gas, and water. Construction expanded by 38%, largely in residential dwellings. In manufacturing, real appreciation of the domestic currency, the tenge (T), affected some industries, and capacity constraints in others.

Services, now constituting slightly over 50% of GDP, continued powering ahead at 10.7%, underpinned by a surge in finance (35%), telecommunications (26%), and transport (6.7%). Agricultural production was also buoyant at 8.0%, much higher than the 5-year average of 6%. The sector seems to have benefited from higher productivity arising from investments made in earlier years. Grain and animal husbandry were the two largest contributors to agricultural production growth, picking up by 9.4% and 4.3%, respectively.

Expansionary fiscal policy was another contributor to the surge in demand last year. The budget deficit was T126.2 billion, or 1.3% of GDP (Figure 2.3.2). Rising commodity prices boosted tax revenues from the

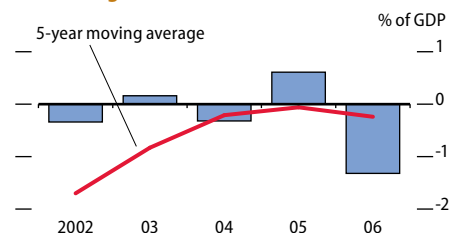
2.3.1 GDP growth



Source: Agency of Statistics of the Republic of Kazakhstan.

[Click here for figure data](#)

2.3.2 Budget balance



Sources: Agency of Statistics of the Republic of Kazakhstan; Ministry of Finance.

[Click here for figure data](#)

resources sector. Fiscal revenues amounted to T1.53 billion in 2006, or 16.1% of GDP, while public expenditures came in at T1.66 billion, or 17.4% of GDP. The major expenditure items were public sector wages and pensions, and public investment programs. High oil prices also helped lift the assets of the National Fund of the Republic of Kazakhstan (NFRK), which rose by \$6 billion over the year to \$14.7 billion.

Inflation intensified in 2006, and the consumer price index was up by 8.6% for the year (Figure 2.3.3). Several major sources stoked inflationary pressure: a substantial influx of oil revenues; greater public spending on wages and pensions and social programs; and excessive domestic demand largely due to a hefty expansion of credits from commercial banks (up 82%). Structural rigidities that limit competition in certain segments of the market for goods and services as well as capacity limits also contributed to rising inflation.

In its quest to control inflationary pressures, the National Bank of Kazakhstan (NBK) took steps to reduce excess liquidity: it raised the refinancing rate in 2 steps from 8% to 9%; strengthened the minimum bank reserve requirements; issued short-term notes to partly sterilize petrodollar inflows; and allowed nominal appreciation of the tenge. These measures have not been effective as reserve money increased by 131% and broad money surged by 80% in 2006 (Figure 2.3.4). Increasing the refinancing rate may have limited impact because most domestic banks borrow from abroad.

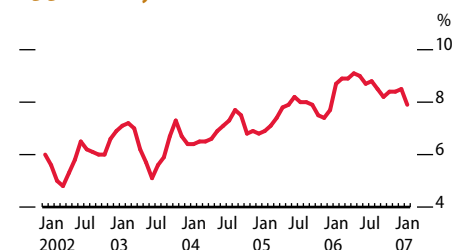
Soaring world commodity prices helped ramp up the value of exports by 35.2% to \$38.3 billion in 2006. Crude oil and oil-related products made up just over two thirds of total exports, and metals and metal-related products about one sixth. Imports leaped by 31.7%, largely driven by purchases of machinery and equipment, nonprecious metals, and petrochemical products. The trade surplus increased by 41%. But the deficit on the services, income, and transfers account widened sharply. This stemmed from greater payments for construction, freight, insurance, and information technology services, as well as a near doubling of income payments to foreign direct investors. Nearly all income payments were associated with oil sector development. The current account surplus in 2006 was about \$400 million (Figure 2.3.5).

The official reserves at NBK more than doubled to total \$19.1 billion at end-2006 (equivalent to 5.4 months of imports of goods and services) while foreign assets of NFRK were \$14.1 billion (Figure 2.3.6). The stock of foreign debt stood at \$59.6 billion in September 2006 (Figure 2.3.7). Private sector external debt (excluding oil and gas intracompany debt) increased sharply by \$11.1 billion to \$35.5 billion. The upsurge in private debt in recent years—mainly local bank borrowing for onlending—has largely been in response to the differential between available foreign borrowing rates and domestic lending rates.

The tenge continued to strengthen against the US dollar in 2006, reflecting high export earnings, augmented foreign direct investment, and a surge in private external borrowing. It appreciated by 5.5% over the year, breaking the psychological threshold of T120/\$1 in June 2006. It remained below this level in July before NBK intervened and induced a depreciation to around T125–130/\$1 (Figure 2.3.8).

Increased credit risk has accompanied the rapid credit growth. Based

### 2.3.3 Monthly inflation



Source: National Bank of Kazakhstan, available: <http://www.nationalbank.kz>, downloaded 7 March 2007.

[Click here for figure data](#)

### 2.3.4 Money supply (M2) growth

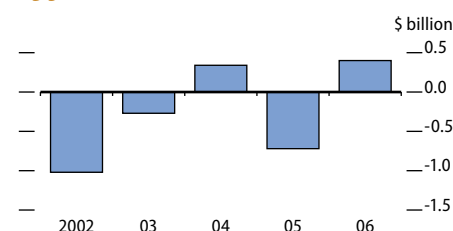


Note: Includes foreign currency deposits.

Sources: International Monetary Fund, *International Financial Statistics* online database; National Bank of Kazakhstan, available: <http://www.nationalbank.kz>; both downloaded on 7 March 2007.

[Click here for figure data](#)

### 2.3.5 Current account balance



Source: National Bank of Kazakhstan, available: <http://www.nationalbank.kz>, downloaded 28 February 2007.

[Click here for figure data](#)

on data from the Agency on Regulation and Supervision of Financial Market and Financial Organizations (AFN), the proportion of bank loans of second-tier banks classified as doubtful loans and bad debts remained extremely high in 2006 at 46%, only down slightly from 48% in 2005. Recognizing the potential problem in the banking sector, NBK and AFN implemented several measures to reduce excessive liquidity and to mitigate risks associated with the deteriorating quality of banks' loan portfolios. The banks' liquidity ratio was increased and asset classification requirement was tightened.

The speed of progress in structural reforms has varied. Robust economic growth seems to have induced some complacency, but new efforts to put Kazakhstan on a more competitive footing and create a favorable environment for business were launched in 2006, including the Kazyna Fund for sustainable development, and Samruk, a new holding company to oversee effective management of state assets (Box 2.3.1). Other measures to improve the business environment included revisions to the law on monopolies and greater powers for the agency regulating them. Substantial progress was made toward joining the World Trade Organization.

## Economic prospects

The economic outlook remains positive but rests heavily on continued high world commodity prices; a sustained increase in oil and gas and minerals production and export; strong domestic consumption; and continued government commitment to prudent macroeconomic management and market-oriented policy reforms.

GDP is expected to grow at 8.6% and 8.9% in 2007 and 2008, respectively. The major contributors to growth will remain unchanged. The non-oil economy is expected to expand at an average of around 10% a year, driven mainly by key sectors such as construction and services.

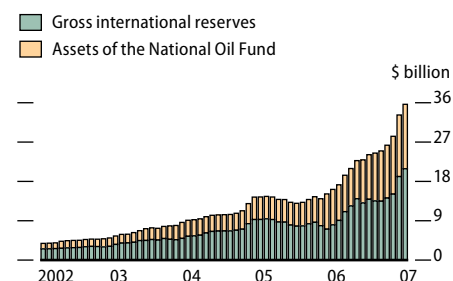
In December 2006, Parliament approved the budget for 2007, and the Government will continue to run an expansionary fiscal policy. Government revenues are expected to be the equivalent of about 17.9% of GDP, and expenditures about 19.2% (the latter an increase of 30%, primarily to fund increases in public sector wages and pensions).

In July 2006, the NFRK was fully integrated into the budgetary system; receipts from all extractive companies will first be accumulated in the NFRK, which will be drawn on as required to fund public investment and government development programs. This will help ensure transparency by demonstrating how the oil fund is being used and separating oil and non-oil transactions.

As part of the Government's initiative to raise the competitiveness of the economy, a variety of tax incentives were introduced to boost the non-oil economy. The VAT rate will be reduced from 15% to 14% in 2007, and a further 1% reduction is scheduled in 2008 and 2009. New tax concessions were introduced to encourage the development of high-value added industries and capital investment. The Government also plans to introduce a flat 10% personal income tax and cut payroll taxes by up to 30% in 2008.

Exports are projected to rise by 15.0% and 9.3% in 2007 and 2008, respectively, largely on higher production from existing oil fields and

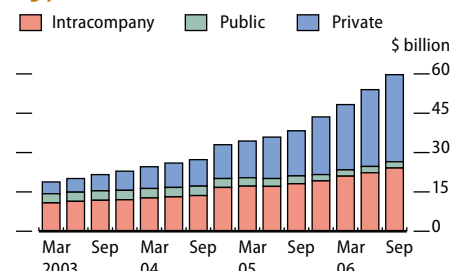
### 2.3.6 Official reserves and assets of the National Oil Fund



Source: National Bank of Kazakhstan, available: <http://www.nationalbank.kz>, downloaded 22 February 2007.

[Click here for figure data](#)

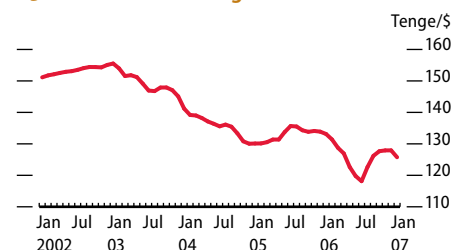
### 2.3.7 External debt



Source: National Bank of Kazakhstan, available: <http://www.nationalbank.kz>, downloaded 22 February 2007.

[Click here for figure data](#)

### 2.3.8 Nominal exchange rate



Sources: International Monetary Fund, *International Financial Statistics* online database; National Bank of Kazakhstan, available: <http://www.nationalbank.kz>, both downloaded 17 March 2007.

[Click here for figure data](#)

new production from the Kashagan oil field in 2008 as well as increased export transport capacity through the Baku-Tbilisi-Ceyhan oil pipeline. Non-oil exports are also expected to increase, mainly on metals and metal-related products, as well as grain.

Rising incomes and excess domestic demand will spill over into imports, projected to rise by 20.4% and 13.3%, largely due to purchases of machinery and equipment for ongoing oil investment projects. Strong exports will keep the trade account in surplus. With the deficit rising in services, income, and current transfers as payment outflows grow, the current account is expected to be in deficit, though it will be readily financed by foreign direct investment and external borrowings. The liberalization of capital account on 1 January 2007—full convertibility of the tenge—will likely take some of the upside pressure off the currency as domestic investors seek out overseas investments.

Inflation is put at 8% in 2007 and 2008, despite NBK's efforts, and the inflationary pressures remain the same.

Over the medium term, the hydrocarbons sector will remain a key locomotive of growth. Its share in GDP will increase as large projects in the Kashagan oil field come on stream in 2008. The Government is likely to continue developing the nonextractive sectors, and construction and services will be key drivers of growth. The Government is also expected to carry on implementing measures to improve competitiveness—including developing Samruk and Kazyna.

In view of large oil-related cash inflows in the coming years, risks are associated mainly with an overheating economy. The focus of monetary policy should be to minimize inflationary pressures. Effective monetary and fiscal policy coordination is also needed to damp excess demand. While the rapid expansion of domestic credit demonstrates confidence in the domestic financial system, it also creates a potential risk in terms of the quality of the loan portfolio of local commercial banks. NBK and AFN recognize this risk, though, and are developing appropriate measures.

## Development challenges

Diversifying from oil and mining is a high government priority, though the prospects for developing business services around these industries should not be underestimated. The potential for maturing industries (mostly private but some state owned) to invest in neighboring countries is likely to continue. This will provide a natural incentive for improving competition and productivity of domestic companies.

The private banking sector with major investments in the Kyrgyz Republic and the Russian Federation is leading the way. The efforts to develop Almaty as a regional financial center is praiseworthy but activities need to be carefully thought out. Priority needs to be given not only to the development of laws and regulatory procedures but also, more importantly, to upgrading that city's aging physical infrastructure.

Finally, sustainable and balanced development of the Caspian region represents a major challenge as past significant investment has not translated into efficient utilization of the labor force in the region. Regional cooperation is also important to promote cross-border business activities.

### 2.3.1 Selected economic indicators

	2007	2008
GDP growth	8.6	8.9
Inflation	8.0	8.0
Current account balance (% of GDP)	-1.6	-2.1

Source: Staff estimates.

### 2.3.1 Kazyna and Samruk

The Kazyna Fund for sustainable development was established in April 2006. Its objectives are to effectively manage state investments, stimulate investment and innovation activities, and increase the economy's competitiveness. Kazyna identifies and implements investment projects in non-extractive sectors through coordinating various institutions involved in national development. Kazyna identifies investment opportunities and local partners as well as provides administrative support and long-term financing in the form of debt and equity.

Samruk was established in early 2006 to improve the government asset-management efficiency and set a new benchmark for corporate governance. It will act as an active shareholder in the following state corporations: KazMunayGaz, KazakhTelekom, Kazakhstan Temir Zholy (railways), KazPost (post), and KEGOC (electricity). The intention is to expand the coverage to include an additional 17 state companies, including Air Astana and Kazmortransflot (shipping).

Such state-driven industrialization may, though, carry risks in terms of favoring certain firms, unless mechanisms are developed for transparency and accountability for these two entities.

# Kyrgyz Republic

Nearly 2 years after the Tulip Revolution, political stability remains elusive. Although the new Government made real efforts to maintain macroeconomic stability, tensions between the different power centers have distracted the authorities and hampered structural reforms, including the passage of key economic legislation. In addition, an accident at the Kumtor gold mine, the largest industrial contributor, has slowed growth. The medium-term outlook, though positive, is clouded by governance concerns, a poor business climate, and political uncertainty.

## Economic performance

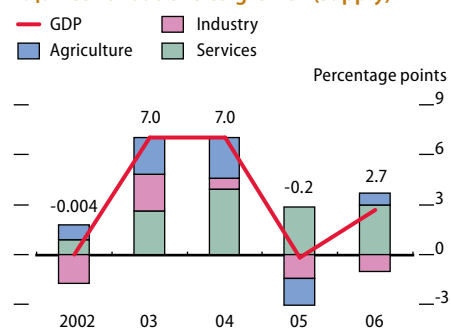
One of the least geographically accessible, and least endowed, countries in Central Asia, the Kyrgyz Republic faces challenging conditions. This partly explains its inadequate physical infrastructure. Recently it has also been buffeted by political turbulence, and almost 2 years after the Tulip Revolution of 2005, political stability has yet to be achieved, which is undermining economic development. A high level of political activity marked 2006, including major protests, government resignation, and two changes of the constitution.

Despite the challenging political environment, the Government managed to maintain macroeconomic stability and keep the Poverty Reduction and Growth Facility (PRGF) program with the International Monetary Fund (IMF) on track. Yet an accident (much less serious than the previous year's) in July at Kumtor—the country's largest gold mine and accounting for about one third of industrial output and 5% of GDP—resulted in gold output falling by about a third, to about 9 tons. This slowed economic growth to 2.7% (Figure 2.4.1), well below the authorities' earlier forecasts of 5–8%. Excluding gold production, GDP grew by about 5%.

On the demand side, private consumption continued to be the driving force of growth, financed by higher incomes (a significant amount of which comes from the shadow economy, with some estimates placing it at up to 60% of recorded GDP); rising workers' remittances from abroad; and higher wages. A positive development was a sizable increase in fixed investment year on year. This stemmed from augmented investment in transport (mainly roads), mining, and construction. Strengthened exports to the traditional destinations of People's Republic of China, Russian Federation, and Kazakhstan provided further impetus.

Sectorally, the drivers were services, construction, and agriculture. Services grew robustly at 8.4%—driven by trade, tourism, catering, and other retail services—and it still has significant room for expansion, given its narrow and low base. Tourism rebounded in 2006 with a record 1 million tourists visiting the Issyk-Kul Lake, the country's main tourist destination. Agriculture—accounting for about a third of the country's GDP and a half of employment—recovered from a fall in output in the previous year, posting a moderate 1.5% expansion. A reported drop

2.4.1 Contributions to growth (supply)



Source: National Statistics Committee of the Kyrgyz Republic.

[Click here for figure data](#)



in crop productivity together with an outbreak of contagious animal diseases accounted for the sector's modest rebound in 2006. Industry overall experienced a contraction of about 7.4%, reflecting the drop in gold production, but nongold output was encouraging, bolstered by construction (up 8.5%), garments (19%), and some processing industries. The food-processing industry is still undeveloped, with most agricultural output processed in Kazakhstan and the Russian Federation.

Increases in world oil and commodity prices (partly mitigated by a stronger currency) and price hikes of communal services, as well as higher personal incomes and money supply growth, gently stoked price pressures in 2006. Consumer price inflation rose moderately, averaging 5.6% for the year (Figure 2.4.2). Monetary growth, however, expanded by more than 50% (Figure 2.4.3). This came both from a rise in net foreign assets, as a result of higher remittances and increased foreign capital flows, and from more dynamic activity by the private sector, which was reflected in credit expansion of 48%.

The inflationary impact of this large increase in the money supply was partly softened by continuing exchange rate appreciation, by 8.3% against the US dollar (Figure 2.4.4). This occurred despite interventions by the National Bank of the Kyrgyz Republic (NBKR) in the foreign exchange market throughout the year, which lifted gross international reserves by an estimated \$205 million. Overall, however, given the low level of monetization of about 22% of GDP, and with adherence of NBKR to a policy of price stability, the monetary expansion experienced in 2006 is unlikely to lead to significant inflationary risks this year.

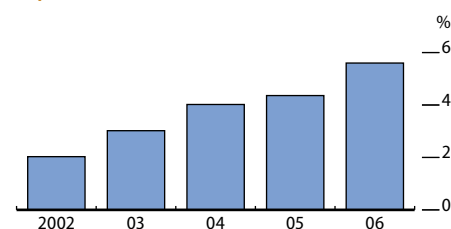
Wages rose by 12% in real terms, with mining seeing the largest gains, but with sizable movements also in public sector wages. Nevertheless, in absolute terms, the average monthly wage (excluding small enterprises) of \$76 a month is still low, not much above the government-set minimum consumption budget.

In this low-wage setting, migration has become a growing issue, with estimates of people working abroad varying widely from 0.5 million to 1 million, attracted by the higher incomes in Kazakhstan and the Russian Federation. Increasingly, skilled workers such as doctors and teachers are working abroad, which may lead to a "brain drain" if the issue is not addressed.

According to Ministry of Finance estimates, remittances in 2006 were substantial, in the range of \$520 million–750 million, or 20–25% of GDP; the two ex-Soviet countries account for about 80% of the total. Although an important cushion for maintaining living standards and for poverty reduction, migration involves high social costs, as evidenced by the separated families and the children cared for by others than parents.

In 2006, the authorities continued to implement prudent fiscal policy. According to preliminary estimates, all quantitative fiscal performance criteria under the PRGF program were met, including the budget deficit target of 3.2% of GDP (as compared with 4.0% in 2005) (Figure 2.4.5). Although total revenues decreased in relation to GDP (to 22.2% compared with 24.1% in 2005), they increased in nominal terms by about \$20 million, mainly as a result of the continued improvements in tax and customs administration and higher import volumes. Revenue performance reflected important tax changes adopted for 2006 to lower

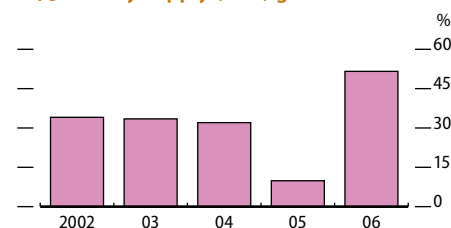
#### 2.4.2 Inflation



Sources: National Statistics Committee of the Kyrgyz Republic; National Bank of the Kyrgyz Republic, available: <http://www.nbkr.kg>, downloaded 4 March 2007.

[Click here for figure data](#)

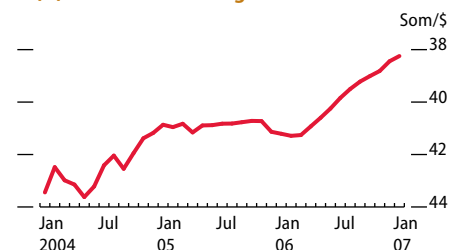
#### 2.4.3 Money supply (M2x) growth



Source: National Bank of the Kyrgyz Republic, available: <http://www.nbkr.kg>, downloaded 28 February 2007.

[Click here for figure data](#)

#### 2.4.4 Nominal exchange rate



Sources: International Monetary Fund, *International Financial Statistics* database; National Bank of the Kyrgyz Republic, available: <http://www.nbkr.kg>; both downloaded 4 March 2007.

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the burden on labor and capital, so as to promote private sector growth and to lessen incentives for taking part in the informal economy. These changes included a flat corporate and personal income tax of 10%, value-added tax exemption for agricultural products and imported basic capital goods, a reduction of payroll taxes from 31% to 29%, and abolition of eight inefficient local taxes.

Total expenditures picked up by about 12% in 2006. However, an important shift took place toward greater social outlays and some economic subsidies. Spending on education, health care, and social security all rose by around a quarter (year on year) in nominal terms, and expenditures on utilities and housing by about a third. Public investments stayed tightly constrained (to 3.1% of GDP) due to limitations on external borrowings for debt-sustainability reasons.

The authorities managed to resist parliamentary pressure to lower the retirement age, and are planning to design a comprehensive pension strategy. Preparatory work has also continued on a transition from a four-tier to a two-tier budgetary system, which would comprise the center and local communities (i.e., bypass the provincial and municipal authorities). The aim is to strengthen decision making at the grassroots level. Introducing the new system will face some challenges in the coming years, and will require simultaneous capacity building in local governments.

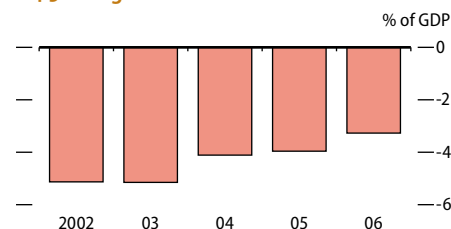
The current account deficit increased sharply (Figure 2.4.6) from 8.3% of GDP in 2005 to an estimated 14.7% in 2006 (or \$414 million), mainly due to the widening trade gap (although improvement in the statistical coverage of the significant “shuttle trade” may also have played a part). Imports of investment goods increased as a result of value-added tax exemption of basic capital assets; other factors were rising energy prices, stronger domestic demand, and speculation (e.g., reexports of fuel resources).

Import growth vastly outpaced that of exports, largely due to decreased production of gold at Kumtor. However, gold remains the largest export item (with about one quarter of the total). Nongold exports were underpinned by greater sales of fruit and vegetables, reexported oil products, and construction materials, spurred by robust demand in neighboring countries.

The trade gap was partly offset by inflows of remittances. The current account deficit was financed by a rise in net foreign direct investment (FDI) and by foreign loans. These capital account inflows have allowed a strong buildup of gross official reserves to \$817 million at the end of December (Figure 2.4.7). FDI expanded rapidly after the 2005 revolution, and was estimated at \$109 million (for the first 9 months of 2006), directed mainly into finance, telecommunications, and food-processing. The largest inflows came from Kazakhstan (30%), UK (19%), Canada (7%), and Turkey (6%).

Though coming down (Figure 2.4.8), the country’s external debt is still the highest relative to GDP among the Commonwealth of Independent States countries, at about 70% of GDP. The 2002 and 2005 reschedulings of the country’s debt by the Paris Club of official creditors has not alleviated the external debt burden. As part of the debt-reduction strategy, the authorities refrained from borrowing or guaranteeing external loans

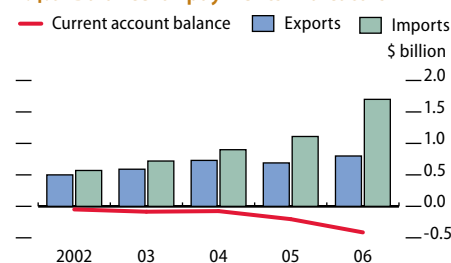
#### 2.4.5 Budget balance



Source: National Statistics Committee of the Kyrgyz Republic.

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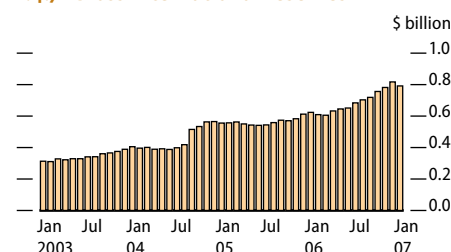
#### 2.4.6 Balance-of-payments indicators



Source: National Bank of the Kyrgyz Republic, available: <http://www.nbkr.kg>, downloaded 30 January 2007.

[Click here for figure data](#)

#### 2.4.7 Gross international reserves



Source: National Bank of the Kyrgyz Republic, available: <http://www.nbkr.kg>, downloaded 10 March 2007.

[Click here for figure data](#)

on nonconcessional terms. In mid-October 2006, IMF formally declared the country eligible to participate in the enhanced Heavily Indebted Poor Countries initiative. This prompted national debate and general public and political resistance, in view of what was taken to be loss of “face” and erosion of the country’s sovereignty. In February 2007, the new Government made a decision not to pursue further interest in the initiative.

Progress on structural reforms has been uneven (Box 2.4.1). Delayed passage of key legislation hampered several government initiatives. For example, the new tax code and regulations on enhancing central bank independence, among others, are still awaiting parliamentary approval. The slow pace of reform largely stems from preoccupation with political issues, but also reflects weakened coordination between the different branches of government in implementing core reforms.

Banking sector reforms remained largely on track, except for the delays with privatization of the Kyrgyz Agricultural Finance Corporation. The central bank made some progress in modernizing the payments system; upgrading its accounting and internal controls; and enhancing bank supervision, with the creation of the Agency for Financial Surveillance and Reporting to assess market, operational, country, and foreign exchange risks. Parliament passed legislation to combat money laundering and terrorism financing. To improve stability in the banking system, the central bank upped the minimum capital requirement for banks to \$1.5 million, which is to be raised further to \$2.5 million by the end of this year.

## Economic prospects

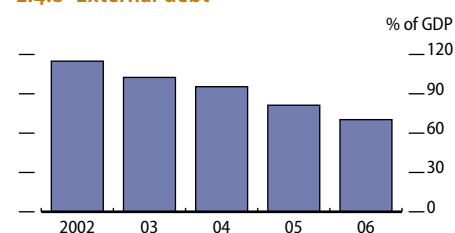
The underlying assumptions for economic projections are as follows: the political situation stabilizes as both the Government and Parliament make headway to resolving the prolonged standoff; key legislation is passed quickly; structural reforms are carried out soon; two promising gold deposits, Jerui and Taldy-Bulak, start mining production; growth stays strong in People’s Republic of China, Russian Federation, and Kazakhstan; the price of gold stays favorable; and, importantly, the new Cabinet will demonstrate commitment to announced economic policy goals and reforms.

In this scenario, GDP growth is projected to be around 4% in 2007 and 5% in 2008 (Figure 2.4.9), underpinned by the rebound in Kumtor gold output and the launch of the new mines, and by a sustained increase in nongold industry and services. Needless to say, this scenario will only unfold if the political situation stabilizes, before all else.

With continuing government efforts in improving the tax administration, and greater compliance encouraged by reduced tax rates and some “formalization” of the shadow economy, it is expected that the fiscal balance will remain within limits agreed with IMF—3% of GDP and to be covered by external resources and privatization proceeds. The draft state budget for 2007 envisages a further reduction in the payroll tax from 29% to a medium-term target of 25%, with the associated revenue losses to be offset by the results of greater efforts to curb tax and customs evasion.

Given the currently low levels of public salaries, and in its efforts to

### 2.4.8 External debt



Source: National Statistics Committee of the Kyrgyz Republic.

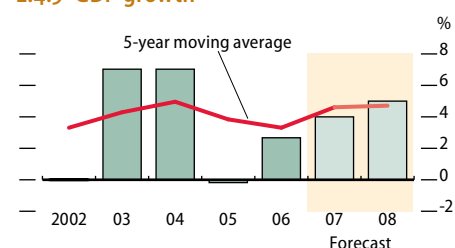
[Click here for figure data](#)

### 2.4.1 Selected economic indicators

	2007	2008
GDP growth	4.0	5.0
Inflation	5.0	5.0
Current account balance (% of GDP)	-12.2	-10.7

Source: Staff estimates.

### 2.4.9 GDP growth



Sources: National Statistics Committee of the Kyrgyz Republic; staff estimates.

[Click here for figure data](#)

deliver the promised improvement in living standards, the Government plans in the coming year to lift state sector wages and pensions by a further 10%, and social spending to about 16% of GDP. These moves are to be funded from public services and administration streamlining, and cuts in the number of public officials. Other priorities in the fiscal area include passage of the tax code, further improvements in tax and customs administration, a strengthening of the Large Taxpayers' Unit, enhanced public financial management, and increases in nonagricultural land taxes.

Inflation should remain manageable. Further gains in remittances, as well as the increase in the price of gas imports from Uzbekistan (to \$100 per 1,000 cubic meters, from \$55 previously) may exert additional price pressures in 2007. However, continued prudence in monetary and fiscal policies is expected to keep inflation at about 5%. The current account deficit is estimated to narrow to around 10–12% of GDP in the next 2 years, aided by an upswing in export volumes. The deficit is to be financed by FDI, other private inflows, and concessional assistance. The domestic currency is set to appreciate in both nominal and real terms in the medium term.

The overriding risk to the economic outlook is continued political uncertainty. Another relates to evolving intentions of the authorities to boost development spending to seek higher rates of investment and employment creation to meet the expectations—still largely unrealized—brought about by the March 2005 revolution.

The second Cabinet, formed in February 2007 after a long bout of political horse-trading, faces a formidable task of stimulating aggregate demand while maintaining high-quality standards for investment, and keeping inflationary pressures in check. This task is exacerbated by the current context of widespread governance issues, and a strong public resistance to foreign-funded aid. Policy stimulation for economic growth is understandable, but entails the risk of excessive state intervention, including through aggressive industrial policy.

#### 2.4.1 Reforming the business environment

The new Government announced improvement of business environment and combating corruption as priority issues. A Country Development Strategy for 2007–2010 was submitted to Parliament for consideration.

The authorities' efforts to stimulate the economy and attract FDI include, for example, cuts in profit and income tax rates and efforts to establish a national development fund. However, tangible advances in improving the investment climate and the business environment, and in fighting corruption, is less evident. Poor public and corporate governance, bureaucratic and administrative constraints, a weak financial sector, and a pliable judiciary remain major obstacles to private business activities.

The country continues to face major challenges in resolving governance weaknesses and stamping out bribery, both of which have diverted scarce resources and depressed productivity growth over the years.

Although the Government has kept the macroeconomic backdrop stable, attracted certain foreign investment over the past year, and announced and initiated wide-ranging reforms, progress in actually pushing through reforms has been slow, again because of political diversions.

# Tajikistan

The economy expanded at a robust rate despite higher costs of oil and gas in 2006. Burgeoning remittances spurred demand, as supply shocks from higher oil, utility, and food prices pushed inflation back into two-digit territory. Medium-term economic prospects are promising, if the expansion in externally financed infrastructure projects is supported by the broad reforms of the development strategy, so creating a favorable environment for private sector-led growth.

## Economic performance

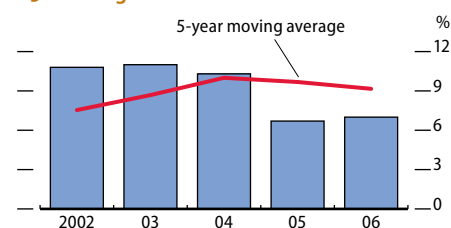
Aluminum and remittances, the mainstays of the economy, continued to drive growth (of 7.0%) in another strong year (Figure 2.5.1). Buoyed by spending of soaring workers' remittances, the subsectors of retail trade, transportation, and finance boosted services, though these inflows were strong disincentives for their recipients to continue working in their traditional occupation, agriculture. The protracted land-reform process and the long-standing issue of reforming cotton farmers' debts compounded the problem. The upshot is that agriculture in 2006 accounted for only 22% of GDP, down from 36% in 1991. Services and industry accounted for 50% and 28% of GDP, respectively.

A pickup in foreign direct investment financing for infrastructure projects and other construction investments, including a boom in private housing, lifted domestic demand, while a surge in aluminum exports (the main export commodity) underpinned strong export growth. More important, aggregate demand was driven by higher private consumption expenditure that, in turn, drew strength from the higher workers' remittances as well as a hike in domestic wages. The number of people finding better work opportunities outside the country and migrating, mainly to the Russian Federation, is on the rise, and the poor especially have benefited from remittances in terms of being able to afford a better standard of living. However, increasing dependence of family members on remittances, alongside sluggish private sector reforms, especially in agriculture, is hampering productivity improvements and risking failure to realize the country's economic potential.

The wave of remittances has not led to growth in the domestic savings or investment rates. Private investment is chronically low at 5.4% of GDP; public capital investment (mainly infrastructure projects) is also low. These levels are insufficient to sustain high growth. Incentives to channel remittances toward private investment are therefore needed to stimulate broader-based growth.

Inflation accelerated in 2006 into double digits after 18 months below that threshold (Figure 2.5.2). The preliminary estimate is a high 11.9%, from 7.1% in 2005. Supply shocks emanating from higher fuel prices and regional food prices, higher private spending, and increases in utility and transport tariffs, all played a part. Core inflation for 2006, as

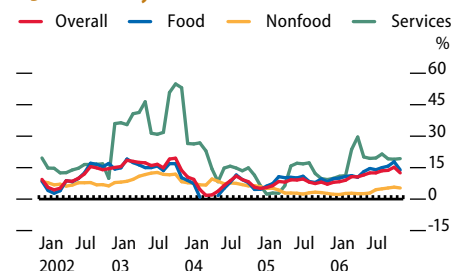
2.5.1 GDP growth



Source: State Statistical Committee of the Republic of Tajikistan, available: <http://www.stat.tj>, downloaded 30 January 2007.

[Click here for figure data](#)

2.5.2 Monthly inflation



Source: National Bank of Tajikistan, available: <http://www.nbt.tj/en>, downloaded 27 February 2007.

[Click here for figure data](#)



calculated by the National Bank of Tajikistan (NBT, the central bank), which excludes major food items and utilities, was lower at 7.3%. Higher incomes and greater demand for staple foods and lower grain production contributed to a surge in food prices.

NBT signaled its concern about growing inflationary pressures by raising its refinancing rate in steps from 8.5% in August to 12% in December. Prior to this, it had lowered banks' reserve-requirement ratio from 15% to 12% in April in an attempt to reduce the cost of attracting deposits by commercial banks, increasing banks' liquidity. Reserve money grew by about 17%, adding even further to banks' ability to expand credit, helping to push up the money supply by 60% (Figure 2.5.3).

Weak institutional capacity and the underdeveloped nature of the financial sector severely hinder the conduct of monetary policy. NBT started to give more attention to managing growth of reserve money by holding frequent and regular meetings at the operational and policy levels.

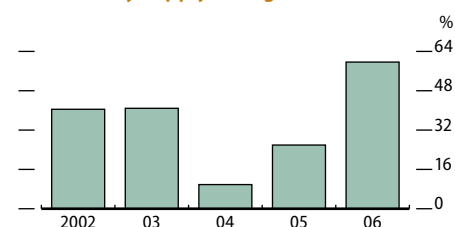
The fiscal situation was healthy in 2006, despite elections, as robust economic growth and better tax administration helped revenues exceed their targets and showed a 0.4% of GDP surplus (excluding the foreign-financed public investment program). Measures for enhancing tax collection introduced in 2006 included replacement of the sales tax on aluminum exports with a tax on aluminum processing, a higher value-added tax (VAT) threshold, and elimination of tax exemptions. But fiscal space is still tight. Expenditures on the social sector are rising, albeit from a very low base (8% of GDP in 2006 as against 5.5% in 2002). One way to enlarge the fiscal space is through improvements in expenditure efficiency and revenue measures.

Other sources of resource mobilization hold little promise. Grants are constrained because of heightened global competition for such funds. The scope for higher domestic borrowing is very limited and external borrowing is also restricted as the country is close to the sustainable ceiling for external debt. After a debt-equity swap with the Russian Federation in 2004 and a debt write-off by the International Monetary Fund (IMF) of \$99 million in 2006, outstanding external debt was brought down to 31% of GDP at end-2006 (Figure 2.5.4), from 108% in 2000. New borrowings for infrastructure point to the ratio rising again, offering little room for taking on additional debt if the authorities are to keep debt at sustainable levels.

IMF in September 2006 projected the deficit on the trade account for 2006 to be unchanged from the previous year, at \$0.5 billion. A higher import bill offset the export gain, reflecting higher oil and gas prices and imports for building the Sangtuda 1 hydropower plant. Exports strengthened mainly because of large price and volume increases for aluminum, even though Tajikistan did not benefit fully from international price rises due to production cost-sharing arrangements. In 2006, remittances leaped to an estimated \$1.2 billion from \$0.6 billion in 2005. IMF estimated the current account deficit at 4.2% of GDP (3.4% in 2005; Figure 2.5.5).

The somoni depreciated by 6.6% against the US dollar in 2006 (Figure 2.5.6). Despite the strength of the ruble and the euro—the currencies of the country's major trading partners—the somoni recorded a moderate depreciation of 3.8% in real effective terms due to inflation

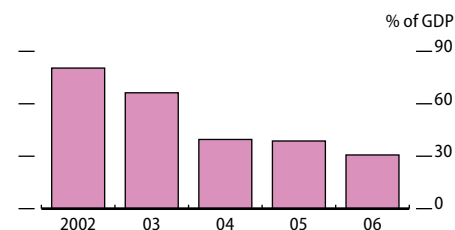
### 2.5.3 Money supply (M2) growth



Source: International Monetary Fund, *International Financial Statistics* online database, downloaded 28 February 2007.

[Click here for figure data](#)

### 2.5.4 External debt



Source: National Bank of Tajikistan.

[Click here for figure data](#)



differentials. As a result, the country retained competitiveness in the European and Russian export markets.

The Government has a wide-ranging reform agenda. It is about to finalize a 10-year national development strategy, and, pursuing that strategy's vision, is drafting a poverty reduction strategy for 2007–2009. The latter strategy identifies as priorities promoting private sector development, strengthening public sector management, and improving health and education services.

The Government had public administration reform high on its agenda in 2006, and it took some steps to put through various measures, including reducing the number of ministries. It also made some headway with key reform measures that represent a fundamental shift for budgeting systems. The Medium-Term Budget Framework, to be pilot tested in 2007, allocates the state budget to sectors on the basis of strategic sector priorities. The central treasury established a cash management unit in April 2006 to enhance the efficiency of budget execution. In July, the Government launched public expenditure tracking surveys, with World Bank support. The authorities continued, slowly, to strengthen tax administration so as to bolster revenues and bring more of the informal economy into the tax net.

In the power sector, the utility attempted to improve payment collection, but low tariffs still make it difficult for it to allocate resources for operations and maintenance. Current steps to tackle the problem include gradually raising electricity tariffs to eliminate large operating losses at the utility and providing a compensatory mechanism for the poor against power hikes.

Banking supervision was further strengthened, and, in line with World Trade Organization commitments and to enhance competition in the sector, the authorities lifted legal restrictions on foreign banks. Minimum capital requirements for banks were increased to \$5 million and those that did not comply were merged or reorganized into nonbank credit institutions. Competition among nonbank financial institutions also improved, widening people's access to microcredit.

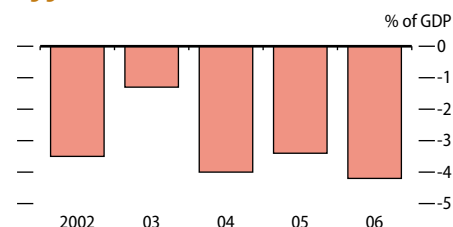
## Economic prospects

Mixed price trends are predicted for the main traded commodities. Prices of aluminum have been supported by high demand but are expected to fall. Global prices for cotton, the second-largest export, are expected to rise by 18% cumulatively over the next 2 years. Prices for natural gas from Uzbekistan, the main supplier, were increased to \$100 per 1,000 cubic meters in early 2007 and this will have a marked impact on the import bill and domestic prices.

The economy is forecast to expand by 7.5% and 7.1% in 2007 and 2008. Externally funded investments in infrastructure, including energy and transportation, will boost aggregate demand, though the major source of growth will continue to be remittance-backed consumption.

On the supply side, services will continue to be an important source of growth, partly as a spillover from greater investment activity but mainly because of rising consumption. Aluminum production will continue to drive industry's contribution to overall growth, but cotton's

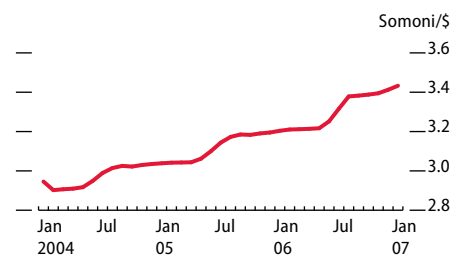
### 2.5.5 Current account balance



Source: International Monetary Fund, *Regional Economic Outlook, Middle East and Central Asia*, September 2006.

[Click here for figure data](#)

### 2.5.6 Nominal exchange rate versus US dollar



Source: International Monetary Fund, *International Financial Statistics* online database, downloaded 10 March 2007.

[Click here for figure data](#)

contribution to agricultural growth is expected to diminish, despite favorable price dynamics. The timely resolution of cotton debt by implementation of the Road Map for the Farm Debt Resolution Strategy will be crucial to releasing agriculture from outmoded central planning-era practices.

To bring inflation back to single digits, NBT will work within the macroeconomic framework of IMF's policy support instrument (under discussion). However, the targets are ambitious and remain vulnerable to shocks in terms of trade, in particular from prices on energy and foodstuffs.

Fiscal policy will adhere to the budget framework that envisages a deficit of 1% of GDP in 2007 and 2008, excluding the externally financed public investment program. Tax reforms are likely to raise revenues but modest domestic borrowing will have to be made to offset the higher spending in the budget for 2007. Spending on infrastructure is set to rise due to cofinancing of large-scale infrastructure projects, while expenditures on social sectors will also increase (but at a slower pace than in 2006).

The size of externally funded projects will rise in the medium term to accommodate the new bilateral loans contracted in 2006 from the People's Republic of China. The loans finance construction of the north-south power transmission line and rehabilitation of the road that connects the major industrial cities of the country with Uzbekistan.

The external debt-to-GDP ratio is set to rise to 46.1% and further to 52.4% of GDP, in 2007 and 2008. The space for new borrowing is very limited as the external debt indicators are now hitting sustainability levels.

### 2.5.1 Selected economic indicators

	2007	2008
GDP growth	7.5	7.1
Inflation	7.0	5.0
Current account balance (% of GDP)	-4.8	-5.0

Source: Staff estimates.

## Development challenges

The main challenge is increasing savings and productive private investment to sustain economic growth. There is hope though, since some recent developments seem to offer scope for greater private investment, including macroeconomic stability; surging remittances; the elimination of high fees on money transfers and so greater remittances channeled through banks; government attempts to attract foreign capital to infrastructure projects; and business regulatory reforms (including cutting much red tape).

Risks remain of course: macroeconomic stability is highly vulnerable to external shocks due to the economy's openness and narrow import dependence; spiraling remittances may create disincentives to work, especially in agriculture; and infrastructure projects may entail higher taxes on the private sector, possibly hurting its willingness to invest.

# Turkmenistan

The economy continued to grow rapidly in 2006, but the exact figure for actual growth was likely lower than the official estimate. It is uncertain whether the newly elected president will embrace reform and engage with the international community. The country is heavily dependent on exports of gas and oil, a situation that is likely to continue over the medium term. The key development challenges are to effectively channel oil and gas revenues toward productive investment, implement market-oriented reforms, and rebuild human capital.

## Economic performance

The economic situation stayed very healthy in 2006, with GDP growth of over 20% (based on official data). However, official statistics tend to overestimate growth, and actual rate was likely around 9%, according to staff estimates. Either way, growth was sustained by increased gas prices (renegotiated with the Russian Federation) and exports. While the gas and oil industry grew rapidly in 2006, the cotton crop experienced shortfalls for the sixth consecutive year.

Official estimates for inflation are unavailable, but according to figures from the International Monetary Fund, it moderated somewhat from 10.7% in 2005 to 9.0% in 2006 (Figure 2.6.1). This was achieved through wage freezes, cuts in pension payments, price controls, and restrictions on cash withdrawals from banks, resulting in a situation of repressed inflation. A dual exchange rate regime exists: one dollar buys 5,200 manats at the official rate, but 24,000 on the black market.

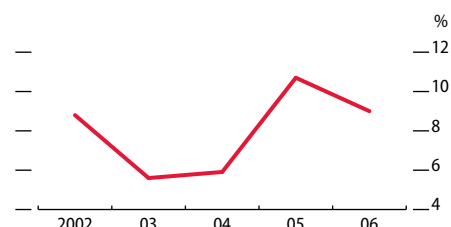
The fiscal surplus edged up from 0.9% of GDP in 2005 to 1.1% (Figure 2.6.2), reportedly due to improved revenue collections, but the non-oil fiscal deficit as a share of non-oil GDP was estimated at 9.5% (2005). There are unofficial reports of a budget contraction, causing the accumulation of public sector wage arrears and education spending cuts. Public sector revenues are largely from oil and gas incomes that are off-budget, and these are managed with other funds directly by the president. These off-budget funds go unreported in the official statistics.

Another large surplus (\$1.5 billion) on the trade balance account was estimated due to booming oil and gas export revenues. Although both exports and imports grew in 2006, exports grew much faster, propelled by surges in both volumes and prices of natural gas. The current account surplus was estimated to have grown to 5.7% of GDP (Figure 2.6.3), while gross official international reserves were estimated at \$6 billion, equivalent to some 15 months of merchandise imports.

Although there are no official labor statistics, unemployment is likely to be high because many school graduates are unable to find jobs, as opportunities are few and they lack the necessary skills.

A central element of the social protection system remains the provision to the entire population of basic consumer goods and

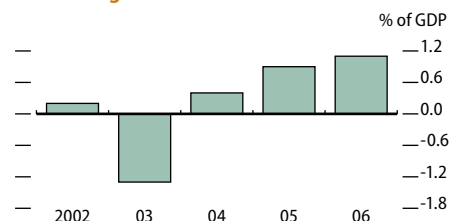
2.6.1 Inflation



Source: International Monetary Fund, *Regional Economic Outlook*, Middle East and Central Asia, September 2006.

[Click here for figure data](#)

2.6.2 Budget balance



Source: International Monetary Fund, *Regional Economic Outlook*, Middle East and Central Asia, September 2006.

[Click here for figure data](#)

utilities free of charge or at subsidized rates. While this enables people to meet a minimum subsistence level and alleviates income poverty, non-income poverty indicators continue to worsen. Social services, including education and health, have been hit by underfinancing, a shortened compulsory education period, excessive state intervention in school curricula, a reduction in the number of university students, and deteriorating health services. Following the death of President Niyazov in December 2006, the new president has announced some reforms in the social sector.

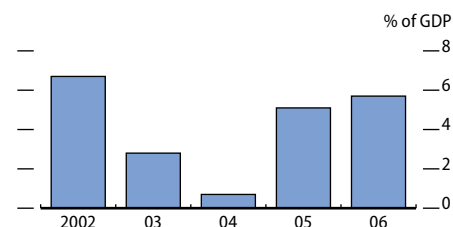
Key areas for reform that the new Government now needs to carry out include a reduction of state intervention of economic activities, liberalization of the domestic market, a shift from setting agricultural and industrial production targets to market-determined production, liberalization and privatization of the banking sector, and unification of the exchange rate. Oil and gas revenues should be managed transparently and incorporated in the national budget.

## Economic outlook

While there is currently some uncertainty about the likely direction of the post-Niyazov economy, it will likely maintain its heavy reliance on exports of natural gas and cotton. With potential discovery of new gas fields (though not proven), Turkmenistan would both increase exports of natural gas to the Russian Federation and Ukraine, at the same time as attempting to diversify its gas export destinations, to include, most likely, the People's Republic of China and, possibly, Afghanistan, India, and Pakistan.

Three growth scenarios can be formulated for 2007–2008. With political turmoil, growth could decelerate to 3–4%. Without it, two possibilities emerge. Under a “no reform” scenario, GDP could grow by 8–9% a year on the back of higher exports of natural gas with continued stagnation in agriculture. Under a “with reform” scenario, growth could increase to 10–11%. Reforms in this context would include liberalizing prices, eliminating subsidies, improving the business environment, revamping the education and health sectors, upgrading delivery of other basic services, and developing rural areas.

### 2.6.3 Current account balance



Sources: International Monetary Fund, *Regional Economic Outlook*, Middle East and Central Asia, September 2006; staff estimates.

[Click here for figure data](#)

### 2.6.1 Selected economic indicators

	2007	2008
GDP growth	8.5	8.5
Inflation	8.0	8.0
Current account balance (% of GDP)	7.4	6.3

Source: Staff estimates.

# Uzbekistan

Continued strong—but narrowly based—growth was driven by increased net exports, a pickup in workers' remittances, and productivity gains in agriculture. Major challenges over the medium term are to continue managing monetary and fiscal policies to cope with inflationary pressures, integrate the economy with the rest of the region (and world) via more open trade and investment policies, advance structural reforms in banking, restructure state enterprises, and remove state controls hindering private sector development. Further diversification away from the commodity and energy sectors would also help sustain growth.

## Economic performance

The economy has shown robust performance over the past 3 years, and continued to do so in 2006, turning in GDP growth of 7.3% (Figure 2.7.1). Exports, too, showed real vibrancy, fueled by favorable price movements in international commodity markets (Figure 2.7.2), and to a degree, heady growth of noncommodity exports.

Productivity gains in the agriculture sector also contributed. The transformation of large, agricultural cooperatives, *shirkats*, into private farms nearly finished, with 666 of them becoming 74,000 small private farms during the year. This change has improved the incentive structure for production—and so productivity—especially in fruits and vegetables.

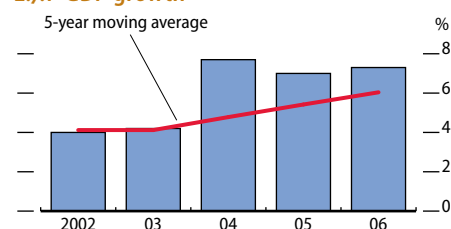
Vigorous export performance coupled with surging remittances has led to a huge current account surplus of 19.5% of GDP (Figure 2.7.3). Gross official reserves are reported to be equivalent to 12 month of imports.

The authorities have maintained a conservative fiscal stance over the past few years. In 2006, the consolidated state budget posted a small surplus at 0.5% of GDP compared to the planned deficit of 3% GDP. Continuation of the conservative external borrowing policy (“zero net borrowing”), has helped improve debt indicators.

Despite their cautious fiscal stance, the authorities have to tackle the risk of higher inflation due to the mounting foreign exchange inflows and rapid reserves accumulation. In 2005, partial sterilization led to a sharp increase in broad money supply of over 50%. In 2006, in order to tighten monetary policy, the central bank conducted sterilization operations using its own paper and treasury bonds. This brought money supply growth down to about 35% (Figure 2.7.4). Nevertheless, controlling money aggregates and associated inflationary pressures remain substantial challenges.

The Government established the Uzbekistan Reconstruction and Development Fund (URDF) in 2006 to absorb the excess liquidity. The total authorized capital for URDF is \$1 billion, with \$500 million already in place. The establishment of URDF is intended to help buffer the economy from price shocks stemming from volatile foreign exchange inflows. The remaining challenge now is how to channel the fund toward productive investments.

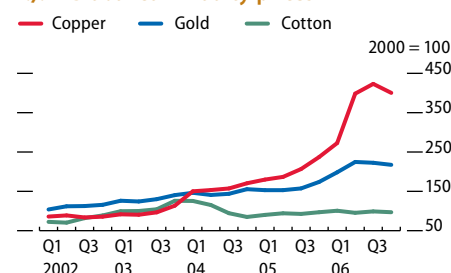
2.7.1 GDP growth



Sources: State Statistical Committee of Uzbekistan; staff estimates.

[Click here for figure data](#)

2.7.2 Global commodity prices



Source: International Monetary Fund, *International Financial Statistics* online database, downloaded 30 January 2007.

[Click here for figure data](#)

Official data indicate that consumer price inflation has declined since 2004, with the official inflation rate estimated to be at 6.8% in 2006. However, this is an area for debate, created by the gap between official and International Monetary Fund estimates for consumer price inflation (though the gap reportedly fell slightly in 2006). A technical assistance agreement recently reached between the Government and the Fund should help resolve the issues of inflation estimate.

Fiscal reforms continued in 2006 in the development of a treasury system. Steps were made to establish a consolidated Treasury Single Account for improvements in budget execution efficiency. The Treasury Law took effect in January 2006. A pilot treasury program introduced in 2005 in the region of Samarkand and Tashkent was extended to cover a total of six regions (*oblasts*). Many banking accounts in the commercial banks held by executing budgetary organizations were closed. As a result, this has eliminated the function of these commercial banks in budgetary execution.

Tax reform continued, to ease the burden on enterprises, broaden the base, and strengthen administration. Tax rates for personal income, corporate profits, dividends, and small and medium enterprises were further reduced, yet despite this, total tax receipts rose.

Banking sector reform could be faster, especially in privatizing large stated-owned banks. Total banking deposits are very low, reflecting the population's low confidence in the system. Banking regulations need to be further simplified and clarified to allow banks to operate commercially.

Despite official commitment to currency convertibility, it is reported that enterprises still face difficulty in converting local currency into foreign exchanges for trade. The authorities argued that the current convertibility continued, however, the introduction and implementation of the recently approved antimoney laundering policy imposed additional reporting requirements, and these may on occasions have delayed the process of meeting requests for foreign exchanges.

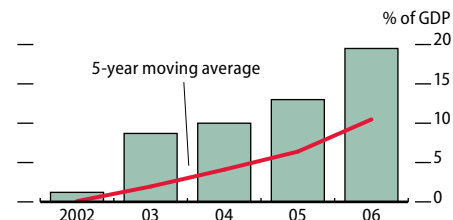
The Government is developing a comprehensive financial sector reform program. One component is to eliminate the distinction between cash and noncash payments. Currently, the civil code requires all transactions between enterprises to be settled in noncash form (bank transfers). Intended to combat the shadow economy, money laundering, and tax evasion, this requirement may have hit normal business activities.

The trade regime remains restrictive, ostensibly to protect domestic industries. Relatively high effective rates of protection for consumer goods, including discriminatory excise taxes and administrative restrictions on imports, have suppressed imports and encouraged informal trade—partly explaining the large current account surplus.

## Economic prospects

International prices of the country's major exports look favorable for the next couple of years. Following an estimated 7% increase in 2006, the cotton price is expected to continue climbing, reflecting a rundown of global stocks. Gold prices, too, seem set to rise further. In addition, the economy will likely continue enjoying the benefits of higher energy prices, after securing a significant increase in the export price of its gas.

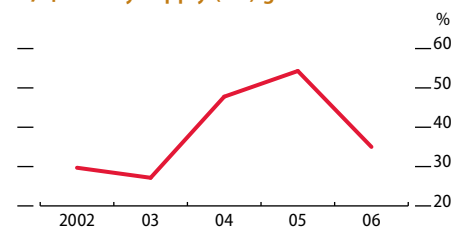
### 2.7.3 Current account balance



Sources: International Monetary Fund, *Regional Economic Outlook*, Middle East and Central Asia, September 2006; Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

### 2.7.4 Money supply (M2) growth



Sources: International Monetary Fund, *Regional Economic Outlook*, Middle East and Central Asia, September 2006; Asian Development Outlook database; staff estimates.

[Click here for figure data](#)



External demand for exports should remain favorable, especially with the likely continued strong economic performance of the Russian Federation and neighboring transition economies. In the absence of major shocks, buoyant exports are seen boosting the economy. Growth in the forecast period is penciled in at over 7%. Trade and current account balances will likely maintain hefty surpluses. The associated increase in foreign exchange reserves will remain a major source of monetary expansion and an inflationary risk.

The Government is targeting inflation of 5–7% this year. The central bank intends to limit broad money supply growth to about 30% through sterilization and use of other indirect monetary instruments. The authorities intend, too, to maintain a prudent fiscal policy to combat inflation. Still, it will be difficult to achieve the inflation target, given the early stage of treasury debt market development, limited sterilization options, and rising pressures from wage and social expenditure increases.

Monetary control is rendered more difficult by exchange rate policy, because the authorities have allowed the domestic currency to depreciate in real terms to stimulate exports. In combating inflation, the Government may want to consider adopting a more flexible foreign exchange rate system, allowing nominal appreciation to resolve the difficulty of monetary control.

Over the medium term, the economy faces many challenges. Certainly, it has yet to realize its full potential. And to sustain current rates of expansion, more investment, especially from the private sector, will be required. The economy also needs to diversify to create the jobs needed by its relatively young and growing population.

Structural reforms are crucial, and will require the Government's continuing to open up the economy and integrate it with the rest of the world. This should introduce more competition, and improve productivity and efficiency. It is also crucial to establish a stable environment in which to attract investments from all possible sources. Banking reforms need to be accelerated, since the economy's full potential will only be achieved when banking mobilizes domestic savings and puts them to productive use. In this regard, it is crucial to build, and then keep, the trust of the population in the system.

The current favorable economic environment provides an opportunity to push through structural reforms. However, the same environment could also lead to a sense of complacency among policy makers. Commitment to economic reforms and transition to a market-based economy are crucial to sustaining the country's long-term development.

The Government's poverty strategy aims to reduce the poverty rate to 20% by 2010, to meet the Millennium Development Goals. Expected strong export growth may well help achieve the objective, but growth should shift from overdependence on external demand to investment. Both the quantity and quality of investments need to be raised, since public investment cannot do the job alone. Both domestic and foreign private investment will need to be welcomed.

The availability and quality of economic data provides a sound basis for economic management. Further improvements are necessary in access to and quality of the data. Improved economic data compilation and analysis will help provide a reliable picture of underlying performance.

#### 2.7.1 Selected economic indicators

	2007	2008
GDP growth	7.4	7.1
Inflation	9.0	8.2
Current account balance (% of GDP)	10.0	9.2

Source: Staff estimates.

# East Asia

**People's Republic of China**  
**Hong Kong, China**  
**Republic of Korea**  
**Mongolia**  
**Taipei, China**



# People's Republic of China

Economic growth exceeded 10% for a fourth consecutive year, driven by strong investment. A gradual tightening in monetary policy and the use of administrative tools moderated investment growth in the second half of the year. In 2007 and 2008, softer external demand and policy curbs are expected to pull growth down gradually. In the short run, the Government is likely to restrict investment growth and cool the economy. In the medium to long-term, the aim is to achieve a more balanced and inclusive economy, dependent less on exports, investment, and industry, and more on private consumption and services. This evolution will probably mean lower GDP growth rates.

## Economic performance

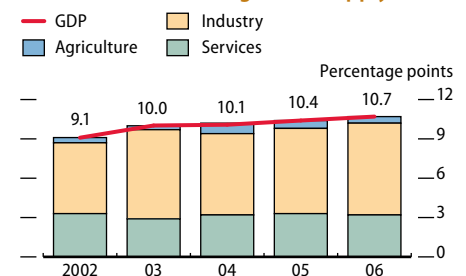
The People's Republic of China (PRC) recorded a strong economic performance in the first year of its 11th Five-Year Program. GDP in 2006 grew by 10.7%, a 10-year high and a fourth year of double-digit growth. Concerned about overheating in some sectors, the Government imposed restrictions that slowed growth modestly, from 11.5% in the second quarter to 10.4% in the fourth.

Industry, including manufacturing and construction, contributed 7.0 percentage points, or 65% of total GDP growth, and services another 3.2 percentage points, or 30% (Figure 2.8.1). Agriculture made a minor contribution. On the demand side, the economy continued to be driven by strong investment, which contributed 4.4 percentage points, or 41% of total GDP growth (Figure 2.8.2). As the contribution of net exports declined to 21% in 2006, that of total consumption edged up to 38%. Private consumption grew robustly, but by less than GDP growth.

Investment surged in the first half of 2006 as a result of accelerating urbanization, the drive of local governments (which have incentives to push growth through investment), and excess liquidity (which made access to credit easy for some firms). As the Government's efforts to cool the economy took effect, the growth of fixed asset investment slowed from about 30% in the first half of the year to 21% in the second (in nominal terms). Investment slowed sharply in industries that have built excess production capacity, such as textiles, coal mining, and electricity (Figure 2.8.3).

The relationship between investment and industry is key to understanding the PRC's growth acceleration. Certainly, growth was helped by economic reforms that made labor and capital more productive, and by a favorable global environment. However, the reinvestment of large profits into new industrial activity was perhaps the most important driver. Higher investment allows more capital deepening, which in turn increases labor productivity and potential GDP. Profits of industrial enterprises grew faster than industrial value added for much of last year, which indicates a decline in the share of wages in GDP. This, together

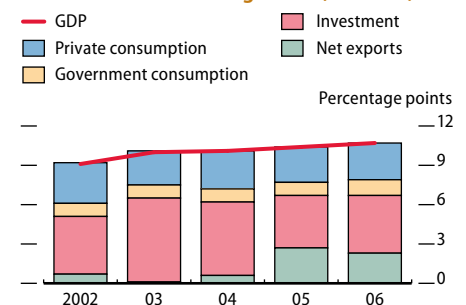
### 2.8.1 Contributions to growth (supply)



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

### 2.8.2 Contributions to growth (demand)



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

with low inflation and impressive productivity gains, helped keep the growth of unit labor costs under control. The gap between growth in nominal industrial profits and nominal industrial value added widened from 3.1 percentage points in the first 5 months of 2006 to 7.8 percentage points in the 11 months to November (Figure 2.8.4), encouraging companies to lift investment.

Faster growth in exports than imports (Figure 2.8.5) boosted the trade surplus by \$60 billion to \$194 billion in 2006. Bilateral surpluses with the United States (US) and European Union (EU) surged, while the deficit with the rest of Asia continued to widen. This is consistent with the growth of supply chains, where manufacturing plants in the PRC import intermediate inputs from the rest of Asia. (See also *Uncoupling Asia: Myth or reality* in Part 1.) Processing trade, which involves the assembly and export of imported intermediate items (with most inputs exempted from customs tariffs), is the largest contributor to the trade surplus (Figure 2.8.6).

The surge in the trade surplus, coupled with higher tourism receipts and interest income on the large official foreign reserves, boosted the current account surplus to around \$227 billion, equivalent to 8.6% of GDP. Foreign direct investment for the year totaled \$69.5 billion. Besides these inflows, short-term speculative capital flowed into property and stock markets. Foreign exchange reserves reached \$1.07 trillion by year-end (Figure 2.8.7), prompting discussions on how to use reserves more efficiently, and calls from some trading partners for faster appreciation of the yuan. In a move to liberalize the capital account, a pilot program was introduced to allow PRC residents to purchase foreign securities through the Qualified Domestic Institutional Investors plan.

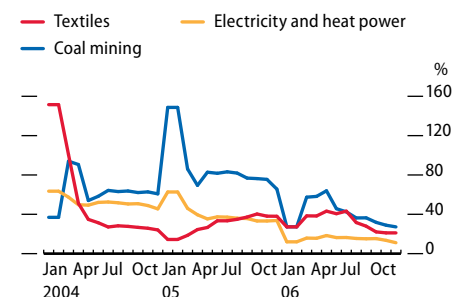
About 11.8 million new jobs were created in urban areas last year, well above target. The private sector and small and medium enterprises generated about 80% of these jobs, mainly in manufacturing, construction, and services. But millions of migrants from the countryside, new graduates, and laid-off workers still went without work. The National Development and Reform Commission estimated at the beginning of the year that urban areas needed about 25 million new jobs in 2006 to absorb all newcomers to the labor market.

The overall fiscal deficit narrowed to an estimated 0.4% of GDP. Revenues rose by 24.3%, helped by gains in incomes and rising corporate profits. Expenditures also rose rapidly, by 18.5%. Given buoyant private investment, the Government reduced its issuance of special treasury bonds used to finance public investment, from the equivalent of about \$10 billion in 2005 to \$7.4 billion in 2006.

As a result of the excess capacity in some industries and strong competition in manufactured products, inflation slowed to 1.5% in 2006. Late in the year, though, food prices accelerated, reflecting a sharp rise in global grain prices. Housing prices in several big cities grew rapidly because of excessive liquidity, speculation, and some structural imbalances in housing supply.

Worried about possible overheating, the Government took several steps to curb credit expansion and to slow investment. The People's Bank of China, the central bank, tightened credit five times, with increases in commercial banks' reserve-requirement ratio, beginning in mid-2006 and

### 2.8.3 Growth of investment, selected industries

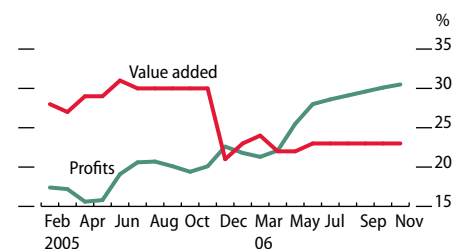


Note: Heat power refers to hot water and steam for city heating systems.

Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

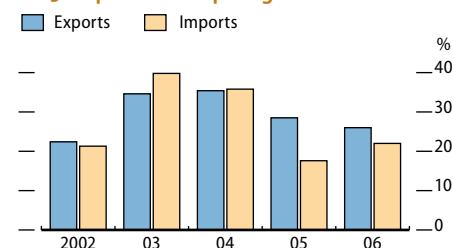
### 2.8.4 Growth of industrial value added and profits



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

### 2.8.5 Export and import growth



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

running through February 2007, from 7.5% to 10.0% (Figure 2.8.8); and three hikes in the benchmark 1-year lending rate through March 2007, from 5.58% to 6.39% (Figure 2.8.9).

Commercial banks with the highest growth in lending were required to purchase special central bank bills at below market interest rates. These measures moderated growth in domestic credit, but actual lending and broad money increased faster than targets set by the central bank at the beginning of 2006. To ease upward pressure on the yuan from the surging trade surplus and strong capital inflows, the authorities allowed a slightly faster appreciation of the currency in nominal terms (2.4% against the US dollar in the second half compared with 0.9% in the first; Figure 2.8.10). The real effective exchange rate depreciated by 1.6% over the year, indicating that PRC goods became more price competitive.

The stock market expanded significantly in 2006, with major domestic banks among companies to sell shares to the public. Share prices climbed (Figure 2.8.11), underpinned by strong economic expansion, high liquidity levels, and the conversion of nontradable, state-owned shares into tradable shares.

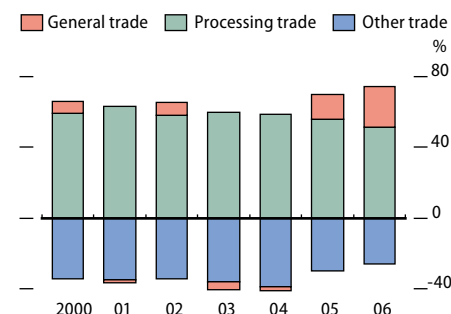
## Economic prospects

Rapid GDP growth in 2006 set a high starting point for the 11th Five-Year Program (2006–2010), which has an indicative average annual growth of 7.5% for the period. This implies that overall macroeconomic policy should tighten in 2007. The projections assume that the authorities will keep the fiscal deficit below 1.0% of GDP. Also, it is assumed that the central bank will continue its current monetary policy stance by using interest rates, the reserve ratio, and open-market operations. Likewise, with rising profit growth and ample liquidity in the system, it is assumed that investment will again grow at a fast rate (although not at the 2006 pace) and will remain the main driver of growth. In the meantime, reforms will be implemented that, in the medium to long term, may have an impact on the structure of the economy.

Economic growth is projected to moderate in 2007 and in 2008, but will remain close to 10%, far from the indicative program target (Figure 2.8.12). Industrial growth is forecast to slow to 11.0% in 2007 and to 10.8% in 2008, from about 12% in the past 2 years, because of: significant oversupply in some sectors; slower growth in investment as a result of the tightening measures; and easing export growth caused by softer external markets. Agriculture is expected to benefit from a new official emphasis on rural development. Assuming no serious weather problems, agricultural production is projected to increase by 5.2–5.4% in the next 2 years, accelerating from an average of about 4% growth over the past half decade. Services are expected to grow by 10.4–10.5% (10.3% last year), supported by government efforts to promote consumption as well as expenditures associated with the Olympic Games in 2008.

Responding to various restrictions, especially those targeted at energy use and pollution, and others curbing property speculation, fixed investment growth is projected to moderate to 20%. It will be important that efforts be made to improve the efficiency of investment, so that a

### 2.8.6 Shares of trade

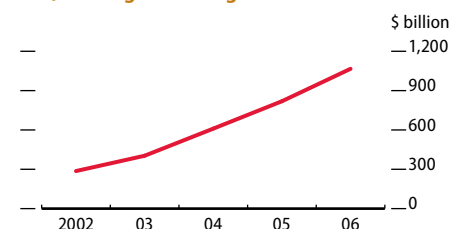


Note: General trade refers to the import or export of goods by enterprises with import-export rights.

Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

### 2.8.7 Foreign exchange reserves



Source: National Bureau of Statistics.

[Click here for figure data](#)

### 2.8.1 Selected economic indicators

	2007	2008
GDP growth	10.0	9.8
Inflation	1.8	2.2
Current account balance (% of GDP)	8.8	8.9

Source: Staff estimates.



given investment share can translate into a higher growth rate of capital accumulation.

Public investment will increase in priority areas including agriculture, education, and health: rural areas will get a larger share of infrastructure spending; schools fees will be eliminated up to the end of junior high school; and spending on health care will increase this year by 87%, and a medical insurance program launched in 2003 is expected to be extended to cover 80% of rural areas. These measures should support rural development and stimulate services. Private consumption will grow, reflecting projected increases in both urban and rural incomes, the latter assisted by government spending in rural areas and grain price guarantees. Retail sales have already risen by 14.7% in the first 2 months of 2007, up from a 12.5% pace in the year-earlier period, a sign of stronger consumer demand.

The softening in export markets and a reduction in PRC tax rebates for exports are expected to reduce the growth of merchandise exports to 18% in 2007, from 26% last year. Import growth will ease to about 18% (versus 22%) as investment decelerates. The large export base and the moderation in import growth suggest that the trade surplus in goods will climb to about \$257 billion by 2008. Trade in services will remain in deficit, but the surplus in the income account is likely to increase sharply, reflecting earnings from accumulating foreign exchange reserves. Consequently, the current account surplus will rise further (Figure 2.8.13).

The acceleration in food prices late last year is not expected to continue through 2007, in part because the push on rural development is encouraging the planting of grain. Inflation will pick up, though, to about 1.8% in 2007 and 2.2% in 2008 (Figure 2.8.14), because of expected rises in labor costs (as a result of substantial productivity increases) and higher prices of water, electricity, and fuel. In the first 2 months of this year the consumer price index rose by 2.4%.

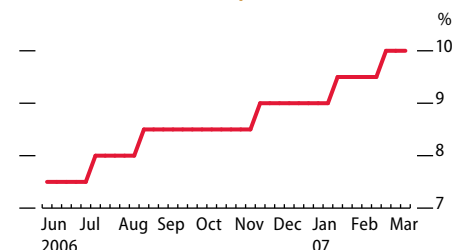
Domestic risks and uncertainties stem from two sources. First, if local governments do not fully respond to the central Government's restrictive measures—and they have not done in the past several years—GDP growth could surpass the above forecasts. (Urban fixed asset investment rose by 23.4% in the first 2 months of 2007, down slightly from the year-earlier pace.) Should investment continue to run at more than 20% a year, what has been a source of growth for many years could turn out to be a curse, if it leads to a further buildup in excess capacity and deflation.

Indeed, the combination of sometimes inefficient investment, overcapacity, and falling prices would erode profitability. To prevent this, the Government would need to step up its use of administrative measures to curb investment. Conversely, if all the measures to rein in growth are successfully implemented, GDP growth in 2007–2008 could slow more sharply, to about 9%. The main risk on inflation is that the Government may increase prices for administered utilities and services at a faster pace than anticipated, which would push inflation above forecast levels.

Over the medium term (2007–2011), GDP growth is expected to average about 9%. Inflation during this period will be higher than it is now, but probably less than 3% on average.

Several factors underpin the medium-term projections. The PRC will

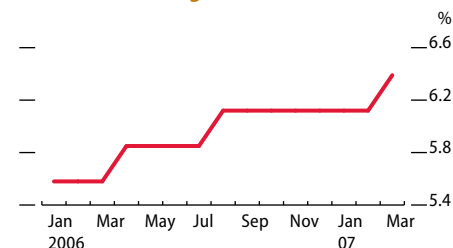
### 2.8.8 Bank reserve-requirement ratio



Source: People's Bank of China.

[Click here for figure data](#)

### 2.8.9 Base lending rate

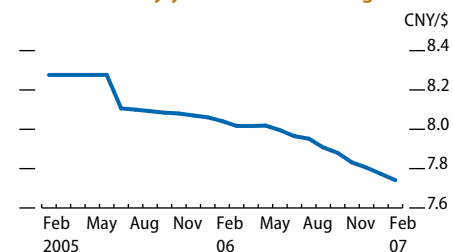


Note: One year rate for working capital.

Source: CEIC Data Company Ltd., downloaded 20 March 2007.

[Click here for figure data](#)

### 2.8.10 Monthly yuan-dollar exchange rate



Source: CEIC Data Company Ltd., downloaded 8 March 2007.

[Click here for figure data](#)



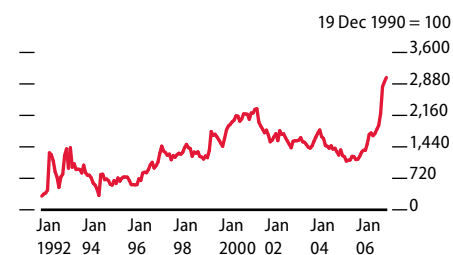
be industrializing rapidly for some time to come, so that investment will continue to support high levels of growth. The trend toward urbanization will also continue, which requires rapid development of urban infrastructure and housing. In the context of wide gaps in incomes and in development between urban and rural areas, the Government plans to promote the laggards rather than hinder the leaders. Moreover, large numbers of unemployed and underemployed people mean that pressure will be maintained on the authorities for many years to generate jobs, which requires high rates of economic growth. Finally, rising imports of technology, improved domestic productivity, and flows of foreign direct investment and other capital, support these imperatives for rapid economic expansion.

Further support will come from efforts being made to create the legal and regulatory structure that underpins development of a market-based economy. The third national financial work conference, held in January 2007, outlined a raft of financial reforms. To increase access to finance in rural areas, the China Banking Regulatory Commission issued rules to encourage private sector participation in rural finance, a change that will be first tried in five provinces. This move aims to address funding restrictions faced by farmers, who have little access to bank loans and generate only 15% of total bank loans and deposits. The conference also set plans for the PRC's three policy banks to open commercial operations so that they base lending decisions on commercial grounds. And it discussed management of the country's huge foreign exchange reserves.

In March, the Ministry of Finance announced that a foreign exchange investment corporation would be established to allocate a portion for strategic investments (e.g., international equity markets, natural resources, and as foreign direct investment). Although the portion of the reserves that could be managed this way was not determined, initial estimates indicate that a sizable amount could be transferred to the new corporation in phases. More active management of the reserves aims to increase returns. Independent estimates put at about 3% the central bank's return in 2006 on its reserves (the majority of which is invested in dollar-denominated instruments, mostly US treasury bonds). (See also Box 1.1.2 in Part 1.)

In other policy developments early in 2007, the Government decided to unify corporate tax rates paid by local and overseas enterprises, at a 25% rate from January 2008. Previously, domestic firms were taxed at up to 33% while foreign companies paid 15%. The National People's Congress in March passed a new property law (to come into effect in October 2007), following a change in the PRC constitution in 2004 to protect private property rights. The new law reassures the growing middle class that its assets (mainly houses) are secure. However, it does not give small farmers marketable ownership rights, nor does it allow them to use land as collateral to borrow and invest, which is what would help boost productivity in the countryside. Moreover, the state retains the right to appropriate farm land. Farmers do, though, get the right to renew land-use leases as they expire. (Rural land is "collectively owned" in the PRC and farmers are given 30-year leases.)

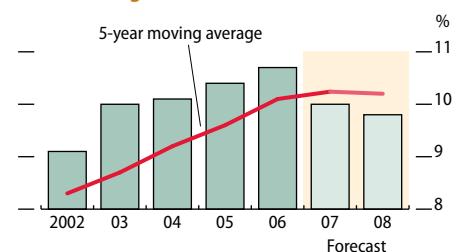
#### 2.8.11 Shanghai stock exchange index, A-share



Source: CEIC Data Company Ltd., downloaded 8 March 2007.

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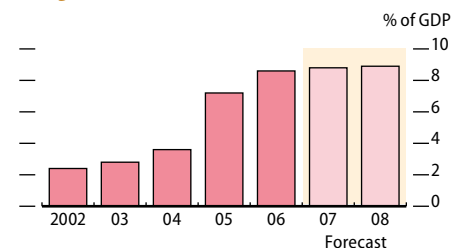
#### 2.8.12 GDP growth



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

#### 2.8.13 Current account balance



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

## Development challenges

Four years of double-digit growth, rising government revenues, low inflation, and a manageable public deficit would be cause for celebration in most countries. In the PRC, this record has raised some concerns. The authorities believe that the economy can continue growing, but are aware that a number of corrections are necessary, in particular an overheated investment sector.

Efforts to cool the economy in the past 3 years have relied heavily on increases in bank reserve requirements and some increases in interest rates. But monetary policy, and in general the use of macro stabilization instruments, does not have the same impact in this economy as in a full market economy. Much of the PRC's bank lending is in the hands of autonomous local bank branches.

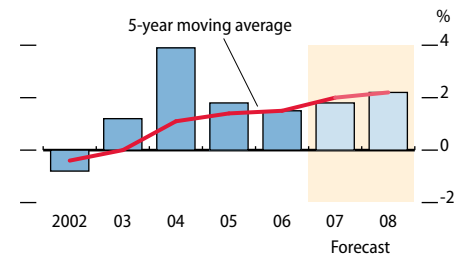
The most direct way for the authorities to control investment is by deciding what investments to approve on a case-by-case basis. Thus, while central planners were finally able to reduce the growth of investment toward end-2006, bank lending still grew at a rapid rate. This has resulted in an excess of bank-funded liquidity that is spilling over into the financial system. Under current methods, the only mechanism available is to continue using administrative measures, and perhaps extend them to the financial system to deal with excesses.

The need to rebalance the economy by reducing the emphasis on investment and export-led growth while lifting private consumption is embraced by the 11th Five-Year Program. Policy makers view economic rebalancing as not just an economic objective, but as part of an overall strategy to achieve “social justice.” Since 2004, the Government has advanced a series of strategies to build what it describes as a “harmonious society.” This involves achieving “five balances”—between rural and urban development, interior and coastal development, economic and social development, people and nature, and domestic and international development. The political leadership decided in 2004 to change the growth pattern from investment- and export-led to more consumption-led growth. During 2005 and 2006, policy makers reiterated that improving the quality of economic growth and rebalancing the economy would be a priority in the medium and long term.

Rebalancing implies altering the model followed for decades. This entails, on the demand side, reduced reliance on exports and investment for growth, in favor of private consumption; and on the production side, a shift from industry-led growth to more services-led growth. Policy measures taken in the past 3 years in pursuit of these goals have included raising minimum wages, reducing income taxes, increasing public spending, as well as taking the steps needed to contain rapid growth in investment and promote consumption.

The scorecard shows that limited progress has been made on most fronts. The dependence on external demand for growth is still high. Since the PRC joined the World Trade Organization in 2001, its foreign trade has grown annually at an average rate of more than 20%. External trade as a proportion of GDP rose from about 42% in 2002 to 66% in 2006 (Figure 2.8.15). Large bilateral trade surpluses have sparked more trade friction with the US and EU. Further, the huge trade surpluses, combined with growing surpluses in the capital account, have created a surge in

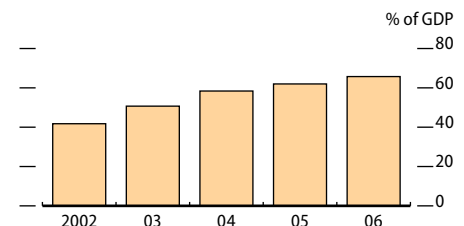
2.8.14 Inflation



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

2.8.15 External trade



Source: National Bureau of Statistics.

[Click here for figure data](#)

foreign exchange reserves that complicates monetary policy operations and puts pressure on the yuan to appreciate. Currently, the PRC needs to conduct extensive sterilization operations to drain liquidity and prevent the extra money from fueling inflation.

The surge in investment and commercial bank lending has not yet been brought under control. Aside from monetary tightening, the Government has taken administrative steps to restrain investment. These include raising downpayment requirements for housing purchases to curb speculation and sending inspection teams to provinces to check if new investment projects violate land-use and environmental regulations.

But key targets were not met in 2006: fixed asset investment growth was 24% (Figure 2.8.16), while the target was for growth below 18%; broad money (M2) grew by 16.9% (target below 16%); and bank loans rose by CNY3.1 trillion (target less than CNY2.5 trillion). In a further sign of a lack of rebalancing, the share of gross capital formation in expenditure-based GDP rose from 36.3% in 2001 to 45.0% in 2006, while that of consumption (private and public) fell from 61.0% to 51.9% (Figure 2.8.17).

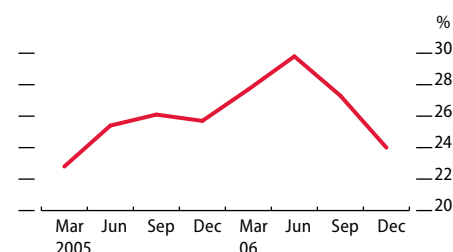
Environmental protection targets were not met either. The Government wanted to reduce energy consumption per unit of GDP by 4% in 2006. The outcome was a decline of just 1.2%. Similarly, there was slippage in achieving an emission reduction target. For example, sulfur dioxide emissions increased by 1.8%. Energy consumption (Figure 2.8.18) and pollution have increased and could become constraints on growth. Although the Government tried to induce local governments and enterprises to improve energy efficiency and cut pollution, these targets were not met.

Furthermore, the share of services in total GDP remains low—it actually fell from 41.7% in 2002 to 39.5% in 2006, lower than in other countries in Asia (Figure 2.8.19). The contribution of services to GDP growth fell from 38.7% in 2001 to 29.7% in 2006, while the contribution of industry rose from 56.3% to 65.2%. The concern is that continued industry-led growth requires more energy and natural resources and puts a heavy burden on the environment, so it may not be sustainable in the longer term.

Income inequalities have worsened. The ratio between urban and rural nominal per capita incomes rose from 2.9:1 in 2001 to 3.3:1 in 2006. Real per capita household income rose by 7.4% in rural areas in 2006, against 10.4% in urban areas. Increasing income inequality impedes the growth of private consumption and adds to social tensions. Unemployment and underemployment have become serious concerns for policy makers.

Restrictive measures involving energy consumption, the environment, and land use are expected to have a greater impact in 2007 and 2008. In this regard, the Ministry of Land and Resources plans to crack down on the use of arable land for construction of buildings, especially for luxury housing and golf courses. Policies on energy conservation and environmental protection have been toughened. The State Environmental Protection Administration (SEPA) has decided to suspend project approvals for any region, sector, or large enterprise if the project violates SEPA's standards on energy consumption and pollution, until action is taken to meet the standards. In the first 2 months of 2007, SEPA

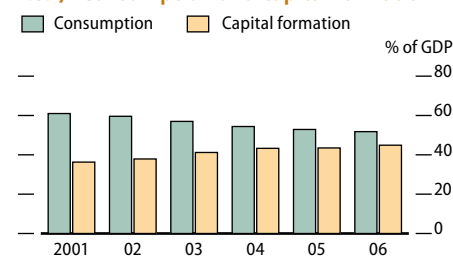
**2.8.16 Growth of fixed asset investment**



Source: CEIC Data Company Ltd., downloaded 20 March 2007.

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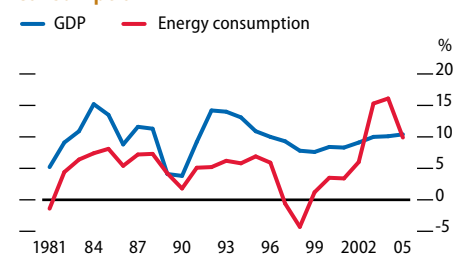
**2.8.17 Consumption and capital formation**



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

**2.8.18 Growth in GDP and energy consumption**



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

suspended more than 80 construction projects and four cities' rights to approve new projects.

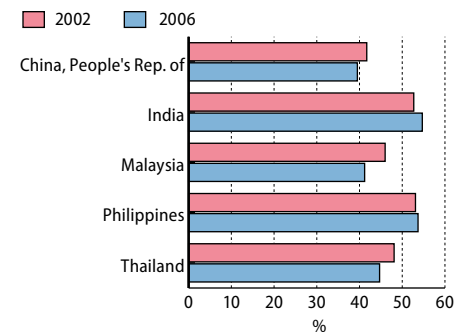
Steps to be taken during the next few years toward rebalancing the economy involve reforms to the social security system—including establishing a minimum living standard in rural areas, similar to that in urban areas. This aims to eradicate absolute poverty (i.e., poor people who live below the official poverty line) in rural areas and help diminish the income gap between rural and urban areas. The Government will spend more on rural areas and less-developed regions.

The authorities have already increased salaries for civil servants, in late 2006, which lifted their purchasing power. Importantly, a plan is being drafted for state-owned enterprises to pay dividends to the state rather than reinvest all their retained earnings. This should impel enterprises to be more selective with their investments and, at the same time, provide financial resources to the state for development of social infrastructure and the social safety net, which is likely to lead to gradually increased consumption spending.

Rebalancing the economy is not easy from the point of view of policy design, implementation, or consequences. It will most likely be associated with lower rates of economic growth over the longer term. An increase in the share of wages in GDP will lead to higher private consumption; but as the increase in the share of wages is mirrored in a decline in the share of profits, this will eventually lead to a decline in investment (potentially larger than the increase in consumption) and, as a consequence, in employment.

A transformation to a more services-oriented economy may bring benefits from the point of view of employment creation (e.g., labor-intensive urban jobs), but services are likely to deliver lower GDP growth rates. The PRC cannot afford this in the short run. One source of growth that should play a more important role in the future is the relocation of labor out of agriculture into activities of higher labor productivity. Given that the share of employment in manufacturing has been decreasing, the services sector will likely have to play a key role in this between-sector transfer. At the same time, growth rates of about 10%, fueled by investment that is leading to overcapacity, and by substantial and growing liquidity in the banking system, pose serious threats to macroeconomic management.

**2.8.19 Share of services in GDP**



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

# Hong Kong, China

Above-trend growth was recorded for a third year in a row, supported by domestic and external demand. GDP growth will be trimmed this year and next by the slowing in the economies of the United States (US) and People's Republic of China (PRC), although budget concessions will underpin domestic demand. Medium- to long-term challenges include broadening the tax base, preparing to meet the needs of an aging population, and maintaining high standards of financial infrastructure and regulation as the high-end services sector expands on the strength of closer ties with the PRC.

## Economic performance

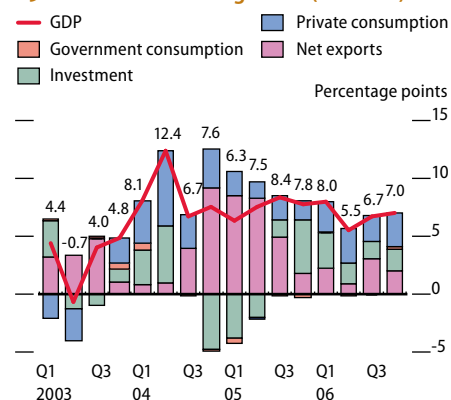
The economy grew robustly by 6.8% in 2006, a third successive year of above-trend growth, on strong support from domestic and external demand. Private consumption (accounting for 52% of GDP) grew by 5.1%, fixed capital investment (23%) grew by 7.9% on the strength of business optimism, and net exports (17.5%) expanded by 12.6%. Government consumption (7.5%) remained restrained.

The generally good year was punctuated by a brief deceleration in the second quarter (April–June; Figure 2.9.1) as trade slowed. Growth bounced back in the third quarter, pulled up by a recovery of exports just ahead of a fourth quarter recovery in the US. Declining oil prices contributed to the recovery of trade, as did booming PRC exports and the falling US dollar. Given that the US and Hong Kong dollars are linked, US dollar depreciation tends to reduce the international price of Hong Kong, China's exports. Corporate investment continued apace, as the economy consolidated its position as a popular entry point for companies doing business in the PRC. Private consumption also was robust in the third quarter. Consumption spending has strengthened over the past 3 years as unemployment has fallen, wages have risen (Figure 2.9.2), and tourism has continued to grow.

The balance of payments surplus grew during the first 3 quarters of 2006, even with a sharp concurrent rise (81.0%) in the merchandise trade deficit (Figure 2.9.3). This spike in the goods trade deficit mostly reflected the slowdown of exports in the second quarter. However, this deficit was small (7.8% of GDP over three quarters) compared with merchandise exports, which amounted to 167% of GDP over the same period.

This reflects the key role of goods reexport in Hong Kong, China, especially from the PRC. In value terms, 90% of exports are reexports. This includes an estimated margin of 17.5% added to goods reexported. The merchandise trade deficit arises because, given the economy's specialization in services (agriculture and industry together accounted for less than 10% of GDP in 2005), it consistently imports more merchandise for domestic consumption than it produces for export. However, net services exports more than compensated for the widening merchandise trade gap, growing by 23.4% and restoring the current account surplus to 9.7% of GDP.

2.9.1 Contributions to growth (demand)



Source: Census and Statistics Department, available: <http://www.censtatd.gov.hk>, downloaded 1 March 2007.

[Click here for figure data](#)

2.9.2 Unemployment and growth in wages



Note: Average pay includes wages, all bonuses, and overtime payments.

Source: Census and Statistics Department, available: <http://www.censtatd.gov.hk>, downloaded 9 March 2007.

[Click here for figure data](#)



Robust net exports of services reflected a significant expansion of financial services. Indeed services (over 90% of GDP) continue to drive growth on the supply side. The development of new financial services with the mainland under the Closer Economic Partnership Arrangement has helped, as has the launch and subsequent expansion of yuan-denominated retail banking services in Hong Kong, China.

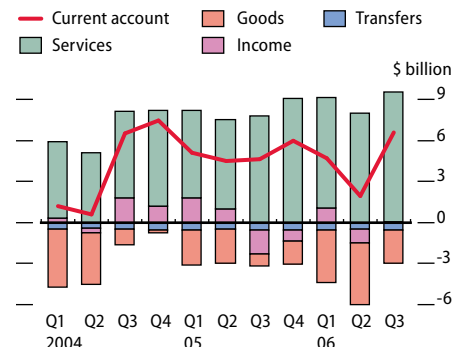
Financial services have also boomed outside retail banking. Initial public offerings (IPOs) have surged—with Hong Kong, China raising more funds through IPOs than the New York Stock Exchange in 2006. Corporate debt issuance is also on an upward trend. Hong Kong, China's sophisticated institutions assist PRC companies that seek access to international financial markets. With a large population in the PRC preparing for retirement, mainland banks are offering a growing array of retirement planning instruments, which are attracting considerable savings. These funds will require management, and financial institutions in Hong Kong, China are well placed to assist.

Thus, the economy is becoming increasingly specialized in high-end services. This is reflected in labor productivity growth rates, which between 2000 and 2005 were particularly high in the communications, international trade, and financial sectors (Figure 2.9.4). Labor market adjustments are apparent in the disaggregated unemployment figures, which, even as they show jobless rates falling for all classes of workers, display disparities by skill level. Only 1.9% of higher-skill workers were unemployed as of January 2007, compared with 4.8% among the lower skilled. The labor market is tightening faster higher up the skill spectrum. However, this tightening did not create inflationary pressures because aggregate labor productivity grew faster than wages in 2000–2006.

After climbing for over 2 years, property prices remained stable through 2006 (Figure 2.9.5), though rents, which usually follow property prices with some lag, continued to rise. With rents rising, inflation edged up, averaging 2.0%. Appreciation of the yuan against the Hong Kong dollar added upward pressure on food prices (Figure 2.9.6), since much food in Hong Kong, China, particularly perishables, is imported from the PRC. Large capital inflows (contributed, in part, by the successful IPOs), and the leveling-out of US interest rates, to which rates in Hong Kong, China are linked, in the latter half of 2006 contributed to liquidity growth (Figure 2.9.7).

Government revenues have grown rapidly on the strength of a strong economic performance since 2003. Accordingly, the budget for FY2007 (ending 31 March 2008) includes both tax cuts and new spending. Particularly noteworthy are: revisions of marginal income tax rates and brackets back down to FY2002 levels, a sizable tax waiver for FY2006 (50% of personal taxes up to a ceiling of HK\$15,000), an additional month's social security payment, a 2-quarter holiday on rates assessed on almost all residential and most nonresidential property, increased tax deductions for education and child-rearing, higher allocations for social expenditures, and commitments to infrastructure development. These provisions are likely to provide a significant boost to demand, while serving to reduce key prices. Private-sector analysts have commented that the measures are affordable and leave room for largesse in future budgets.

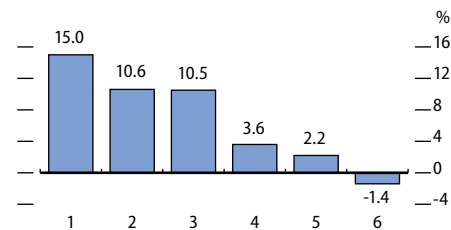
### 2.9.3 Trade and current account



Source: Hong Kong Monetary Authority.

[Click here for figure data](#)

### 2.9.4 Productivity growth in selected services segments



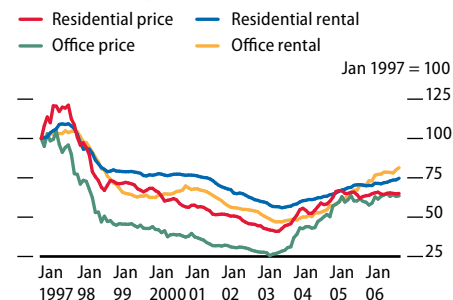
1 = communications; 2 = import and export trade; 3 = financing; 4 = transport and storage (excluding land transport); 5 = wholesale and retail trade; 6 = restaurants and hotels.

Note: Refers to average productivity growth in 2000–2005.

Source: 2006 Economic Background and 2007 Prospects, Government of the Hong Kong Special Administrative Region (2007).

[Click here for figure data](#)

### 2.9.5 Property indexes



Source: Rating and Valuation Department, available: <http://www.rvd.gov.hk>, downloaded 19 February 2007.

[Click here for figure data](#)



## Economic prospects

Given the importance of trade and financial services, the economy's performance depends critically on external conditions. *Asian Development Outlook 2007* expects a slowing of growth rates in the PRC in 2007 and 2008. It is assumed that the US economy will decelerate in 2007, before recovering a bit in 2008. This outlook considers further, mild, and gradual appreciation of the yuan possible. The baseline forecasts assume the yuan will be stable relative to the currencies of Hong Kong, China and the US.

On the basis of these assumptions, growth is expected to slow to 5.4% in 2007 (Figure 2.9.8). Trade expansion will fall as the PRC and US economies decelerate, but domestic spending is expected to strengthen further, with consumer spending supported by the large budget givebacks. The returns to taxpayers amount to about US\$2.6 billion, or 2.3% of consumption spending in 2006. The tightening labor market also supports consumption spending.

At the same time, the growth potential of new services facilitated by closer integration with the PRC will underpin a healthy rate of business investment. However, with trade slowing and domestic demand still healthy, the current account surplus is projected at 9.5% of GDP (Figure 2.9.9).

Budget initiatives will exert downward pressure on prices. The waiver of housing rates for 2 quarters as well as a waiver of public housing fees in February 2007 will arrest any inflationary pressures accruing from housing costs. Other budget concessions will also help, to a lesser extent.

Conversely, the budget (together with the strong domestic demand growth likely to follow) implies some upward price pressure, though in a small open economy heavily dependent on trade this is likely to be mostly felt through the prices of nontraded services. On balance, inflation of 1.6% is expected in 2007 (Figure 2.9.10). It could be slightly higher if the yuan appreciates further against the US dollar.

In 2008, since US interest rates are expected to ease and US economic growth is projected to turn up, trade volumes will grow faster, boosting reexports. Falling US interest rates will be matched in Hong Kong, China. Lower interest rates will limit the likely decrease in domestic spending as the effects of the 2007 budget on consumption fade. The trade deficit will therefore narrow, while GDP growth will slow slightly to 5.2%.

Continued expansion of financial linkages with the PRC will raise services exports. Tourism is likely to keep expanding, assisted by rising incomes in the PRC. The current account surplus is therefore projected to rise, to 11.5% of GDP in 2008. Inflation is likely to rise to 2.3%, as the effects of the FY2007 budget wear off and as monetary conditions loosen.

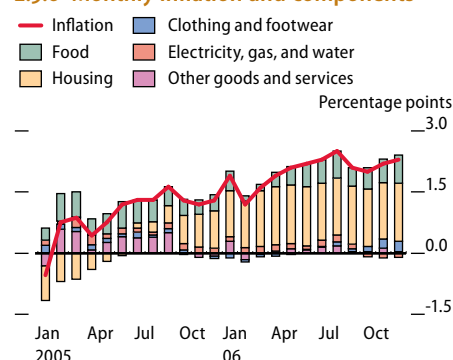
The key risks to this outlook are external. Reexports are volatile, and are very large relative to trade flows and GDP. Trade fluctuations therefore present a significant source of uncertainty for this economy. Moreover, given the loss of manufacturing jobs in North America and Europe, protectionist pressures abroad present a growing cause for concern.

### 2.9.1 Selected economic indicators

	2007	2008
GDP growth	5.4	5.2
Inflation	1.6	2.3
Current account balance (% of GDP)	9.5	11.5

Source: Staff estimates.

### 2.9.6 Monthly inflation and components

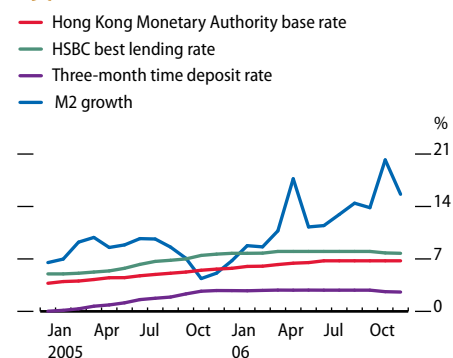


Note: Year-on-year rates of change from October 2005 were estimated using 2004/05-based consumer price indexes (CPIs). For earlier months, the year-on-year rates of change were derived from CPIs with a 1999/2000 base period.

Source: CEIC Data Company, Ltd., downloaded 19 February 2007.

[Click here for figure data](#)

### 2.9.7 Financial indicators



Sources: CEIC Data Company Ltd.; Hong Kong Monetary Authority, available: <http://www.info.gov.hk>; both downloaded 19 February 2007.

[Click here for figure data](#)

## Development challenges

The economy faces several challenges in the medium to long term. The Government obtains much of its revenues from income taxes, charges, and levies tied to property values. These are procyclical, which in an economy subject to externally driven volatility implies fiscal uncertainties. Holding excess reserves to provide assurance against such uncertainties is costly.

The Government wants to broaden the tax base, and launched public consultations in 2006 focusing on a proposal for a Goods and Services Tax (GST). A GST is economically appealing because it minimizes distortions to relative prices needed to raise revenue. However, some retailers opposed the GST, arguing that it might reduce sales and involve compliance costs. Advocates for the poor maintained that a GST would be regressive and would widen the wealth gap. The Government announced in December that while the consultation on the GST continues, it is seeking other ways to broaden the tax base.

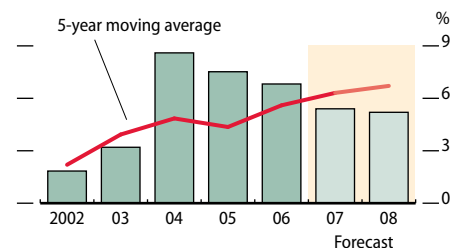
The economy stands to profit substantially from its high-quality institutions for ensuring financial stability and predictability, which facilitates the flow of capital into and out of the PRC. Hong Kong, China's capacity to minimize information asymmetries between players on financial markets is therefore vital. However, as the range of assets traded in its financial markets grows, and becomes increasingly tied to mainland companies that have historically operated to different financial standards, the difficulties associated with ensuring such transparency may increase. Thus ensuring institutional standards in the face of rapid financial development will require considerable effort.

On a related issue, several important markets, including those for basic services such as retailing leave market power concentrated in relatively few hands. Recent moves to liberalize entry into services suggest there will be new competitors from the mainland. This will be helpful, but only if it leads to more autonomous firms in the market, not just a rotation of new players into the market, and old ones out. Thus, the development of competition policies remains a challenge.

Rapid growth in the Pearl River Delta has degraded air quality, and this has led, reportedly, to difficulties in retaining internationally mobile services sector staff. Recognizing the transboundary dimension to this problem, in that many of the emitting plants are outside Hong Kong, China, the governments of Hong Kong, China and Guangdong province have developed a plan and signed agreements to substantially reduce four major air pollutants by 2010.

Finally, Hong Kong, China has an aging population, and must prepare for a surge in retirements. It has a mandatory pension fund that is well resourced and privately managed. This will help finance retirement expenses. However, health care presents concerns. The International Monetary Fund reports that 82% of in-patient and 46% of out-patient care is publicly funded. Thus fiscal pressure looms as the population ages. Discussions are under way on mechanisms to limit public health-care liabilities by encouraging potentially subsidized private insurance, especially for catastrophic incidents. Needless to say, to the extent that costs will be shifted to those about to retire, tensions will rise.

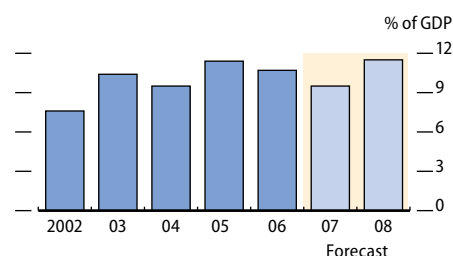
2.9.8 GDP growth



Sources: Census and Statistics Department, available: <http://www.censtatd.gov.hk>, downloaded 1 March 2007; staff estimates.

[Click here for figure data](#)

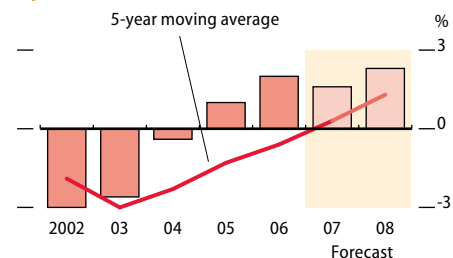
2.9.9 Current account balance



Sources: Hong Kong Monetary Authority; staff estimates.

[Click here for figure data](#)

2.9.10 Inflation



Sources: Census and Statistics Department, available: <http://www.censtatd.gov.hk>, downloaded 8 March 2007; staff estimates.

[Click here for figure data](#)

# Republic of Korea

Growth accelerated to its fastest rate in 4 years in 2006, spurred by a recovery in domestic demand and strong exports, though momentum slowed over the course of the year. In 2007, a continued expansion in investment, particularly in manufacturing, and a recovery in construction are likely to underpin a rebound in domestic demand over the year. The strength of the rebound will depend on a continued recovery in consumption. Growth in exports is likely to ease, trimming the expansion in GDP for the whole year. Structural reforms at the moment are incomplete, particularly in services, capping growth potential.

## Economic performance

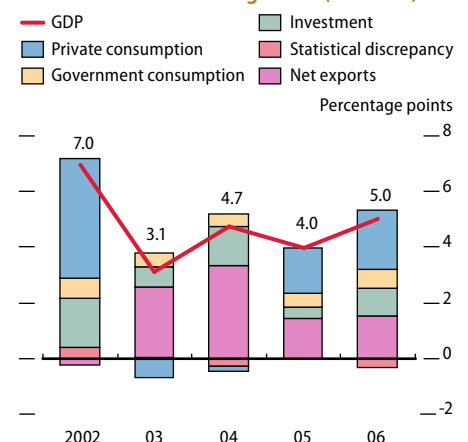
GDP grew by 5.0% in 2006 in the Republic of Korea (hereafter Korea), a marked improvement from the prior year's 4.0%. This outturn masks, though, decelerating momentum over the course of the year amid some softening in growth of both exports and domestic consumption. Quarterly GDP growth rates slid from 6.1% (year on year) in the first quarter to 4.0% in the fourth. After peaking in the first quarter, industrial production eased and inventories accumulated. A cooling in the housing market early in the year hurt construction investment and consumption spending throughout the summer months. Although buoyant exports continued to support a recovery in nonconstruction investment, domestic demand weakened over the year as a whole.

Private consumption posted healthy growth of 4.2% in 2006, the highest rate since the credit card crisis in 2003, when a sharp increase in card issuance resulted in a surge in household debt and a subsequent spending slump. Here too, quarterly growth rates slipped over the year, partly because of a renewed buildup in household debt. Despite extensive government efforts to cool a buoyant residential property market, house prices accelerated in the second half of the year. This resurgence, in an environment of relatively low interest rates and ample liquidity, prompted households to borrow more to finance home purchases. Household debt rose to nearly 67% of GDP by September 2006, from 65% in 2005, and is up sharply from about 40% a decade ago.

The economic recovery broadened with a pickup in capital investment. Capital spending increased by 3.2%, despite a shrinkage in construction investment in the first half of the year. Rising house prices lifted construction in the second half. Corporate spending on machinery and equipment made a steady recovery, increasing by 7.5% during the year. Total investment contributed 1.0 percentage point to overall GDP growth (Figure 2.10.1). Given that many large companies are export-oriented, robust export performance and strong balance sheets augur well for a continued investment recovery.

Merchandise exports rose by 14.4% in nominal US dollar terms in 2006, in the face of a strengthening won, a muted recovery in global

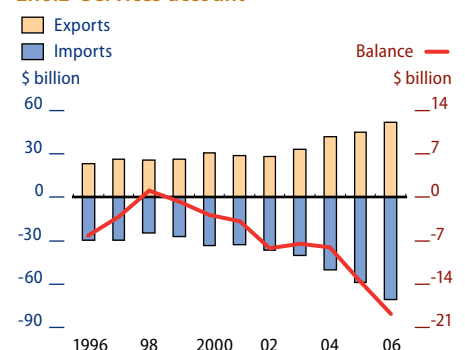
### 2.10.1 Contributions to growth (demand)



Source: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/ElIndex\\_en.jsp](http://ecos.bok.or.kr/ElIndex_en.jsp), downloaded 26 January 2007.

[Click here for figure data](#)

### 2.10.2 Services account



Source: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/ElIndex\\_en.jsp](http://ecos.bok.or.kr/ElIndex_en.jsp), downloaded 18 February 2007.

[Click here for figure data](#)

information technology activity, and high oil prices. Automobiles, consumer electronics, semiconductors, and ships continued to lead Korea's exports. Generally benign external demand conditions and improved large-company competitiveness underpinned the robust export performance in these industries. Even faster growth in imports (up 18.4%) compressed the trade surplus. High prices for oil and raw materials lifted the import bill in most of 2006, though signs of moderation appeared in the fourth quarter. Merchandise trade still posted a significant surplus, but it was largely offset by a widening gap in services trade. The services deficit more than doubled between 2004 and 2006, to \$18.8 billion, as more Koreans opted for overseas education, vacations, and other services (Figure 2.10.2). Productivity growth in a number of domestic services has stagnated (Figure 2.10.3), in part owing to a pervasive public-sector presence in the sector and also to restrictions on international firms operating in some services areas, which limits competition.

The pickup in economic growth led to some strengthening of the labor market, and for the year unemployment averaged 3.5%, down from 3.7% in 2005. Average monthly earnings rose by 2.6%. However, while 2006 saw 295,000 new jobs, the economy is generally sluggish at creating employment, even during upturns. Rising labor costs have encouraged manufacturers to relocate production overseas or to outsource parts of their production to countries with cheaper labor.

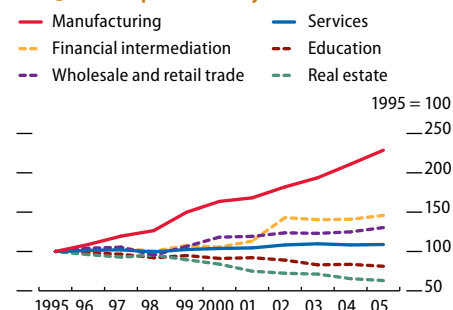
Another barrier to creating more jobs is structural rigidity in the labor market. After years of labor union action, employees in jobs classified as permanent positions have gained strong legal protection for job security, improved working conditions, and higher wages. Employers increasingly have turned to workers they can hire on fixed-term contracts, often at lower overall compensation. Government efforts to contain the trend toward fixed-term employment could result in companies being more reluctant to hire, unless permanent workers agree to give up some of their existing benefits.

Consumer price inflation decelerated by a half percentage point to 2.2% in 2006. The easing of global oil prices from their peaks in 2006 and a stabilizing of food prices helped, and monetary tightening over 2 years also took effect. The won appreciated against both the US dollar and the yen from already strong levels, also helping keep a lid on inflation (Figure 2.10.4). Surpluses in both the current and capital accounts have underpinned the currency's strength. Despite significant capital outflows of portfolio investment, the capital account posted a large surplus due to a sharp increase in short-term borrowing by banks for the purposes of export industries' currency hedging. The pressure on the currency to appreciate appears to be easing though, as export growth moderates and as Koreans are allowed to invest more overseas.

## Economic prospects

Growth is expected to pick up again from late-2006 levels on the back of a steady increase in investment and continuing support from exports, as well as a gradual consumption recovery in 2007. Although annual growth is projected to slow to 4.5% (Figure 2.10.5), quarterly economic performance is likely to accelerate over the year. The recovery will

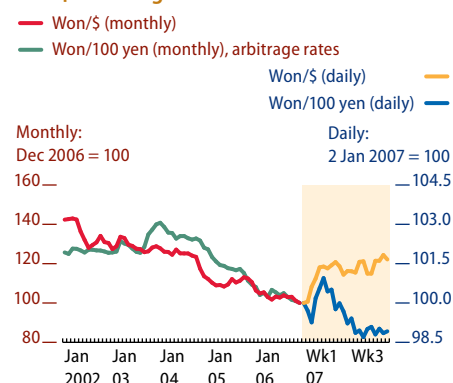
### 2.10.3 Labor productivity



Source: Staff estimates based on employment data from International Labour Organization and gross value added from Bank of Korea.

[Click here for figure data](#)

### 2.10.4 Exchange rate index



Source: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/EIndex\\_en.jsp](http://ecos.bok.or.kr/EIndex_en.jsp), downloaded 6 February 2007.

[Click here for figure data](#)

### 2.10.1 Selected economic indicators

	2007	2008
GDP growth	4.5	4.8
Inflation	2.4	2.6
Current account balance (% of GDP)	0.1	0.1

Source: Staff estimates.

### 2.10.1 Dangers of the house price boom

Surging housing prices have raised concerns in the Government that a bubble may form, which ultimately could damage the economy. At this stage, there are fundamental reasons behind the price gains: an underlying housing supply shortage and strong demand underpinned by low borrowing costs. The house price/rental value ratio—its historic average may be used as proxy for property values—also remains low for the country overall, even though home prices have been rising much faster than rental values over the past few years (Box figure 1). Nevertheless, the pace of increase in house prices in some affluent areas of Seoul has been alarming, rising by nearly 25% between September 2005 and September 2006.

Key concerns are the rapid buildup in household debt associated with mortgage lending and its possible knock-on effects. Fast-rising house prices and expectations of further gains have encouraged households to take on more mortgage debt. For example, bank lending to households increased by 10.7% in the 12 months to September 2006, with more than 60% of this mortgage related. As household debt has grown much faster than incomes, households' ability to repay debt has deteriorated: the ratio of household debt to income has resumed its rise since 2005 (Box figure 2) and the number of personal bankruptcies has more than doubled in this period.

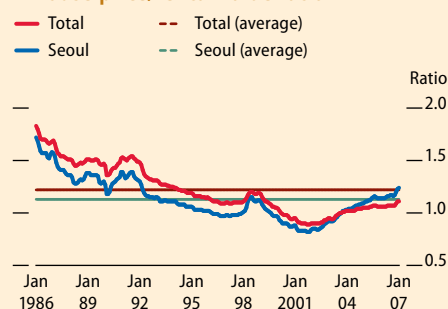
Heavy household debt burdens have also hurt prospects for a speedy recovery in consumer spending. A sharp downturn in house prices could push financially weak households into bankruptcy, starting another prolonged slump in private consumption, and threaten the health of the financial system by eroding loan collateral values and swelling the number of delinquent loans. For now, though, bank stability indicators show little sign of stress.

The Government introduced another set of measures in November 2006 in an effort to stabilize house prices, the eighth such package in 3 years. These latest measures include plans to increase the housing supply, which has

not been a focus of previous packages. They also involve tighter financial regulations to curtail growth of household borrowing.

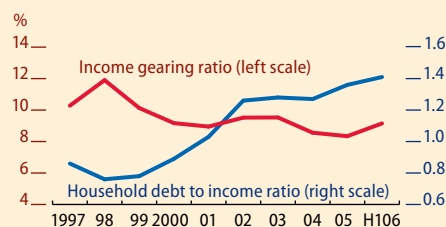
A major policy challenge is to ensure sufficient housing supply by addressing inefficiencies arising from heavy public sector involvement and regulation of the housing market, and by securing adequate public provision of housing for low-income earners, who may be bypassed in the market mechanism. But there is always a risk that measures taken to contain price rises could in themselves precipitate a sharp fall in housing prices.

#### 1 House price/rental value ratio



Source: Staff estimates based on housing price data from Bank of Korea, Economic Statistics System.

#### 2 Household debt and income



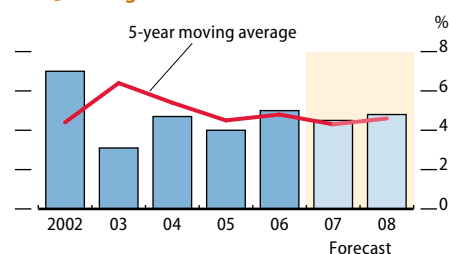
Note: Income gearing ratio refers to the share of household interest payments in household disposable income.

Sources: Household Assets and Debts: Flow of Funds Statistics, Bank of Korea; Household Disposable Income: System of National Accounts, Bank of Korea.

broaden with domestic demand strengthening. Economic indicators in late 2006 showed signs of a stabilization in industrial production, construction investment, and consumption. As 2007 progresses, the external environment could turn more favorable with the global downturn bottoming in the second half. The Korean economy is projected to continue building momentum in 2008, based largely on firming domestic demand, with growth of 4.8% that year.

Private consumption is recovering, as the improvement in the job market underpins growth in household incomes. However, household debt remains high at a time when increases in interest rates in 2005–2006 are adding pressure on consumer spending. Given the underlying weakness in household balance sheets, private consumption growth

#### 2.10.5 GDP growth



Sources: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/ElIndex\\_en.jsp](http://ecos.bok.or.kr/ElIndex_en.jsp), downloaded 26 January 2007; staff estimates.

[Click here for figure data](#)



is expected to remain moderate. Moreover, consumer sentiment has declined (Figure 2.10.6) because of concerns about the global economic outlook, uncertainty surrounding the implementation of new tax laws targeting real estate, and political tensions involving the Democratic People's Republic of Korea.

Export-led manufacturing firms are for the most part in good shape, with strong profits, to continue an expansionary cycle in investment. Capacity utilization has edged up too, indicating a potential need for expanding production facilities (Figure 2.10.7). The upturn in house prices in the second half of 2006 is likely to be followed by a pickup in housing construction over the forecast period, helped by new measures from the Government to increase housing supply.

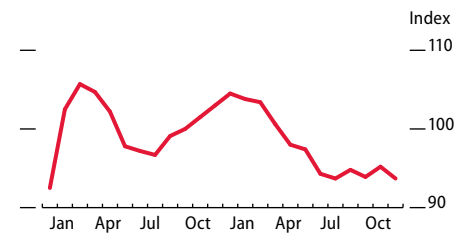
In 2007, the expected moderate slowdown in the US economy suggests there will be some easing in Korea's export growth rate. Nevertheless, a still-robust export performance will support a recovery in industrial production and business spending. However, rapidly rising imports, driven in part by demand for overseas travel and education, will cut by half the contribution of net exports to GDP growth. Although merchandise trade looks set to achieve a record surplus, based on the robust exports and declining oil and commodity prices, growth in imported services will remain high. The current account surplus, which narrowed to less than 1% of GDP last year, is projected to shrink further (Figure 2.10.8).

Monetary and fiscal policies are projected to be set in generally neutral positions. The Bank of Korea is expected to loosen the tightening bias that it maintained throughout 2006, as inflationary pressures subside in a context of softening economic growth and declining import prices. Consumer price inflation is likely to remain below the central bank's target band of 2.5–3.5% in 2007 (Figure 2.10.9). On the fiscal front, an expected increase in tax revenues, drawing on last year's stronger economic growth, should make room for some additional fiscal outlays this year. Fiscal spending will continue to focus on strengthening social infrastructure and the social safety net, on enhancing productivity in the services sector, and hence on preparing for long-term structural changes including an aging society. However, growing concerns both about long-term fiscal sustainability caused by the aging population and about the projected costs of social services will restrain the use of expansionary budgets.

New tax laws take effect in 2007 intended to streamline sources of tax revenues and restore fairness by removing some of the wide array of tax credits and deductibles. A fiscal tightening effect from efforts to broaden the tax base and to strengthen tax collection has been balanced by measures to leave in place a majority of tax credits for small and medium enterprises (SMEs) and for business investment for the time being, given that economic activity will slow in 2007 relative to 2006.

Risks to the projections would most likely originate in any sharp slump in the US economy, which would undermine Korea's export performance and reduce GDP growth. Domestically, a surge in housing prices has led to an increase in household mortgage debt. A significant downturn in the housing market could intensify financial pressures on households, which would retard the recovery in consumption spending (Box 2.10.1).

#### 2.10.6 Consumer expectations index



Source: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/ElIndex\\_en.jsp](http://ecos.bok.or.kr/ElIndex_en.jsp), downloaded 10 January 2007.

[Click here for figure data](#)

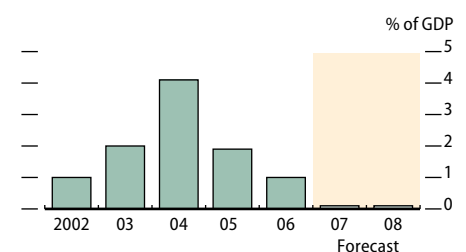
#### 2.10.7 Manufacturing capacity utilization (3-month moving average)



Source: National Statistical Office, available: <http://www.kosis.nso.go.kr>, downloaded 5 February 2007.

[Click here for figure data](#)

#### 2.10.8 Current account balance



Sources: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/ElIndex\\_en.jsp](http://ecos.bok.or.kr/ElIndex_en.jsp), downloaded 18 February 2007; staff estimates.

[Click here for figure data](#)

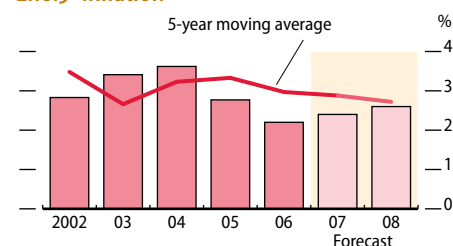


## Development challenges

Korea faces important challenges resulting from intense global competition and an aging population. The recovery in GDP growth rates after the 1997–98 Asian financial crisis partly reflects successes in addressing certain structural weaknesses in the economic and financial framework. Reforms are incomplete though, as illustrated by the 2003 credit card crisis and the subsequent prolonged slump in private consumption. A more fundamental problem that is damping private consumption is lagging productivity in the services sector and among SMEs. This is holding back improvements in the labor market and in wages growth. The likely key to resuming rapid growth over the medium term is to accelerate productivity growth by continuing with structural reform, particularly in the labor market and in the services sector, including SME restructuring.

As the economy matures and as the population ages, slowing labor and capital inputs will require a more efficient and flexible economic structure that can ensure productivity gains while accommodating the necessary socioeconomic adjustments. In the medium to long term, reforms should focus on health, education, and facilities for the aged; undue regulatory burdens; and weaknesses in the services sector.

### 2.10.9 Inflation



Sources: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/Elndex\\_en.jsp](http://ecos.bok.or.kr/Elndex_en.jsp), downloaded 24 January 2007; staff estimates.

[Click here for figure data](#)

# Mongolia

Buoyant commodities markets and good weather made 2006 another year of strong economic expansion. Growth is projected to step down a little in 2007, but remain brisk. The main challenges are to use the Government's revenues from mineral wealth in a manner that sets the country on a sustainable development path; and to address immediate poverty and environmental problems.

## Economic performance

The economy performed well in 2006: growth in GDP picked up to 8.4%, a fourth straight year of 6%-plus expansion. Inflation moderated from high levels and both the fiscal and current accounts were in surplus. As an economy based on agriculture (which supports nearly half the population) and mining, Mongolia usually does well when the weather is favorable and commodity markets are buoyant.

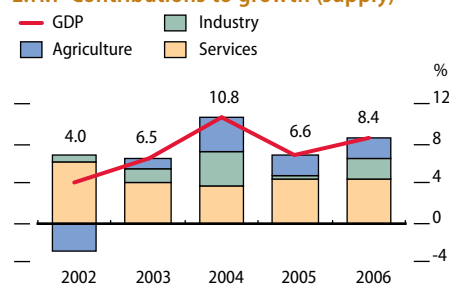
That describes 2006, when the winter was mild and copper and gold brought high prices. Livestock numbers rose by 14.5% to a record 34.8 million as herders responded to demand from the People's Republic of China (PRC). Goats and sheep make up over 80% of the total, with the remainder cattle, horses, and camels. Copper export receipts in US dollars nearly doubled, though copper export volumes increased by only 2.1%.

The clothing industry, too, was a strong performer. It contracted in 2005 after the global textile and clothing trade quota system ended, but rebounded last year as manufacturers focused on the European Union and took advantage of its tariff concessions. For mining, total mineral extraction grew marginally and reported gold production fell. The latter may have been caused by greater smuggling of gold after the Government imposed a windfall profits tax on gold and copper. Transport and telecommunications maintained robust growth, such that services contributed the most (4.4 percentage points) to total GDP growth. Agriculture and industry contributed about 2 percentage points each (Figure 2.11.1).

Broad money (M2) growth was again high in 2006 at 35% (Figure 2.11.2), but inflation slowed from an average of nearly 13% in 2005 to 5.1% last year. This deceleration reflected a much more moderate rise in food prices and a 4% appreciation of the togrog against the US dollar, which made imports less costly.

On the back of rising income from mining, the budget was in surplus in 2006 (by 3.9% of GDP; Figure 2.11.3). Revenues benefited from the Government's 51% share in the biggest copper mine, operated by Erdenet Company, and from taxes on mineral output. In 2006 the Government also imposed a 68% windfall tax on copper and gold for prices exceeding \$6,500 a ton for copper and \$500 an ounce for gold. This tax generated \$152.4 million. Moreover, overall tax collections have been buoyed by the solid economic growth.

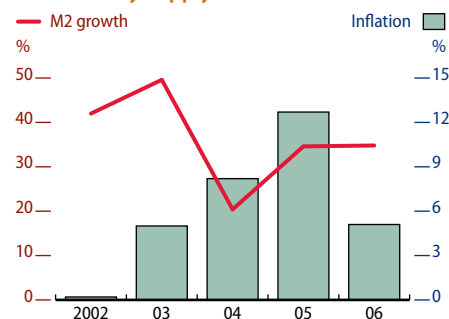
2.11.1 Contributions to growth (supply)



Source: National Statistics Office.

[Click here for figure data](#)

2.11.2 Money supply and inflation



Source: Bank of Mongolia.

[Click here for figure data](#)

Expenditures also rose noticeably. The Government increased salaries of public officials by 30% and started cash transfers to families with newly born children, to newly married couples, and to families for each child below the age of 18. The parliament agreed to budget those payments for years into the future, raising questions about the sustainability of public finances.

Exports soared by 44% in nominal terms, as a result of high prices for copper and gold and an increase in cashmere exports (the number of goats rose by 16.5% to 15.6 million). Textile and clothing exports to the United States continued the decline that set in when global quotas ended, but rose substantially to the European Union, which exempts certain Mongolian products from import duties. Many of Mongolia's exports have benefited in recent years from strong demand from the PRC, Mongolia's main export market.

Mongolia imports all its petroleum products, and the surge in global oil prices last year was the main reason for the strong growth in imports of 26%. The trade account produced the first surplus for many years (Figure 2.11.4) and the current account was in surplus for the third consecutive year. Foreign direct investment was \$367 million in 2006, four times as high as in 2000. Most has gone into mining. Gross international reserves more than doubled to \$718 million in 2006.

In the policy arena, the Government adopted a new mining law that gives it the right to acquire up to 50% stakes in "strategic" mineral deposits. As well as the imposition of the windfall profits tax, mining royalty rates were raised. Negotiations continued between the Government and Ivanhoe Mines Ltd. of Canada, which holds the license for the large Oyu Tolgoi copper and gold deposit, on an agreement concerning taxes and royalties. Companies from the PRC are negotiating to develop coal mines and build power plants, for export to their home market.

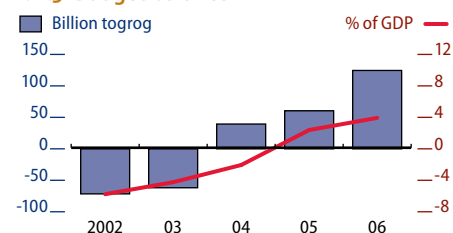
Sustained economic growth in recent years, plus inflows of foreign capital mainly into mining and a more competitive financial market, have spurred sharp increases in credit growth (by more than 40% in 2006). This rapid growth has heightened risks. Officially, the reported ratio of nonperforming loans to total loans has been fairly steady at around 9%, but actual figures are likely to be higher. Some banks do not have adequate risk management and internal control mechanisms, and their rapidly inflated lending may be at the cost of quality.

In this regard, the recent establishment of a financial regulatory commission and a stronger statement of intent by the Bank of Mongolia, the central bank, on banking supervision are encouraging.

## Economic prospects

The projections assume that prices of copper and gold will be fairly stable in 2007 and that the price of cashmere will decline slightly. Government expenditures are taken to rise as elections approach in 2008. The forecasts also presuppose that policies will be implemented to maintain the confidence of international mining investors. Economic growth in the important PRC export market is forecast to ease to about 10.0% this year from 10.7% last year.

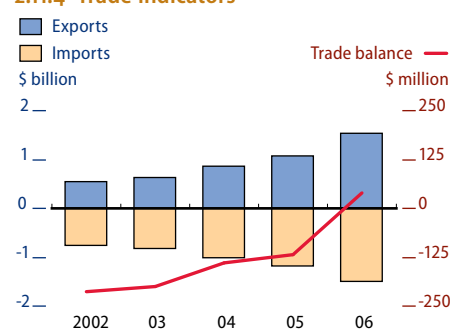
### 2.11.3 Budget balance



Source: National Statistics Office.

[Click here for figure data](#)

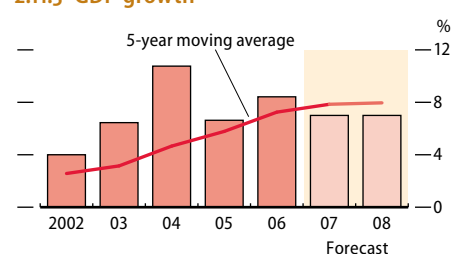
### 2.11.4 Trade indicators



Source: Bank of Mongolia.

[Click here for figure data](#)

### 2.11.5 GDP growth



Sources: National Statistics Office; staff estimates.

[Click here for figure data](#)

### 2.11.1 Selected economic indicators

	2007	2008
GDP growth	7.0	7.0
Inflation	6.0	6.0
Current account balance (% of GDP)	2.0	2.0

Source: Staff estimates.

On this basis, Mongolia's GDP growth in 2007 and 2008 is projected to step down to about 7% (Figure 2.11.5), after averaging 9% for 3 years. Livestock and manufacturing growth rates have been unusually high and are projected to slow. Agriculture in particular could be bumping up against sustainability constraints in terms of herd size.

The minerals law and the tax regime for mining may well be modified to be more investor friendly, which would encourage higher mining output and attract further investment. If the Government and Ivanhoe Mines agree on terms for development of the Oyu Tolgoi deposit, Ivanhoe's investments would rise substantially over the next couple of years. In that case production could start in 2010.

Major international mining company Rio Tinto would join Ivanhoe in developing the Oyu Tolgoi deposit, which could produce an estimated 1 billion pounds of copper and 330,000 ounces of gold a year for at least 35 years. This would have a significant impact on exports and government revenues. Also, initial investment in the large Tavan Tolgoi coal deposit could start over the forecast period.

A government pledge to provide 40,000 households with improved housing should stimulate the construction industry. In addition, Mongolian banks have started to tap international financial markets, which could provide an increasing flow of longer-term funding for investment projects. The Trade and Development Bank of Mongolia issued a \$75 million bond in early 2007 at a yield of 8.75%. The 3-year bond attracted strong demand from investors.

Inflation over 2007 and 2008 is projected at about 6%. The past high inflation rate (the annual average exceeded 8.0% in 3 of the past 6 years) has been driven mainly by supply shocks to food and oil prices and to exchange rate movements. Consequently, the stronger trade position is expected to support the exchange rate and so help contain price pressures. The Bank of Mongolia has found little evidence that money growth drives inflation in the economy. Continuing monetization of the economy could account for the weak link between money growth and inflation.

The current account is expected to show surpluses of about 2% of GDP in the forecast period as prices of copper and gold stabilize, but mineral export volumes rise.

The biggest risk to the economy would be a sharp drop in international metals prices. In addition to direct links to GDP, mineral exports are the major source of government revenues and affect the exchange rate, which in turn has an impact on inflation. Significant declines in prices of copper, coal, gold, and cashmere would hit the current account and, in the longer term, could lead toward debt distress. Severe winter weather can devastate agriculture in any year.

Further out, there is a threat to the sustainability of the natural-resource base. Overstocking in agriculture and lax controls over smaller mines, as well as environmental problems related to urbanization, have damaged the environment, including water resources. Unless the Government can reorient agriculture toward a sustainable growth path, this sector's growth will likely slow in the medium term and it could face longer-term contraction. Potential instability in the financial sector is a further risk, since some banks have tried to expand by offering high rates for deposits and using funds to make high-interest, high-risk loans.

### 2.11.1 Development challenges

Once Mongolia started its transition in 1991 from a command economy, it was quick to dismantle that system, institute legal and institutional frameworks, and adopt market-oriented policies.

Nevertheless, cumulative growth has been insufficient to resolve high levels of poverty that emerged after the initial shocks. Poverty incidence was estimated at 32.6% in 2006. The benefits from mineral wealth have not been broadly distributed.

Moreover, social services, particularly education and health, have deteriorated. Current expenditures in the budget account for an inordinately large proportion (almost 80%) of total public spending, and little public investment is directed to building infrastructure.

An important development challenge is to use government revenues from mineral resources for setting the country on a sustainable long-term development path while also addressing social and environmental problems. This will require significant investment in social and physical infrastructure, which would facilitate the development of new growth sources and an upgrading of labor productivity.

Such a plan should be linked into the budget and set out development priorities. This also will require the building of capacities in strategic planning and in project preparation and appraisal.

Among other issues the public investment plan should address the degradation of the environment. In addition to the problems outlined, the overuse and illegal trade in forest products and wildlife have inflicted heavy damage and put under threat the sustainable economic growth, primary education, and environment targets in the Millennium Development Goals.

Corruption also is a challenge to development. In 2006, Mongolia ranked 99 out of 163 countries on the Transparency International Corruption Perceptions Index.

# Taipei, China

On the back of stronger exports, economic growth accelerated in 2006. Domestic demand was subdued for most of the year, weighed down by a tightening of consumer credit. This year, consumption and investment demand are projected to pick up, cushioning the economy from an expected slowdown in external demand. That would leave GDP growth slightly below last year's pace. Structurally, higher performance levels require manufacturers to move further up the value chain and services firms to become more outward oriented.

## Economic performance

Supported by strength in exports, the economy grew by nearly 5.0% in the first 3 quarters of 2006, but slowed to 4.0% in the fourth when the pace of exports decelerated sharply (Figure 2.12.1). For the year as a whole, exports of goods and services measured in US dollars expanded by 12.9%, up from 7.8% in 2005, led by optical equipment, electronics, and machinery. Growth in imports accelerated to 9.9%, from 8.2%, driven by purchases of inputs needed for the expanding export industries and by a strengthening in domestic investment. As a result, net exports in national account terms jumped by 31.3%, contributing 3.5 percentage points of total 2006 GDP growth of 4.6% (Figure 2.12.2).

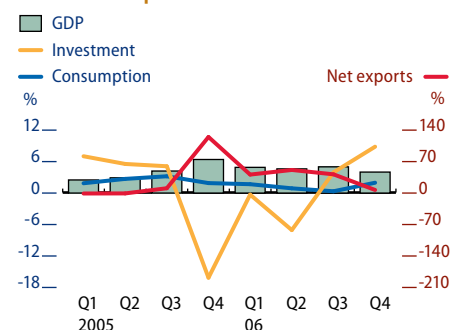
Private investment edged up by 2.1% in 2006, largely the result of a cyclical upturn in the second half, following 3 quarters of decline. The pickup was primarily seen in purchases of machinery and equipment prompted by strong exports of manufactures. Construction investment also continued to recover, as the property market strengthened. However, private investment growth was largely offset by a 4.9% contraction in public investment, due to the completion of some major projects. Overall, total fixed investment rose a paltry 0.3%, making little contribution to the overall outturn.

Private consumption decelerated to 1.5% from 2.7% a year earlier, weighed down by a tightening in consumer credit that followed the bursting of a credit-card bubble in late 2005. On a year-on-year basis, private consumption slowed to just 0.4% growth in the third quarter. It picked up in the fourth, in part because of a low-base effect from weak private consumption expansion in the last quarter of 2005. Government consumption slipped by 0.2%, reflecting efforts to tighten expenditures.

On the supply side, manufacturing grew by 7.1%, led by the subsectors of electronics components and computer and telecommunications products. Construction rose by 5.2% (from 0.5% in 2005). Services, which account for 73% of GDP, steadily progressed by 3.7% and were again the major contributor to GDP growth. Agriculture expanded by 5.4%, mostly a recovery from typhoons and floods in 2005.

Those natural disasters had hit vegetable and fruit production in 2005, pushing up the consumer price index by 2.3%. In 2006, as their

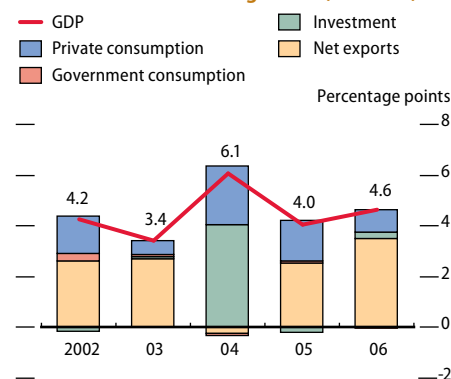
2.12.1 Growth of GDP and demand components



Source: Directorate General of Budget, Accounting and Statistics, available: <http://eng.stat.gov.tw>, downloaded 26 February 2007.

[Click here for figure data](#)

2.12.2 Contributions to growth (demand)



Source: Directorate General of Budget, Accounting and Statistics, available: <http://eng.stat.gov.tw>, downloaded 26 February 2007.

[Click here for figure data](#)



prices fell or steadied, inflation was marked down to 0.6%. Wholesale prices, in contrast, rose steeply by 5.6%, pushed up by rising international oil and commodity prices and a weakening of the New Taiwan dollar (Figure 2.12.3). The divergent trend between consumer and wholesale prices indicates limited pass-through from increased production costs into retail inflation, partly a consequence of firms having limited pricing power.

Labor market conditions improved with the faster pace of economic growth. Total employment expanded by 1.7% and the annual average unemployment rate fell to a 6-year low of 3.9%. Job creation was broad based, with construction growing strongest, by 3.3%. The reduction in labor market slack and lower inflation lifted real wages. Real average earnings of nonagricultural workers rose by 0.5%, a switch from a 0.9% decline in 2005.

Concerned about negative real interest rates and inflationary pressures from rising prices of imported oil and commodities, the monetary authorities raised the benchmark discount rate by 12.5 basis points in each quarter of 2006, to 2.75%. The policy rate is still below those of most other regional economies, however.

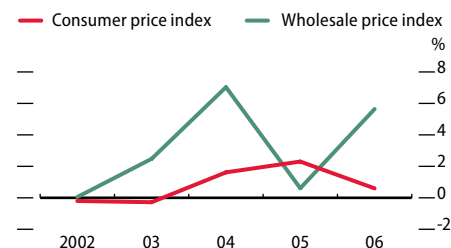
With an abundance of funds in the banking system, the cost of borrowing stayed low. The base lending rate rose by just 27 basis points over the year to 4.12%. However, the pace of domestic loan growth slowed markedly to 2.5% at end-2006 from 8.1% a year earlier, mainly due to the weakness in consumer lending. After 2 years of rising at double-digit levels, lending to consumers nudged up by 1% in 2006 as banks imposed more stringent lending standards after a surge in credit-card defaults. Banks wrote off US\$5.1 billion in bad cash-card and credit-card loans last year, more than double the amount in 2005.

On the back of the property market upturn, construction lending rebounded by 26.8%, which partly offset the impact of the consumer credit crunch (Figure 2.12.4). Despite weak credit expansion, broad money (M2) grew by an average of 6.2% in 2006, similar to that recorded in 2005, as financial institutions increased their portfolio investments.

The strong rise in exports pushed the trade surplus up by 30% and this followed through into the current account surplus, which reached \$25.2 billion in 2006, equivalent to 7.1% of GDP. This was partly offset by an upsurge in capital outflows channeled to overseas securities markets, and by a reduction in portfolio investment inflows. A widening gap between local interest rates and the US Federal Funds rate was the major factor driving capital outflows, though some domestic reasons apparently contributed, such as the gradual lifting of a cap on overseas investment by insurance companies. Gross international reserves rose to \$266.1 billion at end-2006. The capital outflows also contributed to weakness in the currency. Over the year, the New Taiwan dollar depreciated on average by 1.1% against the US dollar, and its real effective exchange rate by 0.4%.

In fiscal matters, the faster pace of economic growth was not reflected in tax revenues, which rose modestly by 1.8%. The tax-to-GDP ratio declined to 14.3% in 2006 from 14.6% a year earlier. Corporate income tax receipts fell by 5.3%, possibly a result of tax exemptions and tax preferences for certain investment and industries. The Government trimmed spending and ended the year in the black, reversing a run of deficits. The ratio of central government outstanding debt to GDP rose

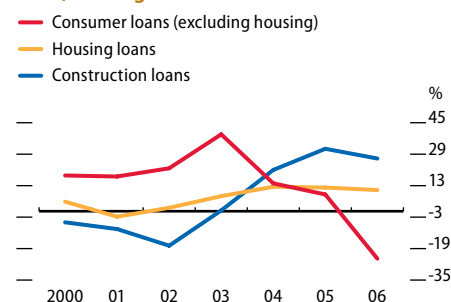
### 2.12.3 Inflation



Source: Directorate General of Budget, Accounting and Statistics, available: <http://eng.stat.gov.tw>, downloaded 13 March 2007.

[Click here for figure data](#)

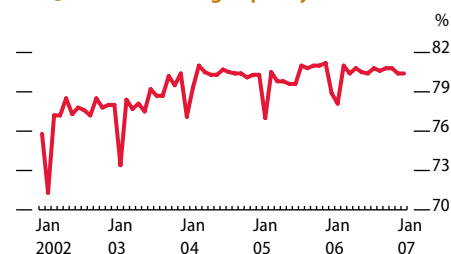
### 2.12.4 Loan growth



Source: Data downloaded from <http://www.cbc.gov.tw/economic/EBOOK/XLS/P113.xls> on 14 March 2007.

[Click here for figure data](#)

### 2.12.5 Manufacturing capacity utilization



Source: Business Indicators DataBase, available: <http://index.cepd.gov.tw>, downloaded 11 March 2007.

[Click here for figure data](#)

### 2.12.1 Selected economic indicators

	2007	2008
GDP growth	4.3	4.5
Inflation	1.6	1.5
Current account balance (% of GDP)	6.7	6.5

Source: Staff estimates.



slightly to 33.2% at end-2006, within a 40% ceiling stipulated by the Public Debt Law.

## Economic prospects

External conditions will be benign in 2007, despite the expected deceleration in the global economy and a softening in demand for some electronics. Resilient intra-Asian trade and robust demand from the People's Republic of China (PRC) will likely provide a buffer against the slowdown in other world markets. Export growth is expected to slow by about 4 percentage points to a still-solid 8.8%. An upturn in the global electronics cycle, starting in the second half of this year, is projected to take export growth back up in 2008, to 9.4%.

Domestic demand is forecast to recover gradually, bolstered by the modest upturn in investment that started in 2006 and a strengthening in consumer spending. The cyclical rebound in machinery and equipment investment will likely be prolonged by a high manufacturing capacity utilization rate (Figure 2.12.5) and by solid exports. Construction investment growth will ease because the buoyant property market is expected to slow. Public investment will increase owing to new public infrastructure projects in energy, water supply, and railways. Private consumption is expected to accelerate back to 3.0% in 2007 as the credit-card debt problems are resolved. Also, spending is underpinned by positive wealth effects from last year's gains in housing and equity prices as well as the strengthening of the labor market.

Based on the above factors, economic growth is projected to moderate to 4.3% in 2007, then inch up to 4.5% in 2008 as the global economy gains momentum. Inflation will creep up to around 1.6% in the forecast period from last year's low levels. Low inflation, a reduced risk of imported inflation, and the expected end of US interest rate rises suggest that the monetary authorities could adopt an accommodative monetary policy stance and keep interest rates steady over this year. Import growth measured in nominal terms is projected to outpace export growth, largely because of the imports needed for investment projects. The current account surplus is forecast to decline to 6.7% of GDP in 2007 and 6.5% in 2008.

These projections are subject to both downside and upside risks. Political uncertainties ahead of legislative elections in December 2007 and presidential elections in March 2008 could unnerve investors, as would any deterioration in cross-strait relations. On the upside, a possible move to liberalize economic relations with the PRC, such as relaxing limits on investment there or restrictions on tourists visiting the island from across the strait, would boost confidence in the economy.

### 2.12.1 Development challenges

Two important medium-term challenges face the authorities: to nurture new sources of growth and to redress income inequalities. The growth engine of recent decades—electronics—has faced significant competition from low-cost producers. Most of its labor-intensive production has relocated to the PRC.

Firms in Taipei, China still make some high-value products and play a dominant role in regional supply-chain management, but profit margins have been squeezed and their linkages to the domestic economy weakened. This is reflected in a reduction in manufacturing to 21.4% of GDP in 2006 from 37.6 % in 1986.

Services, which accounted for 73% of GDP last year, are mainly oriented toward the domestic market and are dominated by small and medium enterprises, so are unlikely to expand at much faster rates than they do now. New growth sources would be fostered if manufacturers moved further up the value chain and services firms tapped into regional markets.

Although the economy has a relatively equal income distribution, income disparities have widened over the past decade. Only the highest-earning 20% of households enjoyed gains in income in 2001–2005, partly because corporate and investment income outpaced wage income, helped by corporate tax breaks. Incomes for other groups stagnated or declined. Unskilled workers were the major losers as manufacturers relocated abroad. Some middle-income earners also suffered because of subdued growth in real wages and a disproportionate tax burden on salaried employees.

The widening income gap will restrain expansion in consumption, make it more difficult to win public support for further economic liberalization, and could even induce social tensions.

# South Asia

**Afghanistan, Islamic Rep. of**  
**Bangladesh**  
**Bhutan**  
**India**  
**Maldives**  
**Nepal**  
**Pakistan**  
**Sri Lanka**



# Islamic Republic of Afghanistan

In the licit economy, economic growth slowed as agriculture was hit by another drought, while reconstruction-linked construction and services continued to expand. The Government continued along its track of solid macroeconomic policy and structural reforms. Yet popular discontent with slow reconstruction, pervasive corruption, as well as sharply deteriorating security, institutional and human resource constraints, a heavy reliance on aid, and a very low domestic revenue base, all remain formidable challenges. As does the impact of opium production, which reached record levels. Since current, licit, drivers of growth cannot provide sustained growth, creating a private sector enabling environment and diversifying the economy remain crucial tasks.

## Economic performance

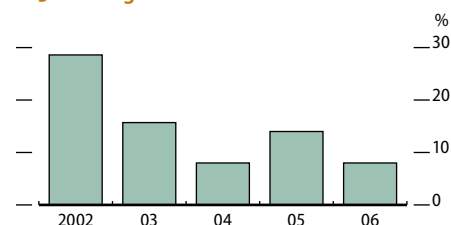
In FY2006 (ended 20 March 2007) the agricultural sector, representing about a third of licit GDP, was hit by another drought. (Box 2.13.1 on the next page discusses the non-licit economy—essentially opium.) While continued expansion in construction and services partly compensated for this decline, overall GDP growth for the year is now expected to reach only about 8% (Figure 2.13.1), or well below the 12% expected in the Poverty Reduction and Growth Facility program with the International Monetary Fund (IMF).

In December 2006, year-on-year inflation registered by the consumer price index for Kabul and five other cities declined to a little less than 4% (Figure 2.13.2), aided by a decline in energy prices and rents in the capital. Wheat imports lessened the impact of the drought on food prices.

Currency in circulation in the year to September 2006 grew less than expected with a gradual shift in money demand from cash toward deposits. Over the year, interest rates on the central bank's 30-day capital notes declined from about 8% to 5–6%. Growing competition in the banking sector is helping narrow the gap between bank deposit and lending rates. From a wider perspective though, the banking sector is still small relative to the economy, despite rapid growth in recent years, and bank assets still account for less than 9% of GDP. Commercial banks dominate the formal financial sector, with about 95% of its assets.

The Government continued to adhere to its “no overdraft” policy for bank financing of the national budget. By the end of FY2005 the execution rate of the development budget reached only 43%, reflecting low capacity, particularly in line ministries; poor prioritization of projects; unrealistic time, cost, and expenditure projections; and delays in project implementation due to a deteriorating security situation. In FY2006 the Government increased its efforts to address the poor implementation performance, such that development expenditures are likely to reach about 55–60% by the end of the fiscal year. To better reflect current spending capacities, the development budget was reduced by 5.1% at the midyear budget review.

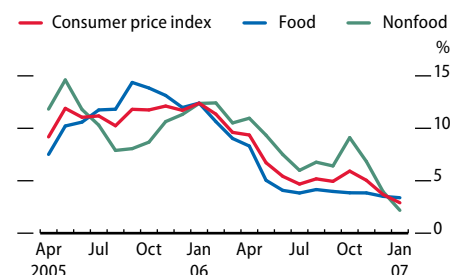
2.13.1 GDP growth



Source: International Monetary Fund, available: [www.imf.org](http://www.imf.org), downloaded 9 March 2007.

[Click here for figure data](#)

2.13.2 Monthly inflation, Kabul and five other cities



Source: Central Statistics Office, available: [www.cso.gov.af](http://www.cso.gov.af), downloaded 19 February 2007.

[Click here for figure data](#)

As spending pressures are growing, the same review increased the operating budget by 6.3% to account for expenditures that had previously been funded by donors, such as the fuel subsidy to operate several power generation plants, costs of additional teachers required, and salary arrears (mainly to teachers). The deteriorating security situation is also adding to spending pressure, and these are likely to increase in the medium term.

On the income side, domestic revenues are expected to rise by 15–20%. Since FY2003, government revenues have seen an overall increase of about 500%, yet are still very low. Customs revenues dropped in the second half of last year, most likely due to new restrictions on imports of old and right-hand vehicles, delays in the introduction of a new tariff schedule, and concessions to traders. This drop was partly offset by higher revenues from taxes on income, profits, and business receipts.

With imports of consumer and capital goods outpacing only slowly rising licit exports, the trade deficit, at \$2.6 billion in FY2005, is seen rising. But with grants, the current account should remain close to balance.

The exchange rate showed continued stability, fluctuating at Af49.73–50.65/\$1 over calendar year 2006. The large foreign exchange inflows have made the currency relatively strong and, given the lack of productivity improvement in the economy, has harmed external competitiveness.

Since the Paris Club rescheduling agreement of July 2006, the Government has been finalizing outstanding bilateral issues and agreements. An agreement with the United States was signed in September 2006 and agreements with the Russian Federation, the largest creditor, and Germany are expected to be signed. Afghanistan will likely benefit from the Heavily Indebted Poor Countries initiative this year.

In January 2006, the Government approved the Interim Afghanistan National Development Strategy (I-ANDS). This sets 5-year benchmarks to enhance security, governance, rule of law, human rights, economic and social development, and stimulate private trade (Box 2.13.2). The Government initiated the implementation of the I-ANDS while preparing a full strategy. The Government continues to push for more aid to be channeled through the budget (currently about three quarters of aid is off-budget) as a further impetus to better align development projects with priorities identified in the I-ANDS. It would also enhance the Government's capacity and, by demonstrating its ability to deliver services to the people, help bolster its legitimacy.

In June 2006, IMF approved a 3-year arrangement worth SDR81.0 million (about \$119 million) under the Poverty Reduction and Growth Facility, building on advances made under its Staff Monitored Program. Progress under the Program and the first review of the Facility has been good, with the authorities meeting most benchmarks.

Revenue administration continued to make progress: tax receipts, particularly from large businesses, increased almost 10-fold in FY2006; a road toll was introduced in June 2006 (though revenues fell far short of initial forecasts); a draft proposal to simplify the tax system and to abolish “nuisance taxes” is expected to be submitted for parliamentary approval by end-FY2006; and reform of the mustoufiats—provincial units of the Ministry of Finance—continued. Strengthening the capacity of these units—responsible for revenue collection, payment processing, and accounting functions at the provincial and district level—is vital.

### 2.13.1 Opium harvest at record in 2006

According to estimates of the United Nations Office on Drugs and Crime (UNODC), total opium cultivation in 2006 increased by 59% and production by 49%. Afghanistan now produces 6,100 tons, equivalent to 92% of total global supply. Most of the production increase was from volatile, conflict-ridden southern provinces.

With the expansion of the licit economy, the share of the total export value of opium to licit GDP is gradually decreasing: from 61.7% in FY2002 to 36.3% in FY2005.

The macroeconomic effects of opium are huge: it generates large aggregate demand, boosts the balance of payments and, through customs duties on drug-financed imports, supports government revenues. However, as much of the income from opium accrues to traffickers, is invested abroad, or is used on imported goods, the overall positive macroeconomic impact is limited.

In rural areas, opium production remains one of the leading sources of employment (it is more labor intensive and more profitable than the production of other crops). In 2006, the share of households involved in opium poppy cultivation rose by nearly half to about 13% of the population.

Responding to changes in economic and enforcement situations, the opium economy has proven to be extremely flexible. Reduction in cultivation in one province often results in production shifting elsewhere.

A study by UNODC and the World Bank has highlighted that eradication efforts tend to most affect poor farmers and rural wage laborers, those who lack political support, or those who cannot pay bribes. Considering the size of the opium economy, phasing out drug production will require significant and sustained effort.

*Sources: UNODC. 2006. Afghanistan Opium Survey 2006. September; UNODC/World Bank. 2006. Afghanistan's Drug Industry—Structure, Functioning, Dynamics, and Implications for Counter-Narcotics Policy.*



Reforms in customs focused on the introduction of the Automated System for Customs Data, attention to compliance, training, and expansion and upgrading of customs offices. The customs tariff structure was further rationalized, customs duties for all raw materials were reduced to 1% and customs duty for all imported machinery waived.

With only about 1.3% of the total population employed by the Government, the size of the Afghan civil service is low in both Asian and global terms. The public sector continues to suffer from lack of institutional and human capacity, impacting on the delivery of basic services, causing implementation delays of development projects, and fueling corruption, though in September 2006 a higher salary structure for many “nonuniformed” civil servants, including teachers, was brought in. In 2006 progress in reforming public administration remained slow.

## Economic prospects

Assuming that the agriculture sector rebounds from the most recent drought, growth for FY2007 and FY2008 is expected to reach double digits again. Inflation is forecast to stay largely unchanged.

Growth prospects for the medium term hinge on the security situation. Overall physical security has deteriorated significantly over the past year, with antigovernment and anti-Coalition forces stepping up attacks, particularly in the south and east. Suicide attacks increased many-fold. Army and police forces, government employees, and aid workers have all been targeted. Less bloody, but still important for the long-term socioeconomic development of the country, are insecurity of contract, property, and land-tenure rights.

The substantial security costs, now largely paid for by other nations, will remain outside the Government’s capacity for a long while. The authorities will also have to deal with uncertainties about nonmilitary donor commitments, including the funding of development projects’ operating expenditures (currently covered by donors), and salary pressures.

## Development challenges

Despite impressive growth and a solid track record of macroeconomic policy and structural reforms, the country still faces substantial challenges. The current reconstruction-related drivers of growth will neither sustain growth, create employment, nor reduce poverty over the medium term.

One of the Government’s main priorities, emphasized in the I-ANDS, is to improve the enabling environment for the private sector and to encourage trade (Box 2.13.2 discusses why). An estimated 80–90% of economic activity is in the informal sector because of political uncertainty, the lack of the rule of law, inefficient business registration procedures, and the tax regime. Entrepreneurs in the informal sector typically remain small, avoiding investments in productive assets or technology that would enable them to achieve economies of scale or to move into higher value-added activities.

(A fuller discussion—still relevant—of the constraints and potential drivers of growth can be found in *ADO 2006*, pp. 145–146.)

### 2.13.1 Selected economic indicators

	2007	2008
GDP growth	10.0	10.0
Inflation	5.0	5.0
Current account balance (% of GDP)	-4.8	-5.7

Source: Staff estimates.

### 2.13.2 Private sector collapse

Prior to 1979, Afghanistan had a vibrant private sector with a long tradition of entrepreneurship, engaged in the production of agricultural products, small-scale industrial activities, and trade.

During the 1980s, most industries were nationalized, traditional manufacturing industries such as carpet weaving moved to neighboring countries, and many businesses were forced to close down due to lack of inputs.

Industrial production fell by 95% between 1979 and 2002, with private output hardest hit, falling from 60% of the total to 21% in this time, recovering to a modest 26% in 2005.

Private sector activity is concentrated in construction and services, both fueled largely by the influx of international donor assistance and opium-related funds. In services, trade and transport dominate. Private sector activity has increased in relatively new services sectors such as telecommunications and banking. Manufacturing is limited to traditional products and small-scale activities such as carpet weaving and dried fruit production.

The private sector cites a lack of adequate infrastructure (especially power), and poor access to land and finance as key impediments. A recent investment climate survey identified corruption as one of the main obstacles for doing business in the country—yet government efforts to combat corruption lack the strong political leadership required for focus and coordination.

# Bangladesh

At 6% over the past 4 years, strong GDP growth has been underpinned by more market-oriented economic policies, a dynamic garment sector, and substantial inflows of overseas workers' remittances. The lead-up to the parliamentary elections was generally expected to be a rough patch given the country's contentious political environment; the constitutional mechanism of a neutral caretaker government was expected to help smooth the way. Deepening political deadlock culminated with the president in January declaring a state of emergency and calling off the elections. But the new caretaker Government has continued with established economic policies and expedited structural and sector reforms. It has taken a broad agenda of activity, including an extensive anticorruption drive that it sees necessary to establish better foundations for holding the elections. GDP is forecast to maintain its recent momentum over the medium term.

## Economic performance

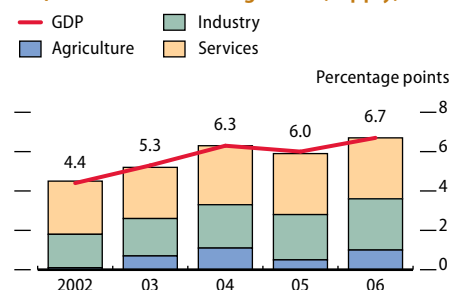
Growth in GDP has trended up in recent years, reaching 6.7% in FY2006 (ended 30 June 2006), driven by improved domestic and external demand. This performance was reflected in a steady expansion in industry, lifted by export-oriented manufacturing, and in continued services buoyancy (Figure 2.14.1). A marked reduction in poverty accompanied growth: the headcount poverty rate declined by about 1.8 percentage points a year between 2000 and 2005 to 40%, compared with a decline of only about 1 percentage point a year in the preceding decade (Figure 2.14.2). The improvement was somewhat faster in rural than urban areas. Rising access of the poor to microcredit, a rapid expansion in overseas workers' remittances, and improvements in physical and social infrastructure all contributed to the sharp drop in poverty.

In FY2006 on the expenditure side, private consumption propelled growth. Investment rose by 0.5 percentage points to 25.0% of GDP, bolstered by a rise in private investment. Gross national savings increased by 0.8 percentage points to 26.6% of GDP, lifted by a rise in workers' remittances. Net exports of goods and services remained negative.

Inflation moved up steadily to average 7.2% (Figure 2.14.3). This exceeded the 7.0% limit set by Bangladesh Bank, the central bank, in its first Monetary Policy Statement (MPS) issued in January 2006. Demand pressures generated by excess money, a sharp depreciation in the taka (Tk) against the US dollar (of 8.5% in FY2006), and a rise in global commodity prices (including oil), all heightened inflationary pressures. Rising exports of some consumer items, pulling their domestic prices to higher global levels, also added to price pressures.

Despite attempts to tighten monetary policy, both money and credit aggregates expanded rapidly in FY2006 (Figure 2.14.4). Broad money grew by 19.5%, as against the MPS program target of 14.3% and prior-year actual growth of 16.8%. Private sector credit grew sharply because of rising credit demand in support of domestic economic activity, while the public sector borrowed in excess of the credit target, mainly to

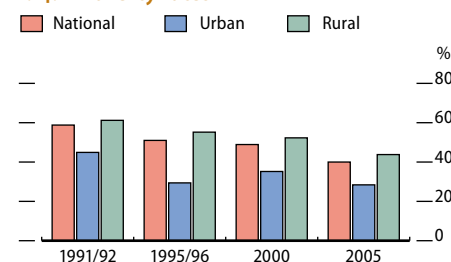
2.14.1 Contributions to growth (supply)



Source: Bangladesh Bureau of Statistics, *National Accounts Statistics*, May 2006.

[Click here for figure data](#)

2.14.2 Poverty rates



Source: Bangladesh Bureau of Statistics, *Preliminary Report on Household Income and Expenditure Survey 2005*.

[Click here for figure data](#)



finance the high cost of imports by state-owned Bangladesh Petroleum Corporation (BPC). To tighten credit, Bangladesh Bank raised key policy rates over the course of the year: the 28-day treasury bill rate from 6.6% in the last quarter of FY2005 to 7.1% in the last quarter of FY2006, and the reverse repo rate from 4.5% in June 2005 to 6.0% in June 2006. Yet because of excess liquidity in the system, these measures failed to fully restrain credit growth.

The second MPS, announced in mid-July 2006, again aimed to tighten monetary policy, both to control inflation and to ease pressures on the exchange rate, at the same time sustaining domestic output growth. The introduction of the MPS is a welcome development as it seeks to bring greater predictability to the policy regime and to avoid policy surprises, which should aid the private sector in making its investment decisions. However, to derive greater benefit from the MPS, the Government needs to allow Bangladesh Bank greater operational autonomy and to establish greater coordination between monetary and fiscal policies.

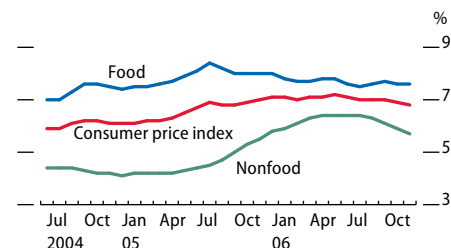
At 3.3% of GDP, the central government deficit in FY2006 came in below the budgeted 4.5%. This was because of lower than planned growth in both current and development expenditures, and in spite of underperformance in revenue collection. Current expenditures were lower as a result of tighter budgetary discipline and reductions in unproductive outlays through austerity measures. Development spending was kept at a lower than projected level by large cost reductions in nonpriority projects, fewer unproductive expenditures, and slow project implementation.

Revenues fell short of target because expected increases in collection arising from reforms and administrative improvements failed to materialize. So while tax-reform efforts yielded some gain in domestic value-added tax and income tax collection, overall targets were missed in part because of lower customs receipts stemming from tariff cuts. Domestic financing (borrowing from bank and nonbank sources) of the budget deficit amounted to 2.1% of GDP, while foreign assistance (both loans and grants) financed the remaining 1.2%.

The exchange rate came under increasing pressure during much of FY2006, because of slowing financial account inflows and higher import prices for oil and some other products. The currency stabilized in the last quarter of the fiscal year, as the tighter monetary policy started to have an effect, and the current account strengthened notably. The exchange rate stood at Tk69.7/\$1 in June 2006, representing an 8.5% depreciation against the US dollar in FY2006 (Figure 2.14.5). The marked depreciation in the nominal rate offset Bangladesh's higher inflation relative to its trading partners, and the real effective exchange rate of the taka depreciated by 5.3% in FY2006, boosting the country's external competitiveness.

Import growth fell sharply to 12.1% in FY2006 from 20.6% (Figure 2.14.6) in FY2005 as administrative controls on letters of credit were imposed and unproductive imports discouraged. In addition, lower imports of foodgrains and most other edible products offset higher imports of oil, industrial raw materials, and capital machinery. Export growth surged to 21.6% from 14.0%, reflecting robust performance of knitwear and woven garments. A decline in the trade deficit and a steep rise in remittances (24.8%) turned the current account balance from a deficit of 0.9% of GDP to a surplus of 0.9%. Foreign exchange reserves

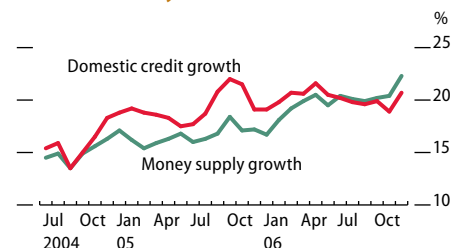
### 2.14.3 Inflation, 12-month moving average



Source: Bangladesh Bank, available: [www.bangladesh-bank.org](http://www.bangladesh-bank.org), downloaded 7 March 2007.

[Click here for figure data](#)

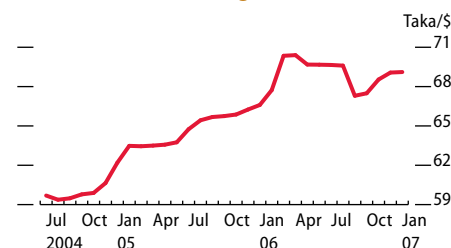
### 2.14.4 Monetary indicators



Source: CEIC Data Company Ltd., downloaded 7 March 2007.

[Click here for figure data](#)

### 2.14.5 Nominal exchange rate



Source: Bangladesh Bank, available: [www.bangladesh-bank.org](http://www.bangladesh-bank.org), downloaded 7 March 2007.

[Click here for figure data](#)

rose to \$3.5 billion at end-June 2006 from \$2.9 billion a year earlier (Figure 2.14.7).

In the FY2007 budget (announced in June 2006), the Government shaved duties on intermediate goods from 13% to 12% and on raw materials from 6% to 5%, as part of trade reforms agreed with the World Bank. It also cut supplementary duties. These measures should improve profitability and competitiveness of domestic industries, though they add to the effort needed to raise the budget's low revenue ratio.

Financial sector reforms to strengthen the regulatory and supervisory framework for banks made headway in 2006, though at a slower than expected pace. The health of the banking system has improved since 2002, as seen in the declines in gross nonperforming loans (NPLs) from 28% to 14% and in net NPLs (i.e., less provisions) from 21% to 8% (Figure 2.14.8). This led to significant rises in profitability ratios. Although the private commercial banks improved to record low NPLs of 6%, the four nationalized commercial banks (NCBs) are still weak and show very high NPLs of 25%. The NCBs have large capital shortfalls with a risk-weighted capital asset ratio of just 0.5% in June 2006 (as against the required 9%), compared with 10% for the private banks.

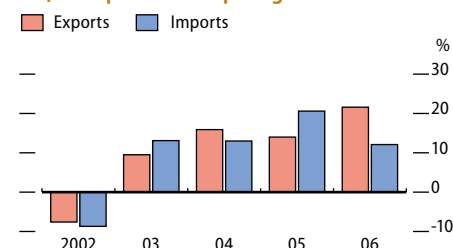
The performance of the four NCBs is monitored under memorandums of understanding signed by each of them and the central bank, in relation to tightened prudential norms and lending limits. It has been mixed, though, in part because of government-directed extensions of credit, particularly to BPC to finance its higher import costs.

The divestment of Rupali Bank, an NCB, moved forward and the sales and purchase agreements are expected to be signed. The Government has taken steps to corporatize the remaining NCBs and make them more autonomous while keeping them under the regulatory purview of the central bank, with an eye on their eventual privatization.

Other areas have shown progress. Bangladesh Bank has completed a comprehensive plan to switch over to the new international standard framework for assessing banks' capital adequacy under Basel II, which the Government intends to implement from early 2009. It established a settlement system for secondary bond trading in May 2005 and introduced mark-to-market valuation guidelines for treasury securities effective February 2006, which have improved operations of the interbank and treasury bill markets. It also introduced market-based auctions of treasury bills in September 2006 to bring greater flexibility to liquidity management.

Unlike many other bourses in Asia, the Dhaka Stock Exchange has not recorded significant gains, though January 2007 (Figure 2.14.9) saw a rise in response to prospects of an improved political situation. Still, as indicated by the low 7.5% market capitalization-to-GDP ratio, the equity market remains underdeveloped, largely because of weak corporate governance, lack of high-quality share listings, and a dearth of large institutional investors. While governance issues need to be tackled, increasing the supply of listed shares by privatizing state enterprises through public share offerings would help boost market capitalization and trading activity. Two major power sector entities—Dhaka Electric Supply Company and the Power Grid Company of Bangladesh—have already

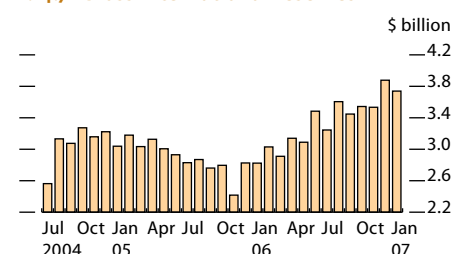
#### 2.14.6 Export and import growth



Source: Bangladesh Bank, available: [www.bangladesh-bank.org](http://www.bangladesh-bank.org), downloaded 7 March 2007.

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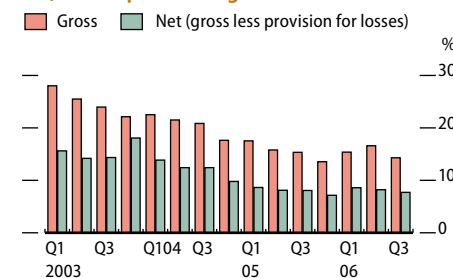
#### 2.14.7 Gross international reserves



Source: Bangladesh Bank, available: [www.bangladesh-bank.org](http://www.bangladesh-bank.org), downloaded 7 March 2007.

[Click here for figure data](#)

#### 2.14.8 Nonperforming loan ratios



Source: Bangladesh Bank, available: [www.bangladesh-bank.org](http://www.bangladesh-bank.org), downloaded 7 March 2007.

[Click here for figure data](#)

set an example by selling shares in the equity market in 2006, under the Government's broader goal of privatizing state enterprises.

Modernization of the National Board of Revenue gathered pace. Large taxpayers' units for value-added tax and income tax have already been established in Dhaka, and branches of these units are being set up in Chittagong (the second biggest city and main port). The board is being reorganized along functional lines and an audit cell has been set up. The central intelligence cell has detected several tax evasion cases and secured unpaid taxes. These actions are expected to strengthen the tax machinery and raise revenues over the medium term. In an attempt to curb corruption among tax officials and redress taxpayers' grievances, the country's first tax ombudsperson was appointed in July 2006.

The Customs House in Chittagong is being split into two entities to strengthen customs administration: one for imports and one for exports. Computerization of customs administration has improved tax assessment and appraisal functions.

## Economic prospects

The economic forecasts for FY2007 and FY2008 are based on several policy assumptions. The most important is that the new caretaker Government will maintain its resolve to preserve macroeconomic stability. Continuing the reforms agreed with the International Monetary Fund under the ongoing Poverty Reduction and Growth Facility, the central bank will retain its tightened monetary policy stance to control inflationary pressures. At the same time, it will aim to support economic growth of around 7% by ensuring adequate credit to the private sector but restraining credit to the public sector.

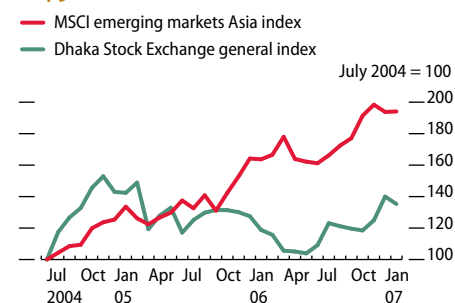
The inflationary consequences of monetary policy will depend both on how political events unfold and on stability in labor and financial markets. At 10.7% of GDP (Figure 2.14.10), weak revenues hamper government efforts to provide resources for physical and social infrastructure development and for poverty reduction.

The second assumption is that, as agreed under the current Poverty Reduction and Growth Facility, the Government will attempt to lift revenues by 0.5 percentage points of GDP this fiscal year by adopting many tax and nontax measures, and by streamlining tax machinery, to offset reductions in customs duties. The authorities are expected to continue reorienting spending to support growth. They are also likely to strengthen institutional capacity for project formulation and administration, and to improve fund-release procedures for programs on infrastructure development and poverty reduction. In FY2007, domestic financing of the fiscal deficit will be capped at 2.5% of GDP.

A third assumption is that the Government will further rationalize energy prices to improve the financial position of state enterprises. In addition to the 5% increase in urban power tariffs of March 2007, it is likely to raise diesel and kerosene prices to bring them more into line with international prices and to reduce BPC's losses, at the same time attempting to address equity concerns.

Fourth, it is assumed that the Government will continue in its efforts to shore up foreign exchange reserves. It will encourage remittances and

### 2.14.9 Stock market indicators



Sources: Bloomberg, downloaded 7 March 2007; Dhaka Stock Exchange, *Monthly Review*.

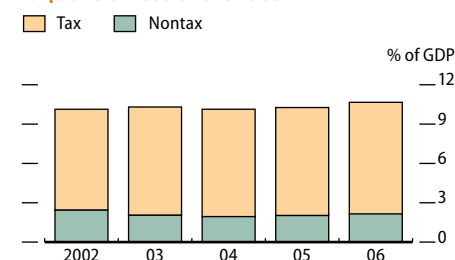
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### 2.14.1 Selected economic indicators

	2007	2008
GDP growth	6.5	7.0
Inflation	7.0	6.0
Current account balance (% of GDP)	1.0	0.2

Source: Staff estimates.

### 2.14.10 Domestic revenues



Source: Asian Development Outlook database.

[Click here for figure data](#)

exports by measures such as allowing the exchange rate greater flexibility and further improving banking services.

On the above basis, GDP growth is forecast at 6.5% in FY2007 and 7.0% in FY2008, driven by a robust performance in industry and services (Figure 2.14.11). Trends in the first half of FY2007 point to a significant pickup in economic activity. Although agricultural growth in FY2007 is likely to moderate from the postflood recovery in FY2006, it is still expected to be above trend. The harvest of the major summer crop—*aman*—has been good, though slightly below that of a year ago. The production of the major winter crop—*boro*—will depend on weather conditions and availability of inputs, though developments to date suggest that it—and the output of other crops including wheat, maize, pulses, and spices, as well as fisheries—is on track for an above-average outturn.

The conditions for expansion in industry (supported by new capacity in garments and textiles, chemicals, cement, and engineering) are favorable, though infrastructure constraints may pose problems. Manufacturing has shown a strong performance, as suggested by healthy growth in manufactured exports, imports of industrial raw materials, and private sector credit. Services output appears to be expanding impressively, in line with industry.

In the first quarter of FY2007, output of medium and large manufacturing, driven by export-oriented industry, rose by 14%, and that of small-scale industry by 11%, year on year (Figure 2.14.12). Uptrends were also noted in the production of nonmanufacturing items, namely gas (9.3%) and electricity (5.1%).

The garment industry grew rapidly, with 28% growth in its exports in the first half of FY2007. Successful diversification of products and markets, increased backward linkages, and a supportive policy regime are among the forces driving the industry. Yet sustaining such growth needs improved infrastructure to help producers cut the present excessive lead times, while more investment in design, equipment, training, and marketing is required if the industry wants to move from producing low- or medium-priced products to high-value-added items.

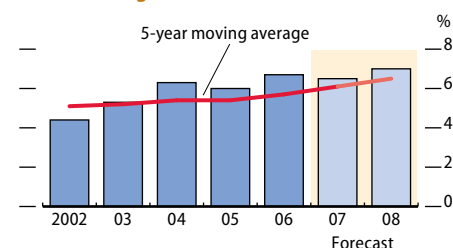
Entering and keeping its place in the market for these items, offering competitive prices and quality, and addressing social compliance issues are crucial if the garment industry is both to remain competitive internationally and to continue generating high employment and income growth for the country.

The pickup in external trade, bank advances to transport and trade, and mobile phone subscribers implies that high growth in services will continue.

In FY2007, inflation is projected to decline slightly to 7.0% and to 6.0% in FY2008 (Figure 2.14.13). After the heightened price pressures of FY2006, inflation has trended down in the early months of FY2007; on an annual point-to-point basis the national consumer price index fell from 7.5% in June 2006 to 6.1% in December 2006, with declines in both food and nonfood prices. The anticipated sustained moderation in price trends is based on a continued tight monetary policy, an easing in international oil prices, a softening of nonfuel commodity prices, and a continued buildup in foreign exchange reserves.

The authorities have announced a broad money growth target of 14.7%

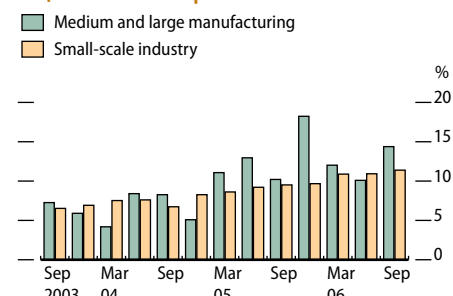
#### 2.14.11 GDP growth



Sources: Bangladesh Bureau of Statistics, *National Accounts Statistics*, May 2006; staff estimates.

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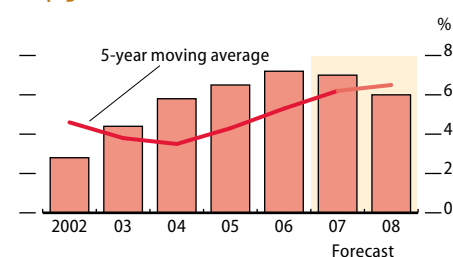
#### 2.14.12 Growth in production



Source: Bangladesh Bank, available: [www.bangladesh-bank.org](http://www.bangladesh-bank.org), downloaded 7 March 2007.

[Click here for figure data](#)

#### 2.14.13 Annual inflation



Sources: Bangladesh Bank, available: [www.bangladesh-bank.org](http://www.bangladesh-bank.org), downloaded 2 February 2007; staff estimates.

[Click here for figure data](#)

and a domestic credit growth target of 14.1% in FY2007. Reflecting its restrained monetary policy stance, the central bank raised policy interest rates between June and December 2006: the 28-day treasury bill rate from 7.1% to 7.3%, and the reverse repo rate from 5.5% to 6.5% (Figure 2.14.14). Commercial banks' lending and deposit rates also rose over the same period, from 12.1% to 12.4% and 6.7% to 7.0%. Even with this cautious policy, a healthy flow of credit to the private sector was sustained with growth of 19.4% year on year in December 2006.

The current account balance in FY2007 is expected to record a surplus of 1.0% of GDP and moderate to 0.2% of GDP in FY2008 (Figure 2.14.15). The outcome will be aided by a continued reduction in the trade deficit and robust growth in remittances. Exports are projected to grow at 20% and 18% in FY2007 and FY2008. In the first half of FY2007 they were up by 26% from a year ago, buoyed by high growth in knitwear (32%) and woven garments (24%) (Figure 2.14.16). Import growth in FY2007 and FY2008 is forecast at 15% and 14%. In the first 6 months of FY2007, imports grew by 20%. Workers' remittances rose by 31.3% in the same period (Figure 2.14.17). Foreign exchange reserves strengthened by \$0.4 billion in the same period, touching \$3.9 billion at end-December 2006.

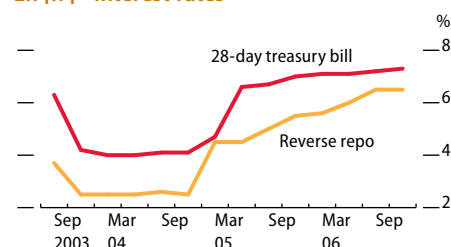
The taka/dollar exchange rate was little changed between June 2006 and February 2007. Bangladesh Bank limits its market interventions to countering disorderly movements and to building a more comfortable reserves position consistent with the macroeconomic program agreed with the International Monetary Fund. A managed floating exchange rate system in force since May 2003 has served the economy well, enabling it to adjust relatively smoothly to the changing external environment, especially in absorbing the oil price shock, supporting export growth, and protecting reserves.

BPC's large losses continue to mount. The Government has not granted any upward adjustments to domestic fuel tariffs since June 2006, when diesel and kerosene (together making up 75% of domestic consumption) were put up by 10% and gasoline by 30%. Even after the fall in prices in the international market, the prices of diesel and kerosene were about 80% of the breakeven level as of mid-January 2007, with a loss of \$0.11 a liter for diesel and \$0.12 a liter for kerosene (Figure 2.14.18). BPC sells other products at a profit.

Driven by growing economic activity, the demand for various fuel products is projected to rise to 4.0 million tons in FY2007, up by 5.3% from the preceding year. In FY2006, BPC incurred losses estimated at \$474 million; this fiscal year losses are projected at \$340 million. BPC's losses, which have been financed mainly by NCB credits, will eventually become government obligations. In a policy shift, the FY2007 budget includes an allocation equivalent of \$86 million, which though inadequate, could cover part of the oil company's losses. The urgently needed policy change, however, is to implement automatic pricing formulas (on the line of those adopted in 2003 but largely ignored) to recover BPC's full costs while providing for social safety net measures to mitigate the impact on society's most vulnerable groups.

From a longer-term perspective, the economy has gently picked up its rate of growth, from 3.7% in 1981–1990, to 4.8% in 1991–2000, and to 5.7%

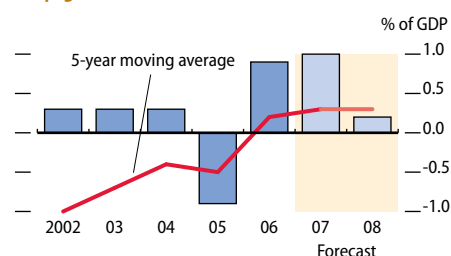
2.14.14 Interest rates



Source: Bangladesh Bank, available: <http://www.bangladesh-bank.org>, downloaded 7 March 2007.

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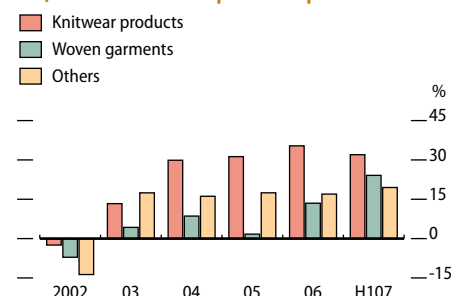
2.14.15 Current account balance



Sources: Bangladesh Bank, available: [www.bangladesh-bank.org](http://www.bangladesh-bank.org), downloaded 7 March 2007; staff estimates.

[Click here for figure data](#)

2.14.16 Growth in export components



Source: Bangladesh Bank, available: [www.bangladesh-bank.org](http://www.bangladesh-bank.org), downloaded 7 March 2007.

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in 2001–2006 (Figure 2.14.19). Savings and investment played their part, rising from 11.6% and 17.5%, respectively, in 1981–1983 to 19.9% and 24.5% in 2004–2006. Greater openness, with exports aided by the dynamic garments industry, also provided stimulus to growth. All sectors, especially industry and services, contributed. Factor productivity also increased sharply, reflecting sounder policies and a higher rate of capital accumulation. The Government stepped up policy and sector reforms to create a more market-oriented economy, paving the way for faster private sector-led growth. Significant reductions in tariff and nontariff barriers and deregulation fostered competition in the economy.

The steady growth record, despite internal and external shocks, provides a sound basis for Bangladesh's medium-term growth prospects of 8% GDP growth. However, for this to be achieved, investment needs to be augmented and economic and structural reforms accelerated to improve productivity and competitiveness in the economy.

Several downside risks to medium-term growth prospects could derail projections, implying slower growth, a weaker balance of payments, and higher inflation. An upsurge in political conflict and associated disturbances would clearly affect economic activity. Growing infrastructure constraints, particularly worsening power shortages, could deter new investments and hold back growth. Externally, stiff competition in garments and textiles in the wake of the end of the quota system poses significant risks. The competition in the world textile market will be further intensified after 2008, when temporary quotas imposed by the European Union and United States on the People's Republic of China expire.

## Development challenges

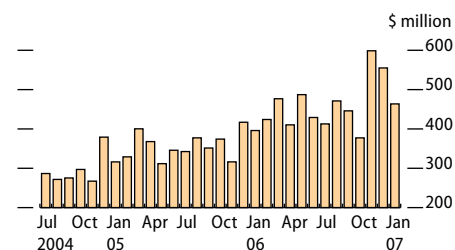
Key development challenges facing Bangladesh include upgrading the physical infrastructure, augmenting efficiency in the financial sector, stimulating greater foreign direct investment (FDI), and strengthening governance. Deficiencies in key infrastructure, such as power (Box 2.14.1), ports, railways, and roads, seriously hamper export growth, investment, and opportunities for transport integration with neighbors.

In the ports segment, Chittagong port, which handles nearly 85% of imports and 80% of exports, suffers from low productivity, labor problems, and weak management, exacerbated by the practice of stuffing and unstuffing containers in the port (because of limited off-dock facilities and costly railway services to move containers). Chittagong port is below the UNCTAD productivity standard of 230 lifts per berth a day.

Bangladesh Railway is unable to carry containers efficiently and on time because of limited locomotive and freight-car availability, congested network on major corridors such as Dhaka–Chittagong and the corridor to India, lack of operational efficiency, and infrastructure constraints. The main constraints facing the road sector are inadequate maintenance funding and weak management.

As a result of weaknesses in transport operations, the country is tardy in exporting and importing, requiring 35 and 57 days, respectively, measured from start to completion of export/import procedures and shipment. This compares ill with neighboring countries such as India

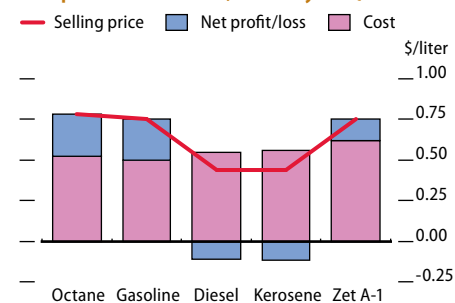
2.14.17 Workers' remittances



Source: Bangladesh Bank, available: [www.bangladesh-bank.org](http://www.bangladesh-bank.org), downloaded 7 March 2007.

[Click here for figure data](#)

2.14.18 Bangladesh Petroleum Corporation fuel price breakdown, January 2007

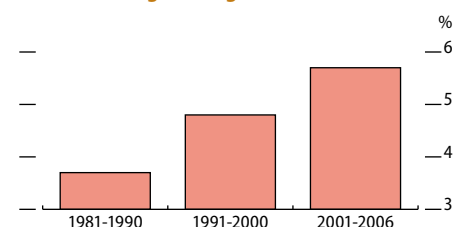


Note: Figures are based on average fuel price in the international market as of 12 January 2007.

Source: Ministry of Energy and Mineral Resources.

[Click here for figure data](#)

2.14.19 Average GDP growth



Source: Bangladesh Bureau of Statistics, *National Accounts Statistics*, various years.

[Click here for figure data](#)



(27/41 days export/import, respectively), Pakistan (24/19 days), and Sri Lanka (25/27 days). Similarly, costs are high. For example, the cost of export for each container in Bangladesh is \$902, compared with \$864 in India, \$797 in Sri Lanka, \$481 in Malaysia, and \$335 in the People's Republic of China.

For Chittagong port, the focus should remain on contracting out operations to the private sector, on allowing private operators to invest in port infrastructure, and on restructuring its management. The caretaker Government has, in fact, transferred the operations of Chittagong container terminal to the private sector, and has also signaled its intention to do the same for the new mooring container terminal.

For Bangladesh Railway, the emphasis should be on ensuring greater commercial orientation, outsourcing some business to private companies, and introducing modern management and financial systems. In roads, the priority should be on approving an integrated multimodal transport policy and creating a road maintenance fund.

Despite some progress, Bangladesh is yet to establish a healthy and efficient financial system. Ongoing banking sector restructuring must be strengthened. In the capital market, the thrust should be on improving financial reporting and corporate governance, and strengthening monitoring and enforcement by the Securities and Exchange Commission. Many government-owned enterprises, including the petroleum distribution companies and Biman Bangladesh Airlines, as well as major private companies such as mobile phone companies with huge annual turnover, could be prime candidates for selling shares, stimulating the equity market.

From already low levels, FDI inflows further declined in FY2006, depriving the country of much-needed capital resources along with the associated transfer of technology, skills, and access to new export markets. Despite the seriousness of the position, the country is yet to accord political decisions on several large FDI proposals.

Corruption is an important factor that prevents Bangladesh from achieving its potential for higher economic growth and faster poverty reduction. The caretaker Government has taken an extensive anticorruption stance, and as part of this will need to address the shortcomings of the Anticorruption Commission, giving it greater independence, scope, and resources.

### 2.14.1 Power problems

Power is the biggest logjam in physical infrastructure. Per capita power generation is only about 158 kilowatt-hours a year, among the world's lowest.

Only a third of the population has access to electricity, and even they have a poor, unreliable service suffering from frequent power outages and low voltage.

This stems from inadequate power generation capacity and poor transmission and distribution systems. In FY2006, maximum served generation was only 3,812 megawatts (MW) as against peak demand of 4,693 MW, resulting in up to 1,312 MW load shedding on 347 days. Most industrial manufacturers have to rely on costly generators, and small enterprises that cannot afford backups have no alternative but to shut down during prolonged power outages.

Over the last decade, net energy demand has grown by 8.1% a year. Yet for an expected average annual GDP growth rate of 8% over the next two decades, the needed average annual energy growth rate is 12%.

Bangladesh faces a momentous task meeting this burgeoning energy demand, which will need substantial investment with reforms in various areas, including introducing an energy pricing policy to recover operating costs, reducing the Government's outstanding dues to power entities, further corporatizing power entities, and making the Bangladesh Energy Regulatory Commission fully operational.

# Bhutan

The huge Tala hydropower project started commercial production in July 2006. In the medium term, Tala is forecast to double electricity export capacity, boosting GDP and government revenues significantly. Yet it makes Bhutan even more reliant on export of one commodity to India. Also, hydropower employment elasticity is low, and cannot cope with the many tens of thousands of young people entering the labor market or migrating to urban areas. The Government needs to stimulate greater private sector activity and to diversify the economy.

## Economic performance

Economic growth is estimated to have accelerated to 9.0% in 2006 from 6.5% in 2005 (Figure 2.15.1). The pickup in growth was largely due to commissioning of the 1,020 megawatt (MW) Tala project in July, with the commercial operation of the first of six turbines in July and the second in October. Nearly all output is exported to India. Production of power from all the four power projects (Basochu, Chukha, Kurichhu, and Tala) increased by 30% year on year, and Tala was responsible for all this rise. Total export sales of power grew by 54% to Nu4.9 billion (about \$109 million).

In other sectors, agriculture is estimated to have grown by 1.5% and services 10.4%. Construction, which declined by about 3% in 2005, recovered on the back of increased private residential and commercial property building.

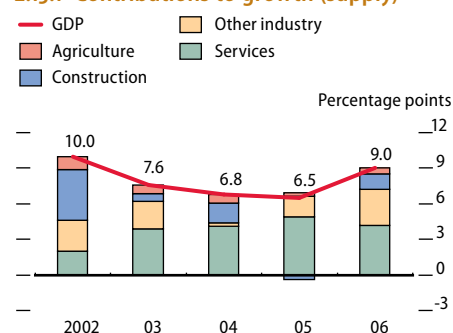
Revised budget estimates for FY2006 (ended 30 June 2006) indicate that the Government's fiscal position improved, with the overall budget deficit narrowing to Nu2.6 billion (or 7.1% of GDP) from 11.0% the previous year (Figure 2.15.2). A small decline in capital spending and an increase in foreign grants were largely responsible.

Capital spending was shaved by 2%, mostly reflecting the high FY2005 base when the Government purchased two Airbus aircraft. Current spending rose by 11%, which included outlays for draft constitution meetings and establishment costs for new institutions, such as the anticorruption and election commissions. Total expenditures, including capital spending of 24% of GDP, came to 44% of GDP.

Revenues and grants increased by 12%, with a robust increase in tax revenues and disbursement of project-tied grants as a result of faster implementation. Total budget receipts depend heavily on grants, and the tax-to-GDP ratio is low at 10.2% of GDP. Of the overall fiscal deficit, about two thirds was financed from domestic sources.

The budget for FY2007 anticipates a further reduction of the deficit to Nu1.5 billion (3.3% of estimated GDP), largely on account of much stronger domestic revenues (up 42%) associated with Tala. With grants estimated at a similar large amount as in the previous fiscal year, total receipts are projected to increase by 21%. Expenditures—both current

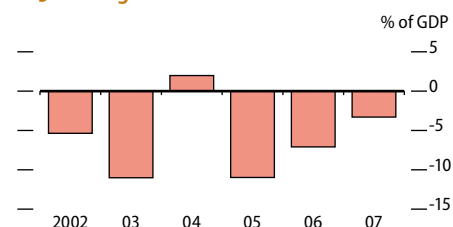
2.15.1 Contributions to growth (supply)



Sources: Royal Monetary Authority of Bhutan, available: [www.rma.org.bt](http://www.rma.org.bt), downloaded 12 February 2007; staff estimates.

[Click here for figure data](#)

2.15.2 Budget balance



Source: Royal Monetary Authority of Bhutan, available: [www.rma.org.bt](http://www.rma.org.bt), downloaded 12 February 2007.

[Click here for figure data](#)

and capital—are each budgeted to increase by about 11%, due to a higher salaries and wages bill, preparations for the introduction of a constitution in 2008, construction of a Supreme Court building, road projects, hospital construction, and preconstruction work for Punatsangchu I and Dagachhu hydropower projects.

Broad money (M2) grew by 25% in FY2006, more than doubling from 11% in FY2005 (Figure 2.15.3). This was entirely due to an increase in the net foreign assets in the banking system. Credit to the private sector rose by 33%, but a very large build up in net deposits of the government more than offset this, and total domestic credit declined over the year. The bulk of the increase in private sector credit was for building and construction, manufacturing, and trade and commerce.

As the ngultrum is pegged to the Indian rupee, monetary developments have limited impact on prices, and inflation in Bhutan is heavily influenced by price developments in India. Consumer price inflation peaked at 6.2% in the second quarter of calendar 2006 (Figure 2.15.4). This gave an average of 4.9% for FY2006, slightly higher than India's 4.3% for the period.

The current account improved markedly, as the deficit narrowed (Figure 2.15.5) to \$30 million (3.6% of GDP) from \$211 million (29.7%). This is mainly attributable to tremendous growth in exports (up \$114 million), small reductions (of about \$15 million each) in both imports and the combined services and income accounts deficit, as well as somewhat larger net transfers receipts (up \$37 million). The 61% expansion in export earnings was about equally split between India (largely electricity) and other countries (mainly fruit and manufactured commodities).

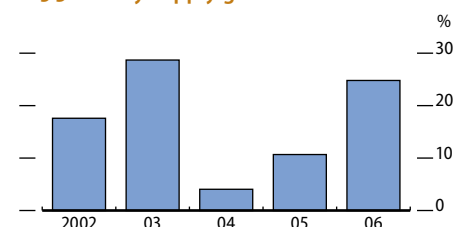
Since imports in FY2005 were buoyed by the purchase of two Airbus aircraft, the relatively small size of their drop in FY2006 of only 3.5% may be partly explained by imports for the Tala project. However, there appears to have been brisk demand for imported goods from both India and other countries. Tourism also continued strong, near-40% growth, with revenues estimated at \$21 million.

As the inflows in the capital account (including grants for Tala) and the financial account (mainly foreign aid loans) together amounted to \$144 million and were much greater than the current account deficit, the overall balance of payments registered a large surplus. Gross international reserves increased to \$479 million at end-FY2006, a very comfortable level equivalent to about 14 months of imports. External debt outstanding at end-FY2006 was \$681 million, or 82.5% of GDP. The debt service ratio for the year was only 5.3%, as almost all debt has been contracted on concessional terms.

## Economic prospects

With the start of commercial operations, Tala will be the main driver of economic expansion in the next 2 years, with growth expected to accelerate further to 18% in 2007 and then moderate to 10% in 2008. Growth in other sectors together is expected to average 6–8%, while inflation should stay around 5%. Tala is expected to generate Nu40 million (approximately \$1 million) in daily revenues, and raise hydropower's share of total government revenues from 45% to about 60%.

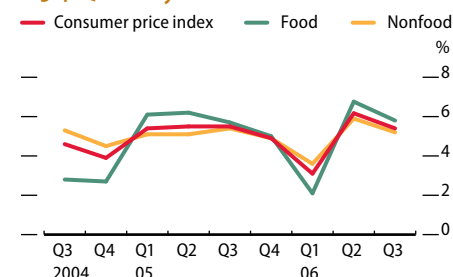
2.15.3 Money supply growth



Source: Royal Monetary Authority of Bhutan, available: [www.rma.org.bt](http://www.rma.org.bt), downloaded 12 February 2007.

[Click here for figure data](#)

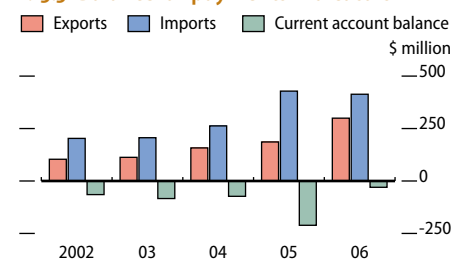
2.15.4 Quarterly inflation



Source: Royal Monetary Authority of Bhutan, available: [www.rma.org.bt](http://www.rma.org.bt), downloaded 12 February 2007.

[Click here for figure data](#)

2.15.5 Balance-of-payments indicators



Source: Royal Monetary Authority of Bhutan, available: [www.rma.org.bt](http://www.rma.org.bt), downloaded 12 February 2007.

[Click here for figure data](#)

Export income from the additional power sales is expected to turn the trade balance to a surplus, and with current transfers likely maintained at about the present level, the current account balance is also projected to switch to a surplus, of 3% of GDP.

Further growth in the medium term will benefit from continued international cooperation in the hydropower sector. Memorandums of understanding have been signed between Bhutan and India for preparing detailed project reports on the 1,095 MW Punatsangchu I, the 992 MW Punatsangchu II, and the 670 MW Mangdechu hydropower projects. The full feasibility report of the Punatsangchu I project is complete and India has agreed to finance it with 60% loan and 40% grant components. Construction is expected to start this year.

2.15.1 Selected economic indicators		
	2007	2008
GDP growth	18.0	10.0
Inflation	5.0	5.0
Current account balance (% of GDP)	3.0	3.0
Source: Staff estimates.		

## Development challenges

The main challenge is that hydropower employment elasticity is low. With more people entering the labor market each year, the Government must stimulate greater private sector activity and diversify the economy to boost employment, in line with the Government's poverty reduction strategy. The Government might aim to do this by improving transportation and communications infrastructure for better integration of the national economy, strengthening the private sector enabling environment (particularly for tourism and high-value agriculture), and enhancing the efficiency of the financial sector.

In preparation for its planned transition from a monarchy to a two-party democratic system in 2008, the Government has established institutions to ensure high standards of governance and transparency. An autonomous Anticorruption Commission has been established, and autonomous status is envisaged for the existing Auditor General's Office. The National Assembly has set up a public accounts committee, and a fiscal responsibility bill is expected to be presented for passing. The actual transformation and workings of a two-party democracy may lead to some initial uncertainty, but the transition is unlikely to result in any significant economic policy changes.

Bhutan is trying to integrate itself with regional and international economic groupings. It is currently negotiating to become a member of the World Trade Organization; the third meeting of the working party was held in October 2006.

# India

Two years of above-trend growth are causing inflation. Optimism over growth prospects has brought high capital inflows and currency appreciation pressure. Manufacturing and construction growth have stimulated a voracious appetite for credit, which in turn complicates attempts to control the money supply.

Agricultural stagnation is the key structural challenge. Rising food prices contribute to inflation. Stagnation also widens inequality, as industry accelerates and services pull on robustly. It also raises pressures to transfer land out of agriculture into industry, and highlights the importance of industrial job creation for growth, labor absorption, and poverty reduction. Yet land transfer from agriculture to industry implies significant worker displacement, and has caused serious social unrest.

With inflation high, and serious structural hurdles for the economy to overcome, the Reserve Bank of India finds itself in a precarious position. It must damp expenditures in the short run, while also ensuring adequate credit supply to promote manufacturing and agricultural investments in the medium term.

However, interest rates have risen, construction growth has already tapered, and the rupee is appreciating slightly. Agricultural planting has responded to rising prices. These trends will help moderate inflation. A soft landing therefore appears likely.

## Economic performance

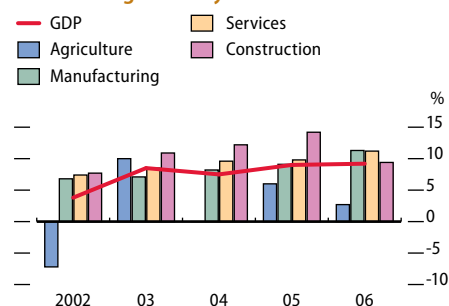
Robust growth momentum continued in FY2006 (April 2006–March 2007). After rising by 9.0% in FY2005, GDP is set to grow by 9.2% in FY2006. India's trend growth rate is estimated at 8–8.5% (see *Asian Development Outlook 2006*).

Four important characteristics emerge from the growth episode of recent years (Figure 2.16.1). First, growth is accelerating. Second, over the past few years, the manufacturing growth rate has caught up with that of services. Despite this, the services sector, given its 55% share of value added (compared to industry's 26%) continues to push up the aggregate pace. Third, construction—whose performance we report separately, given its important role in the Indian story today—has been through a boom that now appears to be ending. Indeed, construction in 2004 employed roughly 6% of the labor force, up from a more typical 3% in 1993. Fourth, agricultural performance remains subdued, with growth declining in the first half of FY2006.

Construction and home sales have soared since 2002, and demand for capital and consumer goods—especially consumer durables (Figure 2.16.2)—has followed. Demand for basic and intermediate goods has also grown with construction. Each of these developments has increased pressure to expand industrial capacity. The National Council of Applied Economic Research's October business confidence survey reveals particularly high levels of capacity utilization in the capital goods sector (Figure 2.16.3). These high levels feed back into capital goods demand.

Booming industry and construction raised gross domestic investment to 33.8% of GDP in FY2005 (Figure 2.16.4), an upward trend that appears

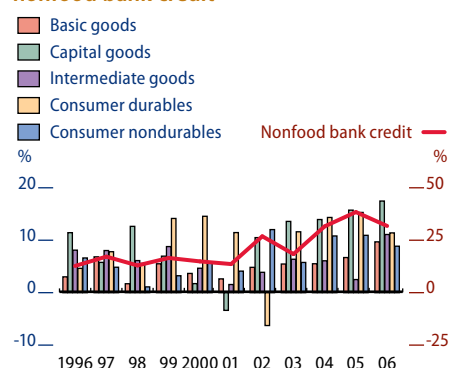
2.16.1 GDP growth by sector



Source: Central Statistical Organisation, available: <http://mospi.nic.in>, downloaded 2 March 2007.

[Click here for figure data](#)

2.16.2 Growth in industrial output and nonfood bank credit



Note: 2006 data are for the first 3 quarters only.

Source: CEIC Data Company Ltd., downloaded 10 March 2007.

[Click here for figure data](#)



to be continuing despite slowing construction. This investment surge has been met by a simultaneous expansion in bank credit. Figure 2.16.2 (above) shows that India's manufacturing take-off coincided with a positive turnaround in the growth of bank credit. Table 2.16.1 demonstrates the extraordinary rate of credit expansion, which has gone into real estate (commercial and residential), infrastructure, and export industries—engineering products, textiles, and chemicals (Figure 2.16.5). An expansion in retail credit has been pushing up consumption as well.

Given the importance of high investment for continued manufacturing growth, provision of liquidity therefore remains a monetary policy priority. However, the high rate of credit growth is causing problems. First, frenetic lending by banks has, at least until recently, confounded attempts to rein in the money supply. Second, excessive lending for long-term real estate transactions appears to have led to maturity mismatches between banks' assets and liabilities. Specifically, according to some estimates, bank deposits have an average maturity of 2–3 years, while rapidly growing housing loans mature in 7–8 years. Some banks seem to feel that they are overinvested in real estate.

The impact of monetary growth and excess demand for nontradable goods and assets (especially real estate) is already being felt. Wholesale price inflation began rising in May 2006, reaching an annualized rate of 6.0% in the third week of January 2007. Consumer price inflation is higher still. While this was initially driven by booming international energy prices, and by still-ascendant food price inflation, recent figures show that burgeoning manufactured goods price inflation is now contributing as much as food and fuel prices combined (Figure 2.16.6). Given tight manufacturing and supporting infrastructure capacity, and the significant time lags involved in augmenting it to meet rising demand, manufacturing is overheating.

Prices of wheat, pulses, milk, and condiments and spices—supply has been tight for all of them—are the chief culprits of food price inflation (Figure 2.16.7). In response to these and other inflationary trends, the federal Government introduced a raft of measures including the elimination of duties on imports of wheat, pulses, edible oils, and sugar; a ban on wheat exports; modifications in the management of public food-stocks including suspension of the futures market; and reductions in regulated retail prices of gasoline and diesel charged by the government-owned oil-marketing companies.

Unfortunately, these measures have met with limited success, as some key global commodity prices have risen on adverse agro-climatic conditions. Prices in the world wheat market have risen faster than domestic prices. Nevertheless, help may be on the way, with rising prices prompting increases in the area under cultivation for wheat, pulses, and coarse cereals.

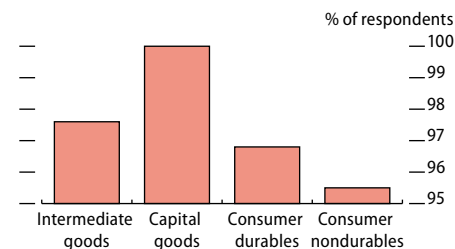
Faced with demand-led inflation, the Reserve Bank of India (RBI) needs to damp expenditures. However, in doing so, it will be important not to reduce the credit available for expanding manufacturing capacity more than is necessary to contain inflation. These capacity expansions are vital for enhancing growth potential in the medium to long term. Thus, credit provision needs to be curtailed, but also redirected away from overactive real estate markets. RBI is pursuing this redirection by

#### 2.16.1 Credit growth rate by sector, October 2006, %, year on year

Retail	34.3
Housing	32.3
Commercial real estate	83.9
Industry, including	24.8
Infrastructure	23.2
Metals	34.6
Textiles	34.2
Engineering	15.3
Chemicals	26.9
Food processing	23.6
Construction	49.5
Agriculture	30.8

Source: Reserve Bank of India, available: [www.rbi.org.in](http://www.rbi.org.in), downloaded 7 February 2007.

#### 2.16.3 Views on capacity utilization: close to or above optimal level, October 2006

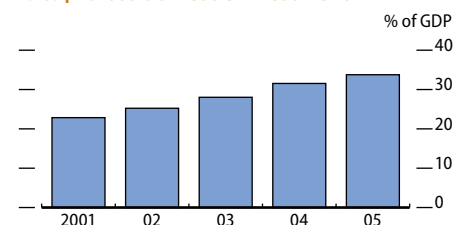


Note: Data refer to share of respondents viewing capacity utilization as close to or above the optimal level.

Source: National Council of Applied Economic Research, *Business Expectations Survey*, October 2006.

[Click here for figure data](#)

#### 2.16.4 Gross domestic investment



Source: Central Statistical Organisation, available: <http://mospi.nic.in>, downloaded 7 February 2007.

[Click here for figure data](#)



requiring banks to hold additional reserves equal to 2% of the value of their outstanding commercial real estate loans. This figure used to be 1%. Such adjustments are an important form of prudential regulation.

Continued high growth in money supply driven by commercial credit during FY2006 prompted RBI to raise policy rates (Figure 2.16.8). However, these rate changes proved inadequate, perhaps because inflation rose faster than some nominal interest rates, leading to a fall in real interest rates. Alternatively, the failure of rate increases to quickly curb credit growth could simply reflect long lags in responses to monetary policy changes. In any event, high growth in bank credit and money supply continued unabated.

Figure 2.16.9 shows stock prices on a tear, which began in 2002 and accelerated further from 2004. Other asset classes, especially property, display similar trends. In the context of corrections in asset prices in most Asian economies in early March, and the reassessment of risk that appears to be driving it, these trends are a source of concern.

Against this background, RBI has expressed serious concerns that the economy is overheating. Consequently, and triggered by the need to sterilize exchange rate interventions in response to a further surge in foreign capital inflows in October–November 2006, the central bank raised the cash-reserve ratio by 100 basis points between December and March. Even these measures appear to have been inadequate, and money supply grew at 20.4% year on year to the first week of January. Thus RBI raised the short-term policy rate again by 25 basis points, and has not ruled out further monetary tightening in the coming months.

Robust demand for credit, higher policy rates, and a rising credit-to-deposit ratio have driven up interest rates, on both deposits and lending. Anticipating tighter liquidity conditions, commercial banks lifted deposit rates by 25–125 basis points and prime lending rates by 75–150 basis points between April 2006 and January 2007.

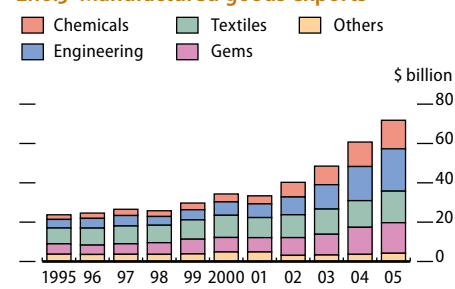
With the loanable funds market tightening, fiscal discipline matters greatly for ensuring that firms seeking to expand industrial bottlenecks are not crowded out.

In this context, it is helpful that rapid growth has boosted revenues greatly, providing ample fiscal space for large increases in expenditures while sustaining fiscal consolidation. The federal budget for FY2007 has been prepared against a background of high inflation and a comfortable foreign exchange reserves position. It also marks the beginning of the 11th Five-Year Plan.

Despite additional expenditure commitments for various social sector programs and rural infrastructure, the federal Government could sustain the momentum of fiscal consolidation. Both the current (revenue) and gross (overall) fiscal deficits as shares of GDP are marginally lower than the targets in FY2006, and the Government expects them to decline further in FY2007. The fiscal deficit is projected to fall to 3.3% of GDP, from 3.7% in FY2006.

Reviving agricultural productivity and output remains a priority area in the budget. A raft of measures has been introduced for strengthening irrigation and facilitating financial inclusion of farmers. On the revenue front, rationalization of indirect taxes continues, with the budget bringing down peak customs duties from 12.5% to 10.0%.

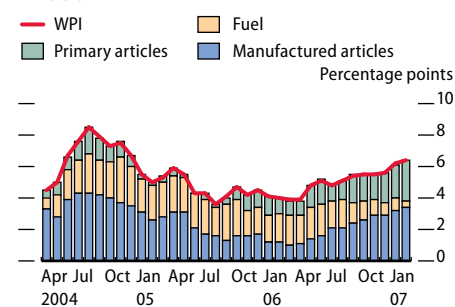
### 2.16.5 Manufactured goods exports



Source: CEIC Data Company Ltd., downloaded 1 March 2007.

[Click here for figure data](#)

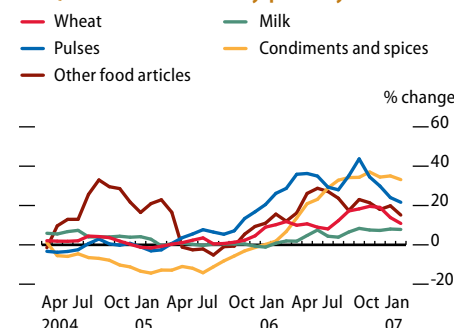
### 2.16.6 Contributions to wholesale price inflation



Source: Reserve Bank of India Database on Indian Economy, available: <https://cdbmsi.reservebank.org.in/cdbmsi/servlet/login/>, downloaded 8 March 2007.

[Click here for figure data](#)

### 2.16.7 Price trends of key primary articles



Source: Reserve Bank of India Database on Indian Economy, available: <https://cdbmsi.reservebank.org.in/cdbmsi/servlet/login/>, downloaded 8 March 2007.

[Click here for figure data](#)

The budget also presents two sets of options for using India's growing foreign exchange reserves (Figure 2.16.10) to finance improvements in infrastructure. Whether and how to reinvest reserves has been widely debated. The immediate difficulty with actually doing so is that, in most cases, rupees would have to be released against foreign currency being returned to the country to purchase domestic inputs. So RBI, already running out of options for controlling money supply and inflation, would have even more liquidity to mop up. Further, demand for rupees by infrastructure investment firms would contribute to rupee appreciation.

The first option presented in the budget neatly sidesteps these complications by requiring foreign exchange reserves, borrowed by foreign subsidiaries of the publicly owned Indian Infrastructure Finance Corporation Limited (IIFCL), to be applied only to expenditures on *imported* inputs for infrastructure projects. Thus the reserves would never be converted into rupees or stimulate local demand. The key limitation of this approach is that most infrastructure inputs are not imported.

The second option would essentially permit foreign IIFCL subsidiaries to borrow RBI's foreign exchange reserves and use them as collateral for larger international loans. These loans could then be applied to domestic infrastructure investments denominated in rupees. Clearly, this option runs into the above monetary problems head on, as would any large foreign direct investment inflows.

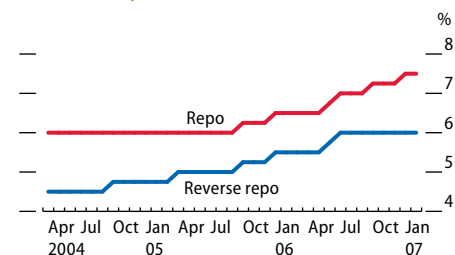
The schemes raise other concerns. IIFCL is a government-owned company, so its borrowings add to the liabilities of the Government. In the context of consolidating the budget, it must therefore be recognized that the Government is borrowing from RBI through the IIFCL. The advisability of such schemes depends on the view taken of the role of foreign exchange reserves accumulation. There are two main perspectives on this.

First, foreign exchange may be accrued for prudential reasons. If this is what reserves are for—and this is clearly RBI's position—then it is institutionally appropriate that RBI, which has been appointed to manage India's overall monetary risks, should be the arbiter of how much accumulation of reserves is “adequate.” It is particularly important not to undermine RBI's autonomy as it attempts to navigate the economy toward fuller capital account convertibility.

Second, foreign exchange may be accruing as part of an effort to use exchange rates to maintain the competitiveness of exports. This is consistent with the fact that RBI has had to actively build up reserves, while remaining active in the foreign exchange market. If this is the case, then foreign exchange accumulation involves a tax on imports. Therefore this plan is tantamount to using a tax on imports to finance infrastructure. This is a policy whose relative merits the Government could debate, but it is not clear why RBI should be involved.

States' finances have improved significantly, after worsening during the second half of the 1990s (Table 2.16.2). This deterioration led to growing recognition of an urgent need to improve their finances. State governments adopted specific expenditure and revenue reform measures, and set aside funds to cover their contingent liabilities. These steps have been institutionally enshrined in fiscal responsibility legislation. The states are also undertaking measures to control rising pension liabilities.

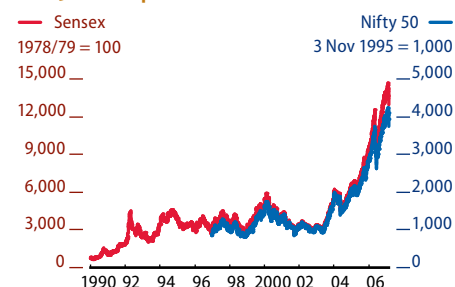
### 2.16.8 Policy rates



Source: CEIC Data Company Ltd., downloaded 8 March 2007.

[Click here for figure data](#)

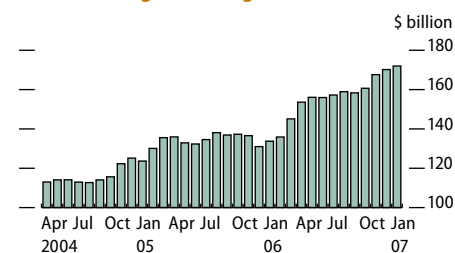
### 2.16.9 Stock price indexes



Source: Reserve Bank of India Database on Indian Economy, available: <https://cdbmsi.reservedbank.org.in/cdbmsi/servlet/login/>, downloaded 10 March 2007.

[Click here for figure data](#)

### 2.16.10 Foreign exchange reserves



Source: CEIC Data Company Ltd., downloaded 1 March 2007.

[Click here for figure data](#)

**2.16.2 Major indicators of state finances (% of GDP)**

	1995–1997	1998–2003	2004–2006
Gross fiscal deficit	2.8	4.3	3.0
Revenue deficit	1.0	2.5	0.5
Capital outlay	1.4	1.5	3.7
Revenue expenditure	12.3	13.5	13.0
Debt	21.4	29.1	32.7

Source: Reserve Bank of India, available: [www.rbi.org.in](http://www.rbi.org.in), downloaded 7 February 2007.

Yet these improvements are threatened by several forces. The first is impending public pay increases. The federal Government has appointed a Pay Commission to review public salaries, and states are likely to follow suit. Some already have (Karnataka and Punjab). The second is that the era of easy borrowing seems to be over. Although existing debts have been restructured, bringing down the interest rates assessed on them, new debts will incur higher interest. The federal Government therefore needs to keep a strict vigil on states' borrowing programs. Finally, the pressure to generate larger resources for India's 11th Five-Year Plan, coupled with complacency facilitated by strong recent growth, is reducing the constituency for fiscal discipline.

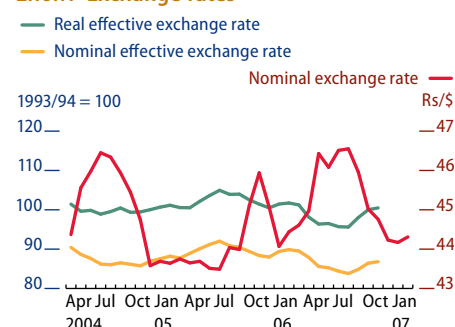
Domestic overheating has been forcing RBI to raise interest rates. As a consequence, surges in capital inflows are leading to rupee appreciation pressure. Indeed, the real effective exchange rate has risen in recent months (Figure 2.16.11). Export growth has declined, and the current account deficit is rising. The balance-of-payments data presented below reflect these forces.

While goods exports grew 23% in the first half of FY2006, imports grew by 25%, widening the merchandise trade deficit to \$35 billion (Figure 2.16.12). This deficit was significantly offset by robust inflows from invisibles, which included earnings from services such as software exports and business services (Figure 2.16.13), as well as transfers from nonresident Indians. The combined current account deficit therefore rose to \$11.7 billion from \$7.2 billion in the first half of FY2005. India ran a current account surplus in FY2003, when the latest growth acceleration began.

Pursuing growth opportunities, net foreign direct investment (at \$4.2 billion) exceeded net portfolio capital inflows in the first half of FY2006 for the first time in several years. Net capital inflows were \$19.3 billion during the same period. The surplus in the capital account is mainly attributable to foreign (direct and portfolio) investment (\$5.8 billion), commercial borrowing (\$5.1 billion), deposits by nonresident Indians (\$2.0 billion), banking capital (\$1.1 billion), and short-term credit and other capital (\$4.9 billion). Thus, even with a large current account deficit, sizable capital inflows led to foreign exchange reserves accumulation of \$8.6 billion.

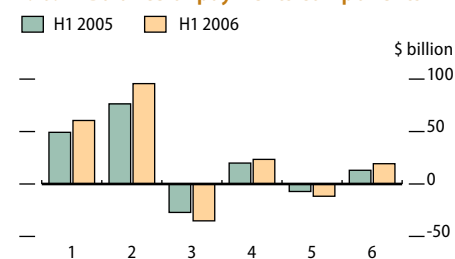
## Economic prospects

The performance described above highlights a fairly broad and overactive domestic demand base for the economy in FY2006, with public expenditures, investment, and household spending all contributing. RBI

**2.16.11 Exchange rates**

Source: Reserve Bank of India Database on Indian Economy, available: <https://cdbmsi.reservedbank.org.in/cdbmsi/servlet/login/>, downloaded 5 March 2007.

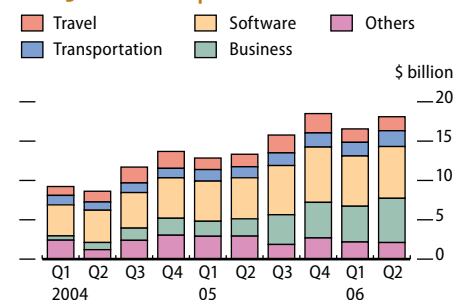
[Click here for figure data](#)

**2.16.12 Balance of payments components**

Note: 1 = exports; 2 = imports; 3 = trade balance; 4 = net invisibles; 5 = current account balance; 6 = capital account.

Source: Reserve Bank of India, available: [www.rbi.org.in](http://www.rbi.org.in), downloaded 7 February 2007.

[Click here for figure data](#)

**2.16.13 Services exports**

Source: Reserve Bank of India Database on Indian Economy, available: <https://cdbmsi.reservedbank.org.in/cdbmsi/servlet/login/>, downloaded 1 March 2007.

[Click here for figure data](#)

has responded with policies intended to slow demand growth, and has indicated a willingness to tighten further.

The following forecasts rest on five major assumptions. First, there is no sudden decline in fiscal discipline. Second, monetary conditions tighten further. Third, agricultural productivity proceeds at its usual, plodding pace. Fourth, with the softening of international oil prices, the Government does not pursue further increases in diesel, kerosene, and cooking-gas prices. Fifth, RBI permits a modest appreciation of the rupee in real effective exchange rate terms.

Rising interest rates in FY2007 will have subtle and wide-ranging consequences, mediated, most importantly, through property development. As liquidity becomes scarce, banks are beginning to reexamine lending practices, which will lead to scaled-back lending for construction and housing loans to allow them to deal with the emerging maturity mismatch. Construction has already decelerated significantly in FY2006. Consumer credit should also come under pressure as banks reallocate loanable funds.

This loss of construction momentum is likely to persist through early FY2007, with knock-on effects for other components of demand. Spending on consumer durables, which has benefited from the construction and sale of new homes, will continue to slow in FY2007. Interest rate rises will also induce consumers to delay consumption, further reducing consumer durables demand. Manufacturing investment will be slightly restrained as falling demand for durables and new homes eases pressure to add industrial capacity. Rising costs of borrowing will also have a direct effect on manufacturing investment, despite good corporate earnings in the current year.

These restraints on demand growth from home buyers, manufacturing investors, and consumers will be accompanied by fiscal discipline, so domestic demand growth will be limited overall. Modest rupee appreciation will contain export growth. However, import growth will remain moderate as well, due to easing demand growth.

These forces are expected to moderate growth rates, bringing aggregate growth down to 8.0% in FY2007, closer to potential (Figure 2.16.14). The correction will not be sharp, in large measure because several drivers will continue to hold sway: industrial capacity remains tight, militating for high investment; key consumption goods markets are expanding, independent of new homes sales—including the sale of consumer durables for homes already built or construction under way; and demand for exports remains healthy, though with some deceleration. Thus despite a firm monetary position, momentum should ensure a soft landing.

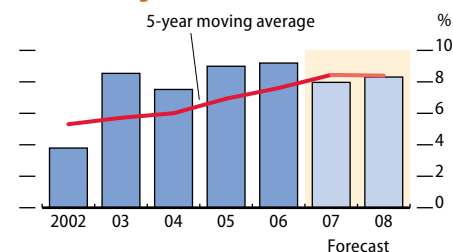
With aggregate demand back in control, interest rates are likely to stabilize and turn down slightly by FY2008. Growth that year should return to around 8.3%, as interim relief offered by the Federal Pay Commission is expected to buoy consumer spending, and as spending strengthens in the new interest rate environment. Specifically, construction is likely to pick up slightly. A large portion of the huge rise in bank lending to real estate in FY2006 was used to finance land acquisition. Future demand for commercial real estate is currently unpredictable, reflecting the uncertain future trajectory of interest rates

### 2.16.3 Selected economic indicators

	2007	2008
GDP growth	8.0	8.3
Wholesale price inflation	5.0	5.0
Current account balance (% of GDP)	-2.2	-2.2

Source: Staff estimates.

### 2.16.14 GDP growth



Sources: Central Statistical Organisation, available: <http://mospi.nic.in>, downloaded 2 March 2007; staff estimates.

[Click here for figure data](#)

and inflation. Therefore, while construction on some lands has been put on hold, it is likely to restart as the cost of funds becomes more conducive to long-term investments.

Against this background, wholesale price inflation is expected to soften and then remain steady at 5.0% in FY2007 and FY2008 (Figure 2.16.15). Inflationary pressures are seen weakening on four factors. First, and most important, the tighter monetary position will limit demand expansion. Second, as a result of rising agricultural prices, the acreage under cultivation has increased, and good *rabi* (spring) harvests are expected. Third, already-high agricultural prices in FY2006 will sap some of their upward momentum in FY2007. And finally, cuts in import duties on key commodities, including edible oils, will help.

Realized performance may depart from this outlook for four key reasons. The first is the potential for an excessive contraction of credit availability. This could be due to unexpected fiscal laxity, particularly in noninvestment expenditures, or an overly severe monetary response, which would beat back investment, lowering growth.

Second, with food stocks still low, the possibility of further supply shocks in the 2007 *kharif* (autumn) harvest, or beyond, present important risks. Food supply management policies therefore need to be urgently improved to reduce price volatility. Minimum support prices are too low, buffer stock targets are not being filled, and measures to augment food stocks through imports have failed. A purely monetary solution to price increases will not work if food prices resume their acceleration.

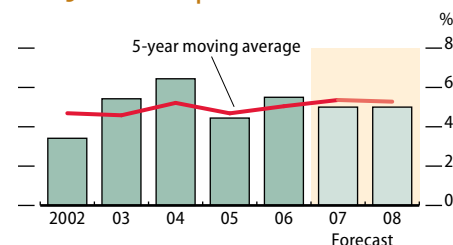
Third, export growth has started to decline (Figure 2.16.16). This is especially true of manufactured exports, and could reflect real exchange rate appreciation. Declining exports in the short run, however, are not an economic risk—simply a potential deviation from forecast. Given excess demand in the economy, some real appreciation is expected, and a little less exuberance on the external account will help the economy to rebalance. With foreign investors confident in India's growth prospects and a solid stock of currency reserves, balance-of-payments reversals are unlikely. Active management of real exchange rates is therefore unnecessary. RBI should therefore focus on limiting short-term exchange rate volatility.

Fourth, inflated asset prices—both for real estate and equities—might fall rapidly. This would suck the air out of hot consumer spending, as wealth falls. It would also make it more difficult to raise funds for new investment on the equity market. And this would also create significant uncertainty regarding the forward path of interest rates, investment, and ultimately growth.

## Development challenges

The Government envisages growth rates of 8.5% over the next 5 years with little inflation. Agriculture provides only 18.5% of GDP, and agrarian growth has slipped to 3.0% over the last 6 years. With industry and services, which make up 81.5% of output, growing fast at anywhere between 7% and 11%, the performance of agriculture is not arithmetically important for aggregate growth. For example, if agricultural growth rates doubled, GDP growth would edge up by a mere 0.5%. It is therefore tempting to focus on industry, and less capital-intensive services, when seeking growth.

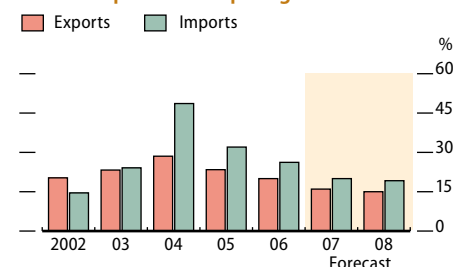
2.16.15 Wholesale price inflation



Sources: Reserve Bank of India Database on Indian Economy, available: <https://cdbmsi.reservebank.org.in/cdbmsi/servlet/login/>, downloaded 8 March 2007; staff estimates.

[Click here for figure data](#)

2.16.16 Export and import growth



Sources: Reserve Bank of India, available: [www.rbi.org.in](http://www.rbi.org.in), downloaded 7 February 2007; staff estimates.

[Click here for figure data](#)

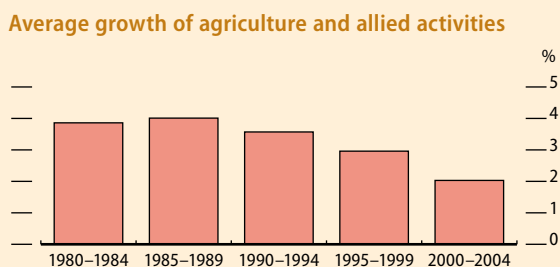


However, the arithmetic belies far more serious matters. Agriculture and related activities employ around 60% of India's labor force (or 115 million farming families), so stagnation in agricultural productivity will put poverty reduction on hold. India's food security situation is also deteriorating alongside farmers' incomes. What is to be done?

Box 2.16.1 delineates the key forces stifling agriculture, and argues that diversifying products into cash crops, improving foodgrain yields in lagging states, and scaling up agriculture a little will help. The last will probably accelerate the rate of labor displacement out of agriculture. Substantial job creation, particularly in India's infrastructure-scarce factories, is therefore urgent. But unfortunately, meager farm incomes leave little by way of profits to invest in rural industry. This helps to

### 2.16.1 Agriculture in transition

Agricultural performance in the past decade has been erratic, while growth in agriculture and allied activities has been slowing since the mid-1980s (box figure).



Source: Mathur, A., S. Das, and S. Sircar, "Status of Agriculture in India: Trends and Prospects." *Economic and Political Weekly*, 30 December 2006–5 January 2007, pp. 5327–36.

Three primary reasons for the agricultural slowdown have been falling levels of public investment, especially in irrigation; steady deterioration of the public institutions that provide credit, inputs, and research and extension services to farmers; and environmentally unsustainable production practices (aggravated by subsidies, output pricing, and marketing policies). For example, while 39% of central Punjab enjoyed water table depths of less than 5 meters in 1973, none does today. Each of these factors adversely impacted yields of principal crops. Rice yields in 2002 were 2,915 kg/hectare compared with 3,448 in Bangladesh, 9,135 in Egypt, and 7,372 in the United States. Wheat yields, at 2,770 kg/hectare, compare poorly with 3,885 in the People's Republic of China, 7,449 in France, and 8,043 in the United Kingdom.

Reviving the performance of agriculture is therefore the major challenge of the 11th Five-Year Plan. The strategy rests on two pillars: increased public investment in rural infrastructure, and reforms and incentives facilitating diversification into high-value crops.

However, agricultural diversification is held back by structural rigidities.

- Marketing arrangements need to be revamped to deal with monopsony, rent seeking, and waste. Private sector competition can help in this regard. Private investment is also crucial for stimulating downstream food processing and extension research to support horticultural growth.
- The absence or poor condition of supporting infrastructure, such as cold storage, hampers the process of diversification. Moreover, the shift to animal husbandry and dairy is constrained by, for example, lack of green fodder, grazing land, and proper supply-chain facilities.
- Better extension and research services are required to adapt new agricultural activities to regional conditions, and help farmers connect to domestic and foreign markets.

Corporate contract farming is often an effective facilitator of agricultural diversification. However, land consolidation is inexorable under contract farming, and distressed farmers, many of whom are heavily indebted, may sell out despite having no alternative livelihood. Notwithstanding the obvious merits of freedom of choice, landlessness in the context of high underemployment can put serious strains on the social fabric.

Agricultural diversification carries significant productivity benefits, but it may have implications for food security. The Government faces a choice: either procure food for national buffer stocks on international markets while providing farmers with decent income alternatives; or, in the name of food security, do not assist farmers in diversifying into higher value-added cash crops when profitable. The latter, through neglect, would implicitly require farmers, among India's poorest people, to bear the burden of providing national food security.

Certainly, interventions that would increase productivity in both cash crops and foodgrains, and enhance farmers' ability to choose between the two in response to market conditions, would be the preferred outcome.



explain why large orchestrated industrialization is being attempted, with state involvement, in rural areas through the development of special economic zones (SEZs).

Such industrial developments demand more agricultural land and even greater labor displacement. Unsurprisingly, these prospects are raising tensions, particularly among landless agricultural laborers who fear a loss of livelihood and expect little by way of compensation. The challenge, therefore, is to simultaneously boost agricultural productivity, while creating enough manufacturing and other nonagricultural employment opportunities that are suited to those pushed out of agriculture.

While India's agrarian crisis has unfolded slowly but relentlessly, the dynamics of employment have shifted recently. Table 2.16.4 shows that employment growth has quickened over the last 5 years. It has done so among both men and women, and those living in rural and urban areas. Further, the data show that casual labor, with its attendant risks (food insecurity for one) is stagnant. Rather, the new jobs have gone to the self-employed and regular employees.

Moreover, employment growth has picked up in most activities. The only two activities identified in Table 2.16.4 where it has slowed ("Trade, hotels, and restaurants," and "Transport, storage, and communications"), have nevertheless grown robustly. The data appear to reveal a rebalancing of employment growth, with industrial employment growing faster, and growth rates in services regressing toward the mean. Indeed, in the last 5 years, industry overtook services in terms of employment growth.

However, those aggregate calculations neglect important details regarding the types of jobs, the locations of those jobs, and the education levels of prospective employees. A large proportion of Indians are illiterate (24.7% of men and 46.3% of women, according to the 2001 census), and many of them are older and supporting families, so educating them belatedly may be difficult. Therefore, a particularly serious concern is whether the economy can generate the types of jobs that would hire the educationally disadvantaged.

The following analysis uses numbers calculated from the National Sample Survey's employment datasets drawn in 1993/94 and a somewhat thinner sample drawn in 2004. At least in so far as the *quantity* of jobs created is concerned, the analysis indicates that these concerns regarding the less educated are somewhat misplaced.

Table 2.16.5 presents the estimated number of new employees in manufacturing and services, by education level. It shows that manufacturing has created more employment for the less educated than has services. Of new manufacturing jobs, 69.6% went to workers without secondary degrees, compared with only 45.6% in services. The four most prolific job creators, which account for 74% of new manufacturing jobs created between 1999 and 2004 are textile products (including apparel);

#### 2.16.4 Overall employment growth rates, %

	1993/94– 1999/2000	1999/2000– 2004
Rural male	1.0	1.9
Rural female	0.2	3.2
Rural persons	0.7	2.4
Urban male	2.6	3.7
Urban female	1.0	6.2
Urban persons	2.3	4.2
Total male	1.4	2.4
Total female	0.3	3.7
<b>Total persons</b>	1.0	2.8
<b>Nature of employment</b>		
Self employed	0.4	4.3
Regular employed	2.3	3.6
Casual labor	1.5	-0.1
<b>All</b>	1.0	2.8
<b>Sector employment</b>		
<b>Agriculture</b>	0.1	1.5
Mining and quarrying	-2.8	2.4
Manufacturing	1.6	5.0
Electricity, water, etc.	-4.7	3.1
Construction	6.4	8.2
<b>Industry</b>	2.4	5.8
Trade, hotels, and restaurants	6.3	3.9
Transport, storage, and communications	5.3	4.9
Other services	-0.7	3.5
<b>Services</b>	2.9	3.9
<b>All sectors</b>	1.0	2.8

Source: National Sample Survey reports of 1993/94, 1999/2000, and 2004.

#### 2.16.5 Net new job creation in manufacturing and services, 1993/94–2004

Education level of new employees	Manufacturing		Services		All new employment	
	Total new jobs	% of new jobs	Total new jobs	% of new jobs	Total new jobs	% of new jobs
Less than primary	826,767	6.15	1,301,377	4.52	-7,225,836	-10.32
Primary	3,003,227	22.34	3,716,948	12.90	18,020,414	25.74
Middle	5,523,520	41.08	8,103,174	28.13	29,331,773	41.90
Secondary	1,750,110	13.02	4,019,009	13.95	11,042,178	15.77
Higher secondary	718,377	5.34	3,384,852	11.75	6,668,285	9.52
Postsecondary	1,624,252	12.08	8,277,945	28.74	12,171,631	17.39
<b>Total</b>	13,446,253	100	28,803,305	100	70,008,445	100

Note: Figures were calculated from National Sample Survey raw data, which were scaled to accurately reflect the size of the Indian population, per the central statistical organization. Scaling factors were 14.6% in 1993/94 and 14.0% in 2004.

Source of raw data: National Sample Surveys 1993/94 and 2004 employment rounds.

nonmetallic mineral products; wood, wood products, furniture, and fixtures; and beverages, tobacco, and related products. Fewer than 20% of workers in each of these sectors have completed secondary school.

The upshot is that as the less educated are squeezed out of agriculture, generating jobs for them will be significantly easier if these education-unintensive manufacturing subsectors continue to grow well.

The analysis so far does not reveal whether the low-skill jobs are being generated in the formal or informal sector. It is likely that much of the manufacturing in the four subsectors identified above is carried out by small enterprises in the informal sector. It follows that the new less-educated manufacturing workers might not enjoy the high levels of labor productivity that come with organizational scale. This is consistent with a study by IMF researchers, who have noted low rates of less-educated job creation in the *formal* manufacturing sector, which implies that these jobs must be predominantly in the informal sector.

In this environment, where farm incomes are falling; where the bulk of job creation is in self-employment and traditional services; and where those low-skill workers able to find manufacturing jobs are in the informal sector, provision of social safety nets becomes a major challenge. Workers without medical insurance, reliable savings mechanisms, and limited access to credit to finance investments and smooth consumption are particularly vulnerable to adverse economic shocks.

This challenge is magnified by the large disparities between agricultural and industrial land productivity, which are creating pressure in land markets. Governments have begun promoting the redevelopment of farmland with the aim of creating SEZs which are intended to assist industrial developers seeking to bypass infrastructure and administrative bottlenecks. As detailed in Box 2.16.2, the creation of SEZs involves a series of measures that are fiscally costly, potentially diverting industry away from other areas, and bring states' land-acquisition powers to bear in markets where land ownership is either poorly defined, or carries significant external effects. Given that large numbers of agricultural laborers who have no title to these lands nevertheless depend upon them for sustenance, the issue is exceptionally emotive.

However, manufacturing is not the only activity placing demands on land. As argued in Box 2.16.1 above, farmers face strong incentives to move land into the production of cash crops. However, agricultural diversification has obvious implications, as diversification may exacerbate India's deteriorating food self-sufficiency situation, as well as inflation.

Well-targeted interventions are required that seek to identify and remove the very distinct barriers to agricultural productivity growth in different states. Foodgrain yields can be increased significantly in agriculturally lagging states, whereas diversification is required to enhance farm income in more agriculturally advanced regions. As the Government has chosen to pursue self-sufficiency in foodgrains as a way of ensuring food security, it must strive to ensure that farmers receive adequate support for their role in making the policy work. While the budget has set aside funds for this, improving systems for delivering services to farmers remains the bottleneck.

Each of these trends shows clearly that as India's modern sectors steam ahead of the traditional sectors, social tensions are brewing,

### 2.16.2 Special economic zones

A special economic zone (SEZ) permits a set of units to operate in a well-defined area where policy measures (which are not generally applicable to the rest of India) promote certain economic activities.

These zones offer high-quality infrastructure facilities and support services, and allow duty-free imports of capital goods and raw materials. In addition, they offer attractive fiscal incentives and investor-friendly institutional services such as simpler customs, banking, and other procedures.

The SEZ Act of 2005 provides a raft of incentives to attract firms. These include: fiscal incentives; tax concessions; establishment of free trade and warehousing zones; reliable infrastructure services, including power, warehousing, and transport; establishment of a single-window authority for each SEZ to impart greater administrative autonomy and reduce bureaucratic costs; and designation of special courts and a single enforcement agency to ensure speedy trials.

Fifteen SEZs were already operational prior to the SEZ Act. The central Government had given formal or in principle approval to 403 applications for setting up new SEZs as of 20 October 2006. Investments of about Rs1 trillion with an employment potential of over 500,000 are expected from the new SEZs over the next 3 years. The central Government has, however, put all new SEZ approvals on hold until the following issues are resolved.

The pros and cons of SEZs are very difficult to weigh. Nothing of this scale and with this particular

set of administrative arrangements and subsidies has been attempted before in India. Clearly, SEZs present an opportunity to provide potential investors with better infrastructure and greater bureaucratic efficiency. Nevertheless, valid criticisms of subsidies to SEZs deserve consideration.

First, with firms already eager to invest (but for the infrastructure and bureaucratic problems), providing enclaves that meet these needs might be enough to stimulate investment. Tax breaks may therefore be unnecessary. Second, SEZ tax inducements are expensive, and come at a time when government is struggling to provide adequate infrastructure in the wider economy.

Third, special tax exemptions always risk opening up loopholes for tax evasion. And fourth, subsidies can undermine both investment and existing firms located outside the SEZs. These firms suffer two disadvantages—worse infrastructure and higher taxes.

Serious concerns have also been expressed with regard to the people displaced by land acquisition. Important issues include: the kind of land to acquire for SEZs; the extent of state involvement in selecting and taking land; how to provide land losers with financial stakes in SEZs; and how to retrain economically displaced people, especially landless agricultural workers for jobs in SEZs.

Indeed, some of the loudest political opposition to SEZ projects comes from the landless, who may not receive lasting compensation for land conversion and who lack the capital to become self-employed.

mediated as ever through tight markets for land and food, and slack markets for labor.

The Government is in a position to play a crucial role in alleviating these tensions. It can do so by assuring appropriate compensation packages for displaced workers; retraining schemes to permit displaced workers to qualify for jobs on SEZs; and most important, infrastructure support for creating and locating manufacturing jobs more organically. More directly, it can help tackle the tensions through well-targeted investments to improve agricultural productivity.

This pursuit of geographically distributed industrialization and agricultural productivity growth requires significant resources to expand infrastructure. For this reason, some economists have urged the Government to suspend its fiscal discipline targets. Yet the historical data suggest that fiscal laxity is at least weakly associated with slower growth in India. Given high capacity utilization and the rising costs of borrowing today, it would be unfortunate if government borrowing crowded out private investment. Therefore, the Government must continue its fiscal consolidation efforts to create fiscal space for infrastructure financing, and continue to explore alternative mechanisms for such financing.

# Maldives

The economy strongly rebounded in 2006, after the downturn in 2005 that stemmed from the impact of the December 2004 tsunami. The Government's expansionary fiscal policy adopted in response to the disaster, building on long-standing structural issues, such as expansion of the civil service and continued heavy subsidies for some social services, worsened the fiscal indicators. This deterioration presents a potentially serious threat to prospects of further recovery.

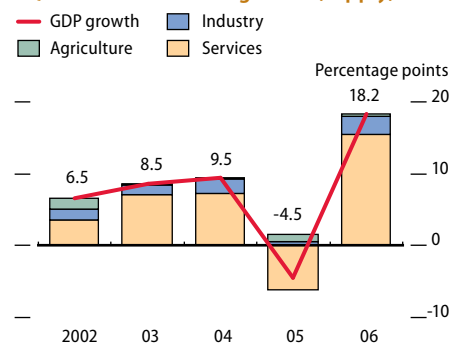
## Economic performance

After 2005's contraction—essentially caused by the December 2004 tsunami—2006 saw an economic upswing, with GDP growth estimated at 18.2% (Figure 2.17.1). Tourism, traditionally accounting for about one third of GDP, grew by nearly half and its contribution to GDP rebounded to its former share as tourist arrivals recovered to close to pre-tsunami levels (Figure 2.17.2). Transport and communications recorded 12% growth. Growth in fisheries (accounting for 7% of GDP, though more important in terms of exports and employment) increased by 3.7% from its robust expansion of 17% in 2005.

Inflation measured by the consumer price index is volatile, as the heavily weighted food component fluctuates significantly. In 2006, inflation picked up slightly to 3.7% from 3.3% a year earlier. This was largely driven by price rises in transport and communications, and in housing, water, fuel, and power, in the main reflecting global oil price rises. The Maldives Monetary Authority tightened monetary policy in 2006 to address inflationary pressures, raising the interest rate on certificate of deposits from 4% to 5% in January. Broad money, however, accelerated to 21% growth from 12% in 2005, driven by a large expansion (50%) in private sector credit, mainly to the tourism and wholesale/retail trade sectors.

The 2006 budget planned for the deficit to widen to 18.1% of GDP from 12.5% in 2005 (Figure 2.17.3). Expenditures were set to grow by 51% (74.5% of GDP) mainly due to a more than doubling in capital expenditures, including those for tsunami reconstruction projects, while current spending was slated to rise by around 18%. Total revenues, including a large increase in grants, were to grow by 44% (to 56.4% of GDP). Preliminary fiscal data through the third quarter of 2006 show strong increases in both tax and nontax revenues. Import duties (about 70% of tax revenues) rose by around 40% from the previous year, reflecting a higher level of imports (as well as the Government's decision to withdraw the 2005 duty exemption granted for tsunami-related reconstruction) and a recovery in tourism taxes (about 20% of tax revenues) from the previous year's lower base. Large nontax revenues of advance payments from newly leased resorts were also collected. However, expenditures through the third quarter of 2006 have risen

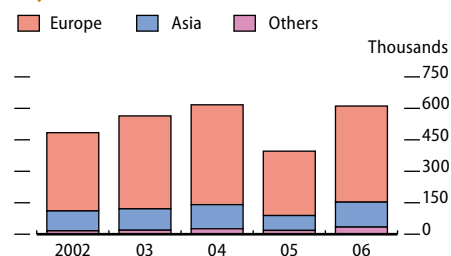
2.17.1 Contributions to growth (supply)



Source: Maldives Monetary Authority, *Monthly Statistics*, Vol. 8, No. 2, February 2007.

[Click here for figure data](#)

2.17.2 Tourist arrivals



Source: Maldives Monetary Authority, *Monthly Statistics*, Vol. 8, No. 2, February 2007.

[Click here for figure data](#)

less than revenues, on account of lower utilization of the development (capital) budget. This result is likely to hold for full-year 2006, as monetary data show that net credit to government decreased (by 22%) and balance-of-payments estimates no substantial increase in grants.

The Maldives is an import-dependent country, bringing in everything from staple foods to resort supplies, construction materials and petroleum products. The average ratio of imports to GDP in 2000–2004 was about 60%, while that for merchandise exports was about 20%. The trade balance deteriorated significantly after 2004, leading to a deficit of \$604 million in 2006 (preliminary estimate, about 67% of GDP; (Figure 2.17.4). Imports increased by 27% in 2006 as both private sector and public sector imports grew. The increase largely came from petroleum products and from construction materials and related products. Exports (domestic and reexports) recorded a strong increase of 40%, mainly due to a pick up in marine exports, which now account for nearly all domestic exports. Garment production and exports virtually disappeared in 2005 with the termination of the quota system at end-2004.

Net services and income receipts about doubled and reached \$185 million in 2006. Earnings from tourism were up by 51% to \$434 million for the year but still were 8% lower than the 2004 pre-tsunami level. Grant transfer receipts estimated at \$122 million were somewhat less than the \$152 million of grants in 2005. Taking into account payments (mainly workers' remittances), net transfers amounted to \$42 million. In sum, the current account deficit widened to \$376 million (42% of GDP, from 36% in 2005).

In terms of financing the current account deficit, the financial account saw an estimated large inflow of \$318 million in 2006, largely private and commercial bank borrowing. Taking account of a large positive errors and omissions, the overall balance was estimated to post a surplus of \$45 million in 2006 (switching from the \$17.3 million deficit of the previous year). At \$232 million as of end-2006, gross reserves offer 3.0 months of import cover.

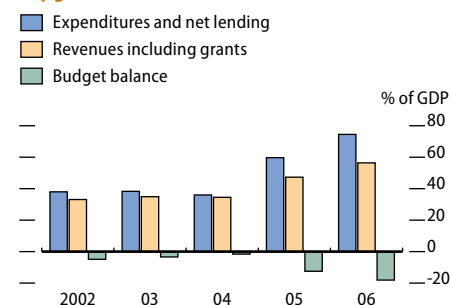
The rufiyaa's peg to the falling US dollar (Rf12.8/\$1 since 2001) has contributed to tourism's sharp recovery. About three quarters of tourists in 2006 were Europeans, benefiting from a strong euro.

External debt statistics of the country cover only government and government-guaranteed borrowings, and the external debt of the banking sector. In the 2 years since the tsunami, external debt sharply increased by \$250 million to reach an estimated \$582 million at end-2006 (64% of GDP), about three quarters the expansion in debt was accounted for by sector short-term external borrowing of commercial banks for onlending to the private sector. At end-2006, about 63% of the outstanding debt was in medium- to long-term maturities (the bulk of which is concessional lending by official creditors), while the balance of \$213 million was short debt of commercial banks. The debt service ratio at the end of 2006 was 4.6%.

## Economic prospects

The Government estimates that GDP will continue its rapid growth in 2007, at 12.1%. This would appear realistic given that tsunami-related damage is being restored, tourism is rebounding strongly, and inflation

### 2.17.3 Fiscal indicators

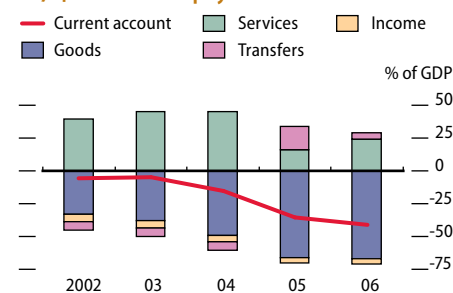


Note: 2006 is budget estimate for the year.

Source: Maldives Monetary Authority, *Monthly Statistics*, Vol. 8, No. 2, February 2007.

[Click here for figure data](#)

### 2.17.4 Balance-of-payments indicators



Source: Maldives Monetary Authority, *Monthly Statistics*, Vol. 8, No. 2, February 2007.

[Click here for figure data](#)



and the balance of payments are under control. Growth would likely slow in 2008, perhaps to about 8%. The Government estimates that the current account deficit could even exceed 60% in 2007 if development plans are fully put through. Inflation should stay at around 4%.

However, the deteriorating fiscal indicators are worrying. The large budgeted deficit stems not only from reconstruction, but also from long-standing structural issues such as expansion of the civil service (and large pay rises) and subsidized social services. Unless the Government addresses these issues before its debt reaches unsustainable levels, high economic growth cannot be maintained. Increases in commercial banks' short-term external debt also need careful monitoring.

The downside risks are grounded in the narrow economic base, shallow financial sector, structural issues that have been masked by tourism-led growth, and severe human resources deficiencies. On average, some 40% of the labor force is expatriate—both at the lower and higher skills end—and a large number of secondary school graduates are absorbed by the public sector, not on account of their skills, but as a social policy objective of keeping youth unemployment down. While absolute poverty has declined and the Maldives is in compliance with the Millennium Development Goal of poverty reduction, inequities and inequalities have increased between Male' and the outer atolls.

## Development challenges

In the absence of any meaningful structural revenue-enhancement measures, there is a possibility that development expenditures will bear the brunt of the necessary fiscal adjustment. This is also evident from the Government's preliminary medium-term fiscal projections, which show development expenditures progressively declining to 9.6% of GDP by 2010, the final year of the Seventh National Development Plan.

The economy remains overdependent on a narrow and concentrated economic base with excessive reliance on tourism. Given its natural endowments, the Maldives will continue to rely on tourism to fuel its growth. However, the feasibility of expanding into business tourism (conference tourism) should be examined.

Other structural issues, such as the presence of many state-owned enterprises, coupled with the absence of a clear strategy for privatization, have flowed into the economic undercurrents that are now beginning to surface ominously in the fiscally constrained post-tsunami era. The process of political liberalization needs to be continued and higher standards of governance adopted to facilitate inclusive development.

In addition, given that the country now has middle-income country status with an average per capita income projected to increase to over \$2,500 in 2006, the Government should decide whether to keep its role to providing and sustaining an enabling environment with a well-defined regulatory mechanism, including enforcement of contracts; or whether to become a more expansive provider of social goods and services.

### 2.17.3 Selected economic indicators

	2007	2008
GDP growth	12.1	8.0
Inflation	4.0	4.0
Current account balance (% of GDP)	-60.9	-15.0

Sources: Government projections for 2007; staff estimates for 2008.



# Nepal

Economic growth remained hobbled by the long-running insurgency, political instability, and poor weather. Yet there is now guarded optimism on the political, and thus economic, front, due to major political breakthroughs starting in April 2006. These brought a comprehensive peace agreement that officially ended the 11-year armed insurgency and started a political process that holds promise of peace and a transition to a more productive economy. Nevertheless, the challenges are huge, and include widespread poverty, pervasive social inequality, low economic growth, and the legacy of a quasi-feudal political structure.

## Economic performance

Political developments were the main event of the year, and moved rapidly from late-April 2006 when parliamentary government was restored following nationwide demonstrations. A few days later a cease-fire was declared by the Maoist insurgents. Subsequently in November, a comprehensive peace agreement was signed that officially ended the 11-year insurgency. Then in January this year the parliament approved an interim constitution that will be effective until a constituent assembly, scheduled to be elected by June 2007, approves a new constitution. Also in January, the Communist Party of Nepal (Maoist) joined the interim legislature.

Many difficult issues of course remain, but the current peace process holds the best promise yet of a new beginning for the country.

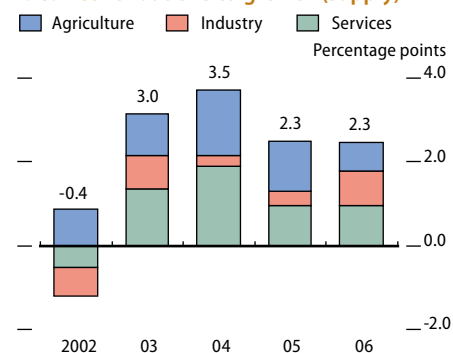
The economy continued its passage through the doldrums in FY2006 (which ended mid-July 2006), undermined by the continuing insecurity and political turmoil (the restoration of parliamentary rule and the cease-fire came late in the fiscal year). GDP grew at 2.3% (Figure 2.18.1), a rate unchanged from a year earlier. Weak conditions in agriculture largely offset industry's slight improvement.

Inclement weather hampered agriculture, damaging the production of the main food and cash crops. Agriculture, which accounts for about 40% of GDP and the livelihoods of 80% of the population, grew by 1.7% in FY2006 (contributing 0.7 percentage points of GDP growth), down from about 3.0% the previous year. Production of key agricultural crops declined by 2%, with paddy output, which accounts for one fifth of the value of food crops, falling by 1.8%.

Industry grew by 3.5% (contributing 0.8 percentage points), primarily due to a 4.2% expansion in construction after 2 years of stagnation. Utilities output was also well above the previous year's level. However, manufacturing remained weak, slipping to 2.2% growth, largely on tumbling garment production (exports slid 35%), continued supply and transport bottlenecks, and more frequent work stoppages and disruptions.

Services growth stayed at 2.4% (making a 1.0 percentage point contribution to growth). Performance was mixed as a recovery in trade, restaurants, and hotels was offset by slower growth in transport,

2.18.1 Contributions to growth (supply)



Source: Nepal Rastra Bank, available: <http://www.nrb.org.np/>, downloaded 12 December 2006.

[Click here for figure data](#)

communications, and storage; finance and real estate; and social services. Tourist arrivals were little changed.

In terms of aggregate demand, both public and private investment stayed sluggish, reflecting the weak investment climate and security-related limitations to making development expenditures in much of the countryside. At 18.5% of GDP, the gross fixed investment rate continued its decline of recent years, moving by about 0.5 percentage points below the level of FY2005 (Figure 2.18.2). As for that year, growth in GDP was mostly driven by expansion in private consumption, which was made possible by the continued large, rapidly expanding inflows of remittances.

The budget deficit widened slightly to 1.8% of GDP, from 0.8%, indicative both of weakness in attempts to expand total revenues and of a decline in grants. Receipts (including current revenues, capital receipts, and grants) increased by 4% (compared with 16% in FY2005) due to low economic activity, poor export growth, and a shortfall in aid flows. Government spending, growing by 11%, fell substantially short (about 15%) of initial budget targets, thereby limiting the deterioration in the deficit.

Both current and capital expenditures missed budget plans, reflecting the difficulties in undertaking spending because of conflict-related disruptions. With foreign aid financing falling below both the budgeted and FY2005 levels, domestic financing of the deficit amounted to 1.4% of GDP (up from 0.2%).

Continued strong growth in remittances boosted liquidity in the banking sector. Broad money (M2) rose by 15.6%, with about two thirds of that coming from a rise in net foreign assets. Private sector credit picked up by 8.9%, in good part reflecting higher import credit, while credit to government rose by 14.5%.

Over the year, bank lending rates rose to about 11.6%, while deposit rates declined marginally to 2.3%. Little progress was made in the effort to accelerate loan recoveries from large, willful defaulters, yet this is essential to bring down high levels of nonperforming loans and improve banks' operations.

Inflationary pressures grew in FY2006 with the consumer price index averaging 8.0%, nearly double the prior-year rate (Figure 2.18.3) and marking the largest rise in 6 years. Lower farm output drove up agricultural prices while upward adjustments to petroleum-product prices in February pushed up fuel and transport costs. The impact of the upward revision in value-added tax in May 2006 was a factor in commodity price rises.

Nepal Rastra Bank sought to tighten monetary policy through raising the discount rate by 25 basis points to 6.25% in February 2006, though this has a weak impact and reserve money still increased by 14% over the year. As the central bank has only limited means to engage in market operations to offset large inflows of remittances, monetary aggregates such as reserve money and money supply are very difficult to control. Still, given that the Nepalese rupee is pegged to the Indian currency, domestic inflation is broadly kept to India's. This link was evident in the rapid growth of imports in FY2006, which muted price pressures. In view of the rise in foreign exchange reserves and the very comfortable level of reserve holdings, this safety valve on price pressures remains securely in place.

Lackluster export growth, higher imports, and a trade deficit widening to \$1.5 billion characterized the external sector. Merchandise

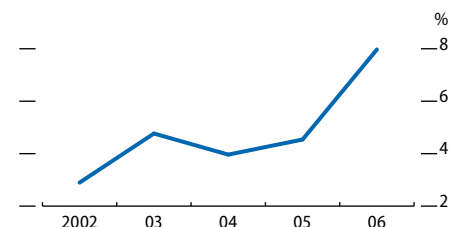
### 2.18.2 Gross fixed investment



Source: Nepal Rastra Bank, available: <http://www.nrb.org.np/>, downloaded 12 December 2006.

[Click here for figure data](#)

### 2.18.3 Inflation



Source: Nepal Rastra Bank, available: <http://www.nrb.org.np/>, downloaded 12 December 2006.

[Click here for figure data](#)

exports climbed by only 4.2%, reflecting slower growth in exports to India (accounting for nearly 70% of the total). They decelerated to 5.4% from 28.2% a year earlier. Stimulated by preferential trade arrangements, exports to India have grown rapidly in recent years, and the growth slowdown bore witness to a sharp drop in shipments of vegetable ghee, a major export that was affected by countervailing duties.

Exports to other countries improved by 1.8%, following a steep 14.5% decline in FY2005, when a sharp fall in garment sales was recorded. Performance in FY2006 underlined the facts that the country's export base is not well diversified and that traditionally large earners such as garments, as well as carpets and pashmina shawls, face stiffer competition, which has eroded sales both to India and to the rest of the world. Imports rose by 18.4%; oil-product imports accounted for about one quarter of the increase and remittance-financed consumption expenditure most of the rest.

Tourism receipts are estimated to have declined by about 10% to \$132 million from a year earlier, but total net services and income receipts are small and were little changed. Nepal is increasingly dependent on remittances as a source of income and foreign exchange: they reached \$1.3 billion in FY2006, an almost 50% year-on-year jump.

The remittance surge more than offset the wider trade deficit and kept the current account in surplus for the seventh consecutive year (at \$191 million or 2.4% of GDP). Taking account of developments in the capital account and valuation changes, gross foreign exchange reserves rose by 24.3% to reach \$1.8 billion (Figure 2.18.4)—equivalent to about 8 months of imports.

## Economic prospects

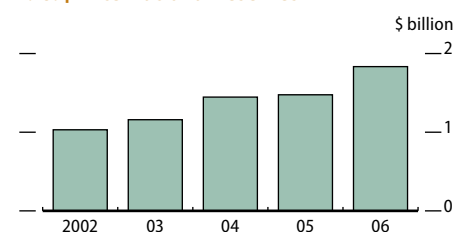
The peace process has rekindled hopes of economic revival in Nepal (Box 2.18.1). Whether the 2.1% average growth of the past 5 years can be substantially lifted to bring the country nearer to its real potential depends crucially on sustaining peace, including timely (and nonviolent) constituent assembly elections scheduled for June this year. The transition to higher growth will also require political stability (including law and order) and better labor relations, the latter to restore business confidence and allow normal economic activities to resume.

Besides political stability and the weather, the populace's ability to cope with price rises for petroleum products (to eliminate the large operating losses sustained by the Nepal Oil Corporation) will substantially influence growth and economic developments. Renewing the bilateral trade treaty with India, which is scheduled to expire in March 2007, could provide a fillip to exports if Nepal can again achieve beneficial terms from its dominant trading partner.

Over the medium term, the economic outlook will depend on how fast the new Government can both step up the pace of structural and governance reforms, and maintain macroeconomic stability. It will concurrently need to boost investment in infrastructure and basic services, education, and health. Reviving conflict-hit industries is also important.

Major donors have already pledged to boost aid to facilitate economic recovery. Moreover, in November 2006, the Government and the International Monetary Fund agreed on a resumption of the poverty

2.18.4 International reserves



Source: Nepal Rastra Bank, available: <http://www.nrb.org.np/>, downloaded 1 February 2007.

[Click here for figure data](#)

2.18.1 Selected economic indicators

	2007	2008
GDP growth	2.8	2.8
Inflation	5.3	5.4
Current account balance (% of GDP)	1.0	1.0

Source: Staff estimates.

reduction and growth facility arrangement that defined comprehensive economic and financial policies for FY2007. To help get the economy back on track, the Government will soon unveil a 3-year interim development plan, which aims at reconstruction of infrastructure, rehabilitation for displaced people, basic service delivery, and reforms to boost investment.

GDP is seen picking up to about 2.8% in FY2007 and FY2008.

Agriculture is likely to grow by the same amount, but this will depend on the weather, since irrigation is patchy. Weather conditions in the early months of FY2007 have not been the best, but expansion penciled in for the year still seems achievable. Better rural security should bring some areas back into cultivation, improve distribution of inputs and services, and generally raise farm productivity, especially after FY2008.

Industry is forecast to grow by 2.2–2.5% in the next 2 years.

Increased construction expenditures and better operating conditions in manufacturing, along with continued strong, remittance-based, consumer spending, are expected to provide the stimulus. However, reviving many “sick industries” will prove difficult since this requires overcoming long-standing weaknesses, such as low labor productivity, high transport costs, and keen competition for external markets. Moreover, power outages have become a grim reality: the wider problem is that energy demand is rising by 10% annually, but supply constraints remain unaddressed.

Expansion in consumption will continue to be the main driver of aggregate demand and this, with some expansion in tourist arrivals, is expected to generate services growth of 3.3%. Investment spending is also likely to rise substantially. At first, this would largely stem from greater budget allocations for rehabilitation and investment and from the more secure countrywide conditions. Private investment in construction and equipment is expected to expand. However, for investor confidence to return, labor relations will have to improve (and the number of work stoppages fall), and the authorities will need to ensure a supportive climate for entrepreneurship.

Inflation is expected to trim to about 5.3–5.4% in the next 2 years, as supply bottlenecks ease, but two factors will have a heavy impact on this forecast: agricultural output and prices may be less than assumed because the weather in early FY2007 was unfavorable, and the magnitude and timing of upward adjustments of Nepal Oil Corporation’s fuel prices cannot be predicted with certainty.

The external sector is set to remain manageable, though reflect a widening trade deficit. Merchandise exports are projected to grow by 4.7% and 6.0%, respectively, in FY2007 and FY2008. Exports to India are likely to be relatively brisk on account of the expected renewal of the existing bilateral trade treaty, but exports to other countries will be attenuated until new strategies to compete in the garment trade, as well as new products, are developed.

Imports are likely to continue growing at relatively high levels of 6.5% and 10.0% in the forecast period, in view of expected double-digit expansion in remittances from abroad as well as fiscal and monetary policies that focus on fostering economic revival. Tourism should see steady improvement, but the overall services and income net balances are unlikely to record major gains. The current account surplus is set to decline moderately to 1% of GDP.

### 2.18.1 A peace dividend?

Nepalis are upbeat following the formal cessation of armed hostilities and, it is hoped, an end to the devastating human cost. Economically, the insurgency has relegated Nepal to being one of the world’s poorest countries. Growth in the medium term, however, clearly depends on how political events unfold in the next couple of years.

On the assumption that peace becomes embedded, a higher growth trajectory requires increased resource mobilization and productivity gains. An investor-friendly climate would create more employment, generate technological spillovers, and contribute to overall economic competitiveness, while a skilled labor force would contribute to raising domestic productivity.

As regards infrastructure—largely neglected in recent years—despite Nepal’s huge reserve of water resources, the country faces scarcity in meeting its irrigation, energy, and drinking-water needs.

Agroprocessing industries and light manufacturing provide much further scope for widening the industrial base, and tourism and remittances also represent lucrative sources of income. With its unique location between the two fast-growing Asian giants, Nepal could benefit from the spillovers of their rapid growth.

But benefits will only fully materialize if peace is consolidated.

# Pakistan

Buoyant growth, improved macroeconomic fundamentals, and strengthened international credit ratings have been the economy's hallmarks in recent years. In fiscal year (FY) 2006, high oil prices, a weak agricultural performance, as well as the effect of the October 2005 earthquake, trimmed the expansion, while strong demand-side pressures have exposed macroeconomic stresses. The economy is expected to pick up slightly in FY2007, reflecting some strengthening in agriculture and manufacturing. Inflation is set to moderate, after a further tightening of monetary policy, but still come in above the central bank's target. Spurred by an expansionary, pro-growth fiscal policy, the budget deficit will widen slightly, as will the current account deficit. The medium-term outlook remains positive, but macroeconomic stability has to be maintained and structural issues addressed.

## Economic performance

The economy has grown strongly over the past 3 years, at an average pace of 7.5%. After expanding at high rates in the preceding 2 years, the economy slowed in FY2006 (ended 30 June 2006), but still maintained a robust outturn of 6.6% (Figure 2.19.1). On the demand side, private consumption, boosted by continued rapid expansion in consumer credit and higher workers' remittances, continued to be a lead contributor to GDP growth for the third year running (Figure 2.19.2). Private sector credit expanded by about 24%. Total investment spending (fixed and inventories) rose to 20.0% of GDP in nominal terms, mainly because of a sharp increase in private investment.

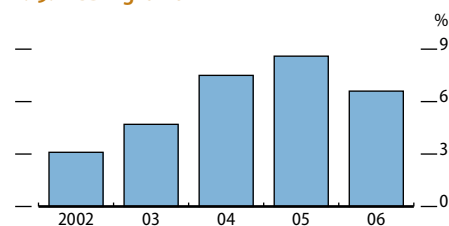
Over the last 3 years, improved business confidence and rising inflows of foreign direct investment (FDI) have buoyed private investment, but negative real interest rates on bank deposits and rising consumer demand have helped push down national savings, further widening the investment-savings gap. With a sharp rise in the current account deficit, the contribution of net exports of goods and nonfactor services became negative for the first time in 6 years.

On the supply side, GDP's deceleration in FY2006 was due to a sharp decline in agricultural growth and slower year-on-year growth in manufacturing, attributable to capacity constraints and the high-base effect. Services, in contrast, accounting for slightly more than half of GDP, gained further steam and recorded their fastest-ever growth rate of 8.8%.

In recent years, the Government's strong macroeconomic policies, high growth rates, increases in pro-poor spending, and burgeoning workers' remittances have all contributed to a steep decline in the incidence of poverty and the unemployment rate. According to official statistics, the proportion of the population living below the poverty line fell sharply from 34.5% in FY2001 to 23.9% in FY2005; in absolute terms, the number of poor people fell from 49 million to 37 million. The unemployment rate declined from 7.7% in FY2004 to 6.2% in FY2006.

Based on recent years' macroeconomic improvements and the strong

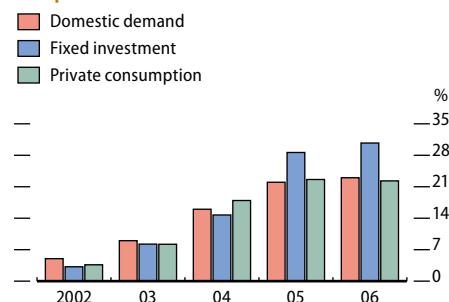
2.19.1 GDP growth



Source: State Bank of Pakistan, available: <http://www.sbp.org.pk>, downloaded 6 February 2007.

[Click here for figure data](#)

2.19.2 Growth of nominal demand components



Source: Federal Bureau of Statistics, available: <http://www.statpak.gov.pk>, downloaded 6 February 2007.

[Click here for figure data](#)



growth potential of the economy, Standard and Poor's in December 2006 announced upgrades for credit ratings to B+ for foreign currency, BB for local currency long-term ratings, and B for short-term sovereign ratings.

Strong demand, catalyzed by increased investment and consumption expenditure, as well as the rise in workers' remittances, has outstripped supply and helped stoke inflationary pressures. Inflation, after peaking at 9.3% in FY2005, remained high at 7.9% in FY2006. The first half of FY2007 witnessed no change in inflation, as rising food prices offset easing oil and nonfood commodity prices. Food inflation rose to 12.7% at end-December 2006 from 7.8% at end-June (Figure 2.19.3), lifted by higher prices of milk as well as by edible oil and wheat, pulled by rising international levels.

In the context of a continuing expansionary fiscal policy, the onus of demand management rests on monetary policy. The State Bank of Pakistan, the central bank, started tightening monetary policy in the second half of FY2005 by raising the discount rate by 150 basis points to 9.0%. In FY2006, it focused on draining liquidity from the market to push up the interest rate structure and contain credit expansion.

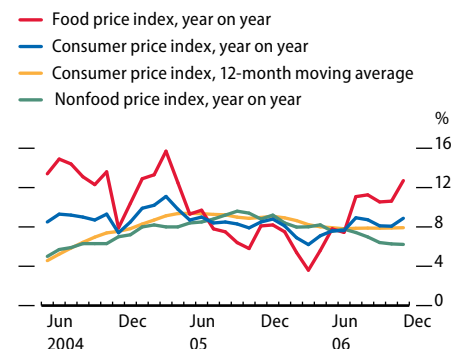
This policy succeeded in reducing growth in private sector credit and resulted in monetary growth that was below the increase in nominal GDP for the first time in 5 years. But, as high inflation persisted, the central bank further tightened monetary policy in July 2006 by raising the discount rate (by 50 basis points to 9.5%), the reserve requirement (on demand deposits by 200 basis points to 7.0%), and the liquidity requirement (by 300 basis points to 18.0% of demand and time deposits). Consequently, the average interest rate on new bank loans rose from 10.1% in June 2006 to 11.3% in December. Monetary growth declined (Figure 2.19.4) because of the decrease in domestic credit and the Government's reduced bank borrowing.

The State Bank of Pakistan continued a managed float policy and the nominal rupee/dollar parity rate remained stable in FY2006. With relatively high domestic inflation, the real effective exchange rate appreciated, which with strong domestic demand, contributed to the deterioration in the current account.

With advances in hand in structural reforms and macroeconomic fundamentals of recent years, the Government since FY2005 has pursued a pro-growth fiscal policy. Development outlays have sharply risen. Spending in the various pro-poor sectors defined in the poverty reduction strategy paper, in particular, increased from 4.8% of GDP in FY2005 to 5.6% the following year. Alongside this, unplanned spending on relief and reconstruction in areas affected by the October 2005 earthquake also contributed to a sharp increase in public expenditures in FY2006, raising the fiscal deficit to 4.2% of GDP (Figure 2.19.5). Excluding earthquake-related spending, the fiscal deficit was 3.4% of GDP, little changed from FY2005. The primary balance, however, which is a more accurate reflection of the Government's discretionary fiscal stance because it excludes the impact of interest payments, turned into a deficit in FY2006 after being in surplus the preceding 4 years.

The current account of the balance of payments has recorded increasingly wide deficits in the last 2 years, after posting large surpluses in the preceding 3 years). In FY2006, the current account deficit,

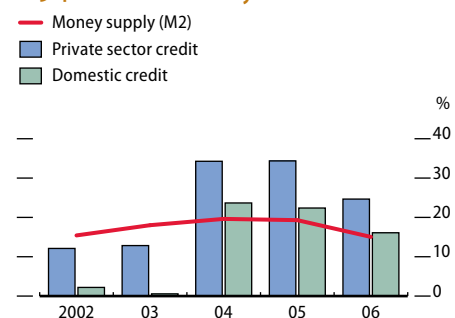
### 2.19.3 Inflation



Source: Federal Bureau of Statistics, available: <http://www.statpak.gov.pk>, downloaded 20 January 2007.

[Click here for figure data](#)

### 2.19.4 Growth of money and credit



Sources: Ministry of Finance, available: <http://www.finance.gov.pk>, downloaded 12 March 2007; State Bank of Pakistan, available: <http://www.sbp.org.pk>, downloaded 29 August 2006.

[Click here for figure data](#)



excluding official transfers, more than tripled to \$5.7 billion, or 4.4% of GDP, from 1.6% of GDP in FY2005, as import growth outstripped export growth (reflecting higher oil prices and strong domestic demand; Figure 2.19.6). The deficit would have been larger still but for the very robust increase in workers' remittances to \$4.6 billion.

The current account deficit was easily financed through non-debt-creating inflows and concessional loans from multilateral agencies. In fact, the overall balance of payments posted a substantial improvement in FY2006. Official foreign exchange reserves rose, and the external debt-to-GDP ratio remained on a downward trajectory, declining further to 28% in FY2006 from 31% in FY2005. However, ever-greater reliance on privatization proceeds, official grants, and portfolio investment, which together financed 45.3% of the current account deficit, raises issues of sustainability of financing large deficits over the medium and long term.

The improved policy environment has stimulated a multifold increase in FDI in recent years, which has risen from \$483 million in FY2002 to \$3,451 million in FY2006. The first half of FY2007 saw an inflow of \$1,873 million. About 70% of total FDI is concentrated in just four sectors: telecommunications, oil and gas exploration, petroleum refineries, and financial businesses.

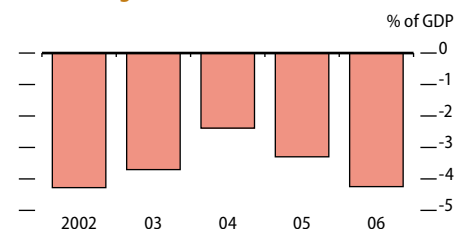
Privatization picked up further in FY2006 when two large entities—the Pakistan Telecommunication Company Limited and the Karachi Electric Supply Company—were privatized. A sum of \$1.5 billion was raised in privatization proceeds, which represented 43% of total FDI in FY2006. In the last few years, the Government has also used the domestic stock market for selling the shares of public sector enterprises to the general public to broaden the base of share holdings. In December 2006, it ventured into the international equity market for the first time in several years, raising \$731 million in global depository receipts issued by the Oil and Gas Development Corporation on the London Stock Exchange.

## Economic prospects

The prognosis for FY2007 and FY2008 is based on the assumptions that the authorities will continue, or perhaps strengthen, the economic reforms of recent years, and that they will press on with relieving the macroeconomic stresses that have emerged in the last couple of years. It is assumed that the central bank will continue its tight monetary policy and pursue a flexible exchange rate policy. Globally, economic growth in the United States (US) and the European Union (EU), the country's two largest trading partners, is assumed to slow somewhat, as is the growth of world trade volume.

The sharp rise in investment last year and moderation in oil prices are expected to boost growth in FY2007. However, shortages of natural gas and suspension of its supply to a number of industrial units to meet the rising demand for household consumption (because of exceptionally cold weather) will likely depress industrial growth, which along with the ongoing slowdown in exports, will dampen the expansion. Agriculture and manufacturing have improved in the first half of FY2007, and services appear to be growing robustly, but somewhat less quickly than last year.

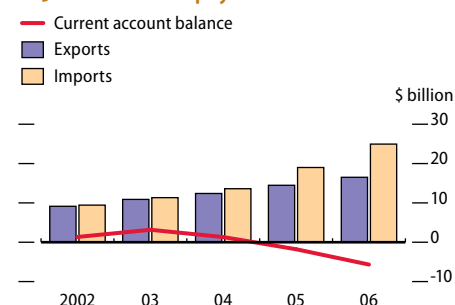
### 2.19.5 Budget balance



Source: Ministry of Finance, available: <http://www.finance.gov.pk>, downloaded 9 March 2007.

[Click here for figure data](#)

### 2.19.6 Balance-of-payments indicators



Source: State Bank of Pakistan, available: <http://www.sbp.org.pk>, downloaded 12 March 2007.

[Click here for figure data](#)

### 2.19.1 Selected economic indicators

	2007	2008
GDP growth	6.8	6.5
Inflation	7.0	6.5
Current account balance (% of GDP)	-4.5	-3.9

Source: Staff estimates.

With developments to date, the economy is projected to grow by 6.8% in FY2007, a solid expansion but essentially unchanged from a year ago (Figure 2.19.7).

In agriculture, production of the major summer crops in FY2007 has shown improvement. The higher offtake of fertilizers and a substantial increase in production loans for agriculture, as well as greater availability of water, all augur well for winter crops. The new package of incentives for livestock, announced in the FY2007 budget, and high prices of livestock products throughout last year, will also boost livestock production. Agriculture is projected to grow by 4.0% in FY2007.

Large-scale manufacturing, which constitutes almost half of the value added in industry, is expected to grow by 8.6%, supported by incentives provided in this year's budget. Growth in textiles and clothing, however, is expected to soften, on lower than targeted output of cotton and weakening export demand. The significantly larger public sector development program, reconstruction of earthquake-affected areas, and greater supply of cement will all boost construction output in FY2007. Hydropower generation will be bolstered by greater rainfall and availability of water in the two main water reservoirs. In all, industrial growth should pick up to 8.6%.

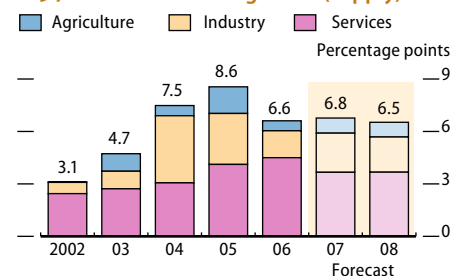
In services, rising foreign investment in telecoms and privatization of the Pakistan Telecommunication Company last year will help sustain vigorous growth. Strengthened by reforms, privatization, and ongoing mergers and acquisitions, the financial sector is expected to stay lively. It will be further spurred by the planned flotation of new global depository receipts for some financial institutions. However, the growth of wholesale and retail trade will slow because of decelerating exports and imports. Services as a whole is projected to grow by more than 7% in FY2007, somewhat off last year's fast pace.

In FY2008, on the back of the expected continuing strength in services and stable growth in manufacturing, GDP is projected to slow slightly to 6.5%. This is still solid performance but less than the projected 7.6% in the Government's Medium-Term Development Framework. The buildup of macroeconomic imbalances and the consequent tight monetary conditions, emerging capacity constraints, infrastructure bottlenecks, and issues of competitiveness in exports of textiles and clothing—on which the economy is overdependent (Box 2.19.1)—are some of the key constraints to reaching the Framework's target.

Inflation is expected to decline further in FY2007, under the weight of continued tight monetary conditions. After resisting demands for cutting domestic prices of petroleum products for 9 months, the Government finally lowered these prices in January 2007. This will have a damping effect on prices throughout the economy in the coming months, as will the slower monetary growth last year. But, because of the upsurge in food prices and higher prices of raw materials, inflation is projected at 7.0%, above the central bank's target of 6.5%. Sustained tight money is likely to take inflation down to 6.5% in FY2008 (Figure 2.19.8).

With projected strong GDP growth, ongoing tax reforms, extension of the tax net to real estate transactions, and higher tax rates on some financial services in the FY2007 budget, tax receipts are expected to maintain double-digit growth and be above the budget target. Despite a

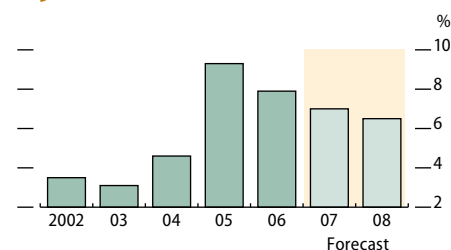
**2.19.7 Contributions to growth (supply)**



Sources: State Bank of Pakistan, available: <http://www.sbp.org.pk>, downloaded 6 February 2007; staff estimates.

[Click here for figure data](#)

**2.19.8 Inflation**



Sources: State Bank of Pakistan, available: <http://www.sbp.org.pk>, downloaded 6 February 2007; staff estimates.

[Click here for figure data](#)

### 2.19.1 Export performance

Over the past 5 years, merchandise exports have delivered over 12% average annual growth, as they have benefited from an enabling policy environment, low inflation, the low cost of credit, and general upturn in economic activity. In FY2005 and FY2006, they grew by 16.6% and 15.4%, respectively, but started decelerating in the second half of FY2006, to just over 6.5%, and to 5.0% in the first half of FY2007. Some of the deceleration stems from the high-base effect, but the underlying causes appear structural.

The main issue is exports' heavy reliance on textiles as well as limited geographic diversification. Between them, textiles and clothing, cotton, leather, rice, and sports goods account for over three quarters of total exports—textiles and clothing alone for three fifths. Thus a downturn in these segments has a significant overall impact.

Conversely, immediately after the ending of quotas, textile exports accelerated strongly, to 16.8% in FY2006 from 6.6% the year before. Increasingly, however, textile exports have come under competitive pressure from Bangladesh, People's Republic of China, and India, specifically in the higher value-added categories that have traditionally not been a strength of the Pakistani textile sector. This pressure, in turn, has led to a fall in international export prices. Consequently, Pakistani textile

exports increased by only 4.3% by value in the first half of FY2007 (box table). The low expected cotton production in 2007 will further hit textile exports, as will the removal of restrictions on textile exports from the People's Republic of China in 2008.

Another issue is that the bulk of Pakistan's trade is with a handful of countries, particularly in Europe and North America. It is expected that the growth in trading volumes in those regions will decline in 2007, hitting Pakistan's exports there.

#### Export growth of major commodities

Commodity	FY2005	FY2006	July–Dec 2005	July–Dec 2006
Textiles and clothing	6.6	16.8	32.5	4.3
Rice	47.1	19.3	46.4	1.2
Leather and leather products	18.7	16.1	31.3	-26.3
Sports goods	-3.0	13.4	6.9	-14.4

Thus, lack of export diversification—for products and markets—is the main reason for recent sluggish performance. Trade policy should therefore focus on developing strategies for diversification and enhancing export competitiveness.

decrease in the domestic oil price, the petroleum levy will likely continue to yield significant income, as will receipts from the US for logistics support operations for Afghanistan. Current expenditures, though, are expected to exceed the budget estimate, because of expected overruns in the interest payment on domestic debt. On balance, the fiscal deficit is likely to rise to 4.5% of GDP in FY2007, coming in at the planned level.

Import growth is set to decelerate in FY2007, on account of moderation in the oil import bill, weaker demand for consumer durables, and some rundown from an apparent buildup of inventories in FY2006 (Figure 2.19.9). Nevertheless, sustained growth and the forecast rise in investment are projected to keep import growth at about 9%. Exports too will rise, but the high domestic cost of production in the textile and garment sector as well as stiff competition from the People's Republic of China (PRC) and India are likely to restrict total export growth to about 8.0%. The current account deficit is projected to edge up to \$6.5 billion, or 4.5% of GDP in FY2007. With the expected stabilization in GDP growth, cooling demand for consumer durables (on higher interest rates), and softening in oil prices, import growth is likely to be moderate in FY2008. As a result, the current account deficit could decline to \$6.0 billion, or 3.9% of GDP (Figure 2.19.10).

In an environment of pro-growth government policies, a continuous increase in the public sector development program, and the projected rise in investment, the medium-term outlook for the economy is positive. Greater trade volumes with countries in the region, including the PRC, will also help. The boom in banking and telecoms is likely

to continue, as the policy environment for these sectors is favorable. Foreign hydrocarbons investments in recent years will have an output payoff. Finally, significantly strengthened through reforms and mergers and acquisitions, the banking system is well positioned to better channel savings to productive uses.

The growing current account deficit, continuing high inflation, and the emerging power and gas shortages are potential risks to the country's medium-term economic prospects. Any deterioration in the security environment would be another. In addition, the ending in 2008 of PRC-specific safeguards imposed by the US and EU against textile and clothing imports could further weaken Pakistan's textile export prospects.

## Development challenges

After the so-called lost decade of the 1990s, the strong performance in the new decade so far is attributable to sound macroeconomic management policies and pursuit of structural reforms in key areas.

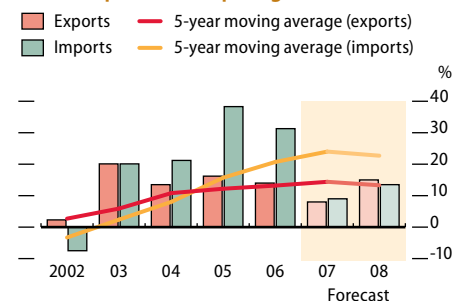
Still, important structural challenges remain and have to be tackled promptly to sustain the present growth trend. Despite healthier investment, the investment-to-GDP ratio is still low relative to countries that have experienced sustained strong growth. Even if investment in the country is underestimated, gross capital formation in 2004 was less than half of that in the PRC and about 60% of that in India or Thailand. Total factor productivity has improved, but insufficiently either to compensate for low investment or to sustain high growth.

Similarly, gross savings as a share of GDP needs to pick up substantially. In recent years, the demand-driven growth and negative real interest rates on bank deposits have contributed to low savings. Another issue is the narrow industrial base, which is linked to the lack of a diversified export base, which in turn must cope with rising international competition.

Human capital development remains a major structural challenge. Despite the recent rise in pro-poor spending, historical underinvestment in human capital has critical implications for growth and competitiveness. Public spending on education was only 2.0% of GDP in 2004, compared with 6.0% in Malaysia, 4.0% in Thailand, and 3.0% in the PRC and India. Unsurprisingly, the human development index rating was the lowest among these countries as well. The Government has, however, announced its commitment to increasing education expenditures to 4.0% of GDP. Finally, critical physical infrastructure bottlenecks impede high growth.

The Government is tackling these structural challenges over the medium term by committing to reform, by strengthening the enabling environment for investment, and by prioritizing resource allocation for infrastructure development and the social sectors.

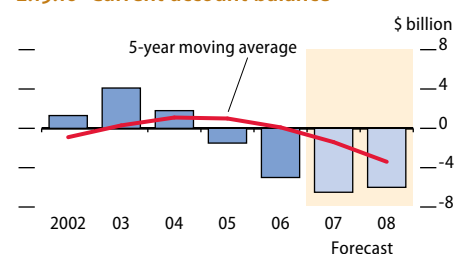
### 2.19.9 Export and import growth



Sources: State Bank of Pakistan, available: <http://www.sbp.org.pk>, downloaded 6 February 2007; staff estimates.

[Click here for figure data](#)

### 2.19.10 Current account balance



Sources: State Bank of Pakistan, available: <http://www.sbp.org.pk>, downloaded 6 February 2007; staff estimates.

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# Sri Lanka

Despite resurgence of the civil conflict, impact of the Asian tsunami, and doubling of oil prices since 2004, the economy grew at its fastest rate since 1978 last year. This strength was fueled by buoyant private activity and expansionary macroeconomic policies that have, though, accelerated inflation. Growth is forecast to moderate over the next 2 years, given the conflict, slow pace of structural reform, and need to cool the economy. Further out, if the fiscal consolidation and increased investment envisaged in the new 10-year development framework are achieved, growth is expected to pick up substantially.

## Economic performance

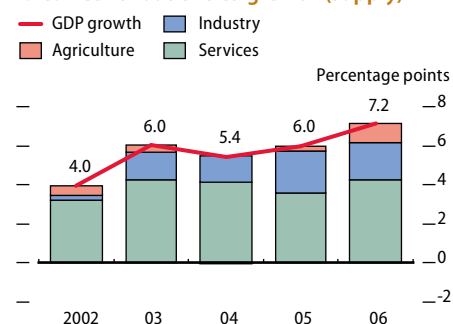
The impressive 7.2% growth in 2006 reflected continued strong performance of services of 7.7% and an unexpectedly high outturn in agriculture of 5.9% (Figure 2.20.1). (The peaceful west and south were responsible for most of the good news, since the two north and eastern provinces embroiled in the conflict contribute only about 9% of total GDP.) Aiding agriculture was fisheries' recovery from the December 2004 tsunami, as it surged by 55%. In fact, had agriculture continued its past 10-year trend of 1% growth, total GDP would have expanded by only 6.4%.

Aggregate domestic demand—buttressed by workers' remittances and rapid credit expansion—stayed high. The population continues to release its pent-up demand for consumer goods and services, especially mobile phones. Mobile and landline phone penetration has grown dramatically since 2003; as a result, mobile phone companies are thriving, with the major operators reporting revenue growth in the first half of 2006 of over 40%. These growth rates have induced many companies to reinvest their earnings to expand their networks, leading to an estimated doubling of total foreign direct investment inflows from \$234 million to \$480 million in 2006. Port services, cargo storage, and warehousing as well as other trade-related services also continued to boom, in line with growing international trade.

Tourism, in contrast, failed to do well in 2006 (Figure 2.20.2), with profit margins falling by up to 50% as hoteliers dropped prices to attract tourists. The subsector had picked up strongly after the signing of the cease-fire agreement between the Government and the Liberation Tigers of Tamil Eelam (LTTE) in 2002. However, it suffered in the aftermath of the tsunami and more recently has been hit by blanket travel warnings from key European markets following the sharp escalation of hostilities between the Government and the LTTE. Tourism industry sources put occupancy rates at 30–50% in January 2007, down from the 90% usually seen at that time of year. While tourism accounts for little more than 2% of GDP, the impact on employment, with about 120,000 directly and indirectly employed, is likely to have been significant.

Industry's performance was decidedly mixed. On the one hand, garments, which dominate the export and industrial base (contributing

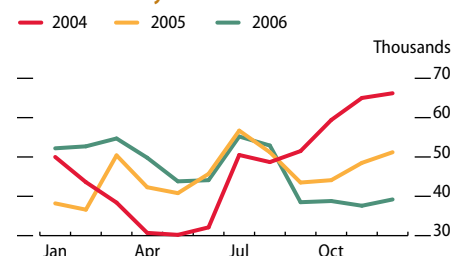
2.20.1 Contributions to growth (supply)



Sources: Central Bank of Sri Lanka, available: <http://www.cbsl.lk>, downloaded 12 December 2006; staff estimates.

[Click here for figure data](#)

2.20.2 Monthly tourist arrivals



Source: Ministry of Finance, *Weekly Economic Position Report*, 2nd week, February 2007.

[Click here for figure data](#)



about 40% of export earnings; Figure 2.20.3), continued to struggle following the end of the quota system on 1 January 2005, growing by little more than 5% in 2006. Structural weaknesses in garments, such as high staff turnover and levels of absenteeism, difficulties in attracting staff (over 30,000 vacancies left unfilled), problems with transport, high electricity prices, as well as the loss of price competitiveness vis-à-vis Bangladesh, People's Republic of China, and Viet Nam, caused in part by an appreciating real exchange rate, all added to the garment industry's woes. Small-scale manufacturing, too, was weak.

On the other hand, favorable weather conditions boosted hydropower generation, helping the utilities subsector expand by about 15%.

As expected, construction continued to grow, in part because of tsunami reconstruction, but also because of major housing developments in big cities, bolstered by a surge in property prices and demand for high-quality housing by Sri Lankan expatriates, and by returnees to the country.

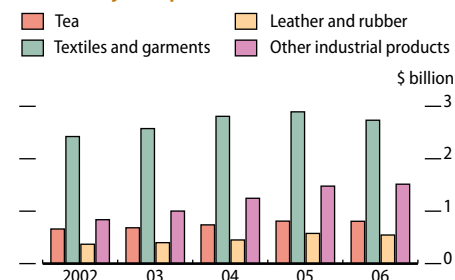
Government spending, up by 26% in 2006, imparted a strong stimulus to the economy but also drove up inflation. While the 2006 budget planned no borrowing from the banking sector, the Government ultimately borrowed 30 billion Sri Lanka rupees (SLRs), or about 1% of GDP. Fiscal consolidation has been a policy objective in recent years, though the Government has repeatedly announced that it would not cut expenditures to contain the deficit, focusing rather on improving revenue collection.

Preliminary data indicate that the 2006 budget deficit (including 0.8% of GDP for foreign-funded tsunami-related project expenditure) was 8.9% of GDP, essentially unchanged from the 2005 outturn and in line with official budget projections (Figure 2.20.4). Three elements contained the deficit: the Government lifted revenue collection substantially for the second year running (up 27.5%); it removed almost all fuel subsidies that had cost it SLRs26 billion, or about 1% of GDP, in 2005; and it offset an SLRs38 billion cost overrun on recurrent spending by means of reallocating funds previously earmarked for capital expenditures. The bulk of the revenue improvement stemmed from changes to income tax (raised tax rates and lowered taxable thresholds), improved value-added tax (VAT) collection, and increased import tariffs.

Recurrent spending rose by 22%, fueled mainly by larger defense expenditures (up by 27%); new recruits to the civil service (continued regularization of 40,000 trainees taken on earlier); additional home guards (35,000 recruits); a greater number of pensioners; and higher civil service wages (the second installment to bring the base salary to SLRs11,650) and cost-of-living allowances.

Looser fiscal policy and increased central bank financing of the budget deficit led to an escalation of demand pressures over the year. Inflation, which had subsided toward the end of 2005, reversed course and accelerated sharply after July 2006, peaking at 20.5% in January 2007 (Figure 2.20.5). This should be seen in the context of annual average inflation in 2006 of 13.6% (based on the Colombo consumer price index). While the one-time impact of rises in administered prices for fuel and electricity and in vegetable prices (due to supply shortages) were factors, the sustained large price upswing primarily reflects rapid increases in

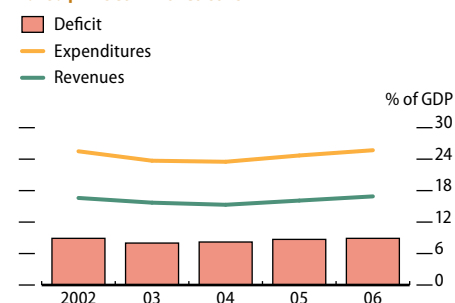
### 2.20.3 Major exports



Sources: Central Bank of Sri Lanka, available: <http://www.cbsl.lk>, downloaded 8 March 2007; Economist Intelligence Unit, *Sri Lanka Country Report*, February 2007.

[Click here for figure data](#)

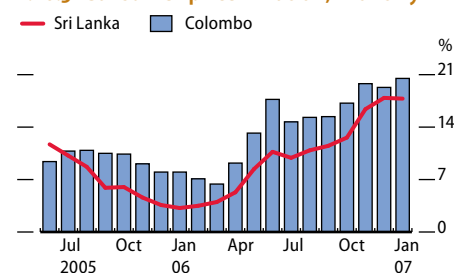
### 2.20.4 Fiscal indicators



Sources: Central Bank of Sri Lanka, available: <http://www.cbsl.lk>, downloaded 12 December 2006; staff estimates.

[Click here for figure data](#)

### 2.20.5 Consumer price inflation, monthly



Source: Department of Census and Statistics, available: <http://www.statistics.gov.lk>, downloaded 10 March 2007.

[Click here for figure data](#)



money (Figure 2.20.6) and credit powered by low and at times negative real interest rates. Consumer credit jumped by 43% (October 2005–September 2006), and overall private sector credit leaped by 24% (both substantially above their respective 10-year averages of 25% and 15%); and credit to the government expanded by 20%.

From September 2006, the central bank took steps to reduce liquidity in the market by increasing its policy rates, bringing the repurchase (repo) rate to 9.625%, and reverse repo or lending rate to 11.5%, and the 91-day treasury bill rate to 12.7% by year-end (Figure 2.20.7). Since the start of this year, the central bank has restricted access to the reverse repo facility at times when the commercial banking system shows a liquidity surplus. Some commercial banks previously used this facility as their main source of credit expansion, taking advantage of the interest differential between the interbank market and (lower) policy rates. But on 30 January, the central bank acted to narrow the interest rate differential between market and policy rates.

Despite improvements in key debt indicators, the Government's debt policy has increased its exposure to foreign exchange rate fluctuations. While public debt rose in 2006 in absolute terms, it declined as a proportion of GDP because of the rapid expansion of *nominal* GDP, but it still remained quite high at about 92%. Since 2004, the Government has pursued a policy of taking on domestic short-term foreign-denominated debt to reduce interest rate costs and to retire more expensive local currency debt, increasing its exposure to foreign exchange risk.

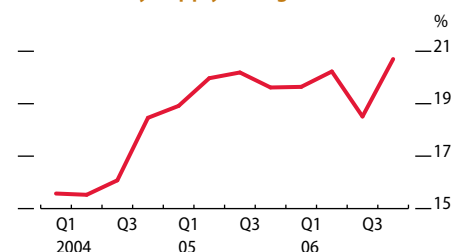
The stock of such debt increased by \$520 million in 2006 to \$1.65 billion at year-end, or 6% of GDP. Overall debt service (principal and interest) of the Government fell from 92% of total revenues in 2004 to 82% in 2006, but still amounted to 15.7% of GDP in 2006, edging up with the end of the tsunami-related debt moratorium in December 2006.

The balance of payments has weathered the oil price shock relatively well, even as the oil import bill (consonant with doubling oil prices) almost tripled in only 2 years to \$2 billion in 2006. Nevertheless, strains are apparent, with the trade deficit remaining in double digits for the third year in a row, reaching 13% of GDP, a deficit not seen since 1994 (Figure 2.20.8). The current account deficit stabilized at 2.8% of GDP, substantially lower than projected in the Government's medium-term economic framework.

A major factor keeping the current account deficit largely in check and helping ease pressure on the balance of payments has been soaring workers' remittances, unexpectedly increasing by \$400 million (or over 1% of GDP) to \$2.3 billion in 2006: after the tsunami, they jumped by almost 30% a year (against 9% annual growth in the 5 years preceding the disaster).

An International Monetary Fund study finds that this jump is probably less a result of altruism than of high global oil prices, since they increased the chances of employment and higher wages for Sri Lankan migrants, over 85% of whom live in net oil-exporting countries. Even though foreign exchange reserves have been maintained at approximately \$2.5 billion (Figure 2.20.9), last year's 15.7% expansion in imports reduced the import cover ratio to 2.6 months by year-end from 2.9 months at end-

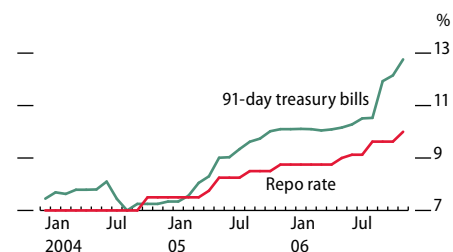
2.20.6 Money supply (M2) growth



Source: Central Bank of Sri Lanka, available: <http://www.cbsl.lk>, downloaded 8 March 2007.

[Click here for figure data](#)

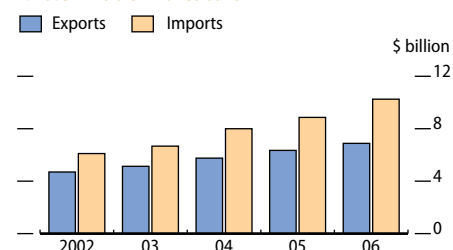
2.20.7 Interest rates



Source: Central Bank of Sri Lanka, available: <http://www.cbsl.lk>, downloaded 8 March 2007.

[Click here for figure data](#)

2.20.8 Trade indicators



Source: Central Bank of Sri Lanka, available: <http://www.cbsl.lk>, downloaded 8 March 2007.

[Click here for figure data](#)

2005. To safeguard reserves, the central bank imposed restrictions in late September 2006 on current payments, imposing deposit requirements of 50% on the import value of certain goods. The International Monetary Fund subsequently approved these restrictions as a temporary measure.

The nominal exchange rate has increasingly come under pressure and has depreciated substantially, especially vis-à-vis the euro and the British pound, even despite initial central bank intervention to defend the currency. Tsunami-related foreign inflows, which in 2005 led to real and nominal currency appreciation, are now moving out of the country to fund capital imports for reconstruction. These outflows, in combination with higher external debt service and oil import bills, all contributed to the substantial drop in the nominal exchange rate. The real effective exchange rate however, is trending upward because of accelerating domestic inflation (Figure 2.20.10).

Since the Government took office in November 2005, structural reform has been limited. Although the private sector accounts for over 85% of GDP, the Government owns institutions that manage about 60% of all financial assets as well as all public utilities and some smaller enterprises. In key policy statements, it has announced that it would seek alternatives to privatization for bringing greater efficiency into the state-owned sector.

Restructuring, rather than privatization, of the People's Bank, which accounts for about 20% of financial assets in the country, has made some progress. One major reform was the removal of fuel subsidies in 2006, relieving a heavy drain on the budget and moving Ceypetco, the state oil and petroleum company, to operate more on a commercial basis. However, the market for retail fuel and lubricants was liberalized in September 2006 without the regulator, the Public Utility Commission, yet receiving authority to regulate applicable retail prices, safeguard consumers' interests, and ensure fair competition.

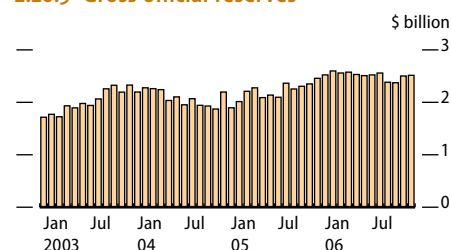
Strong opposition by labor unions has been one of the major factors holding back reforms. The long-awaited unbundling of the Ceylon Electricity Board, in the planning stage since 1997, has been put on hold. The Government is now seeking to manage the utility more efficiently by other means, and to bring more transparency into rate setting and procurement.

The power sector remains a major trouble spot for the economy because its least-cost generation plans have not been implemented for the last 20 years. This has pushed electricity tariffs to among the highest in the region, despite the fact that the sector does not charge cost-recovery tariffs, leading to daily losses of SLRs50 million and an accumulation of large debts. Operational problems are exacerbated by rising power demand and high capacity utilization in the transmission and distribution system. Many lines and transformers are becoming overloaded and this will result in rising maintenance costs, deteriorating performance, and higher technical losses.

## Economic prospects

Growth prospects have become, if anything, more complex: opportunities for, and risks to, economic growth have risen since last year. Factors that could potentially lay the foundation for strong economic growth

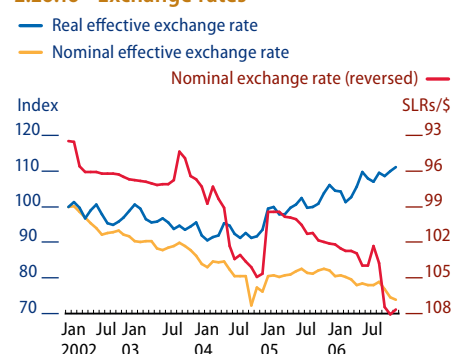
### 2.20.9 Gross official reserves



Source: Central Bank of Sri Lanka, available: <http://www.cbsl.lk>, downloaded 14 March 2007.

[Click here for figure data](#)

### 2.20.10 Exchange rates



Source: CEIC Data Company Ltd., downloaded 12 March 2007.

[Click here for figure data](#)

and that show a marked departure from previous approaches are, first, a powerful president whose first term will end in 2011, and who has now also succeeded in forging a parliamentary majority with crossovers of Members of Parliament from the typically more private sector-oriented United National Party. This could make implementing legislative changes easier than before, and could also be the beginning of a “southern consensus,” the lack of which has been partially blamed for the slow resolution of the ethnic conflict in the country. Second, public investment is considerably higher.

Factors that have increased the risks are the falling import cover in terms of foreign exchange reserves, accelerating inflation, and the rapid buildup of domestic dollar-denominated, short-term, commercial debt, now amounting to 6% of GDP. Despite the fact that the private sector continues to be resilient, these developments are a concern, and need to be addressed through policy actions to reduce the fiscal deficit (and hence the need to borrow commercially), and to gradually tighten monetary policy so as to control inflation. There is also the risk of prolonged power cuts in 2007, a result of the delay in commissioning a new power plant, unless the government quickly introduces contingency plans.

The underlying assumptions of the following projections are: the conflict will not escalate further; the LTTE will not succeed in destroying key economic infrastructure; and 2007 will see gradual monetary tightening and a determined effort to slow inflation (as the central bank at least partially succeeds in implementing its ambitious financial and monetary policies for the year). In this it will need to be supported by the Government and the newly established National Economic Council.

The outlook for 2007–2008 is for growth of 6.1% and 6.0%, respectively (Figure 2.20.11), which is somewhat below government forecasts. It assumes that tighter fiscal and monetary policies gradually curtail aggregate demand by 2008, and that the conflict will continue to curtail tourism growth. In addition, agriculture will expand much less quickly than in 2006, in line with long-term trends, as its post-tsunami recovery is largely completed. However, except for the lackluster performance of tourism, the private sector will once again prove to be resilient, and services will remain the engine of growth. Finance, trade-related services, telecommunications, and information technology (IT) will perform robustly, buoyed by continued consumer demand and public sector expansion.

Assuming a gradual deceleration in inflation to 9% by 2008 (as the impact of tighter policy is felt with a time lag of up to 2 years), industry consolidation, and facilities upgrading, the garment sector is projected to regain some of its competitiveness by 2008, just when the People's Republic of China moves out of restraints imposed by the European Union and United States. The Government expects a breakthrough in the negotiations with the European Union on lowering the threshold of country-of-origin requirements under the “GSP Plus” scheme from 50% to 35% this year. However, hopes to conclude a free trade agreement with the United States are unlikely to be realized.

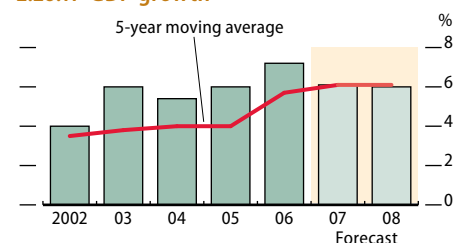
The government-projected deficit of 9.2% of GDP for 2007, including fully foreign funded projects, is likely to be met. A gradual reduction of spending as fiscal policies slowly tighten will bring the deficit—including

### 2.20.1 Selected economic indicators

	2007	2008
GDP growth	6.1	6.0
Inflation	10.0	9.0
Current account balance (% of GDP)	-2.5	-2.4

Source: Staff estimates.

### 2.20.11 GDP growth



Sources: Central Bank of Sri Lanka, available: <http://www.cbsl.lk>, downloaded 12 December 2006; staff estimates.

[Click here for figure data](#)

fully foreign funded investment projects—to 7.7% of GDP in 2008. However, the expenditure composition is likely to change, with recurrent expenditure (such as defense, subsidies, and wages and pensions) likely to surpass budgeted estimates. The implementation of key cost-cutting exercises outlined in the budget speech, such as cutting SLRs16 billion by avoiding duplication of expenditure, would have to be tackled quickly to show results.

Revenue collection, though, is projected once again to increase substantially, despite the growing complexity of the tax regime that introduces more exemptions: higher CIF mark-up values on imports, the cascading nature of the tax regime, falling tax thresholds, and tax implementation changes that would convert VAT to a quasi-withholding tax (whereby one third of VAT payments to government contractors are withheld), will all help boost revenue collection.

The first steps taken in January 2007 to rein in growth of monetary aggregates suggest that the central bank is determined to fight inflation more aggressively than last year. Its financial and monetary policy plans of January 2007 indicate its intention to reduce growth of broad money supply to 13.2% by December 2007 (relative to estimated actual levels of 12 months earlier), a sharp drop from the 17.8% growth seen in 2006.

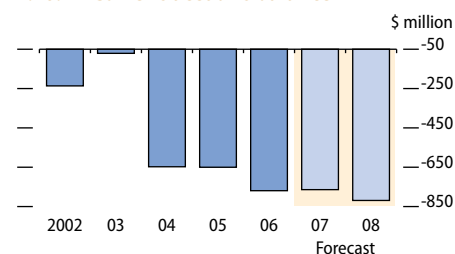
Achieving the central bank target depends crucially on the volume of government net domestic borrowing, which has to keep in line with the budget target of SLRs156 billion (out of which commercial bank borrowing should not exceed SLRs16.7 billion).

Given the Government's expenditure plans, and past delays in firming up foreign financing, it is not yet clear whether the central bank will succeed in controlling expansion of the money supply (and thereby inflationary pressure). Neither is it clear whether moves to control prices of 11 essential consumer items for 3 months from 1 March 2007, are temporary, or whether these measures will remain more permanent.

The current account deficit in 2007 will narrow slightly to \$764 million (or 2.5% of GDP; Figure 2.20.12), due to substantially lower import growth following a projected stabilization of oil prices at about \$57 a barrel. Export performance will stay muted, despite several expected positive developments for the garment sector. Concessional financing, tsunami-related grants (largely phased out by 2008), and commercial borrowing appear sufficient to finance this deficit. However, should oil prices be as high on average as in 2006 (about \$65 per barrel), the current account deficit would increase sharply by 1.2% of GDP (\$320 million) to 3.7% of GDP.

In the long term, the significantly higher public investment planned by the Government will increase economic growth. Three major investment projects, some in the pipeline for 20 years, are now finally going ahead: the Kerawalapitya Combined Cycle Power Plant (\$310 million), the Norrachchalai coal power plant (\$510 million), and the extension and development of the Colombo Port (\$300 million, with total project costs including planned private sector investment for the terminals eventually estimated at \$1.2 billion). These investments are crucial to safeguard economic growth, act as a catalyst to private sector investment, and expand the country's role as a logistics hub.

**2.20.12 Current account balance**



Sources: Central Bank of Sri Lanka, available: <http://www.cbsl.lk>, downloaded 7 March 2007; staff estimates.

[Click here for figure data](#)

## Development challenges

The country's civil conflict is undoubtedly the main long-term challenge to development, shaving off an estimated 2% of GDP growth each year. Civil conflicts of such complexity can take decades, if not generations, to resolve. However, despite the opportunity costs of the conflict, the economy has grown at an annual average of 4.6% since the conflict started in 1983, and is a testimony to its resilience.

The current policy focus of the Government is on infrastructure development to improve electricity supply and roads. This is crucially important, but would need to go hand in hand with preparing the ground for higher productivity gains. To achieve this—and at the same time increase income equality—Sri Lanka needs a well-educated labor force and better access by the underprivileged to high-quality education (Box 2.20.1).

### 2.20.1 Education

Literacy indicators are high, and do not point to an immediate crisis. However, representatives of those segments that can propel the country on to a higher growth path (e.g., IT and high-value manufacturing) have repeatedly stated that they suffer from a shortage of suitably skilled labor.

Spending on private tuition among all families, including the poorest, has shot up, pointing to deficiencies in the quality of public education. In turn, sustained high economic growth has to create jobs attractive enough to retain highly skilled people who are usually among the most mobile and too often leave the country. The country reportedly has one of the highest “brain drain” ratios in the world. (This may reinforce the lack of skilled staff, identified by entrepreneurs as slowing growth in business outsourcing and IT development.)

In addition to the need to improve the skills of its students, the school and education system seems to increasingly fail the poorest. School leavers who, due to poor conditions in rural schools, often fail one or more of their O levels, stand little chance of being employed in the private sector; with very high pressure emanating from their families that hope to have at least their offspring move away from the agriculture sector, the public service (clerical jobs) or the army is often the only source of employment.

In addition, the lack of mathematical skills precludes even those who go to university from studying a non-arts degree, thereby again relegating them to arts subjects for which employers usually pay less well. The quality of schooling is highly skewed between rural and urban regions and educational outcomes between the provinces differ sharply (box table).

The quality of English language teaching and the lack of English language proficiency are other serious obstacles to social mobility. Overall, the poor see few chances

of upward mobility, due to the lack of good education and—according to anecdotal evidence—a social and political network. As a result, their children drop out more often, and intergenerational education mobility is low internationally.

In contrast to Sri Lanka's earlier impressive record, education's share of GDP and expenditure started decreasing in the 1970s and is now equivalent to about 2.5% of GDP—lower than in most comparable countries.

The Government now sees education as a priority, embarking in 2006 on a reform program that includes improving English at all levels and that introduces English as a medium of instruction in state schools. This 5-year program should show some results within a few years. It is hoped that it will be able to address some of the needs of a modernizing society, of the knowledge economy, and of the poor.

#### Provincial education outcomes

Province	Percentage of students achieving mastery of:		
	their first language (Sinhalese or Tamil)	mathematics	the English language
Western	51	52	20
Central	34	33	8
Southern	43	44	13
North-Eastern	23	25	5
North-Western	42	43	9
North-Central	36	41	8
Uva	34	35	8
Sabaragamuva	40	43	10
<b>Sri Lanka</b>	<b>37</b>	<b>38</b>	<b>10</b>

Source: World Bank, *Treasures of the Education System*, 2004.



# **Southeast Asia**

**Cambodia**

**Indonesia**

**Lao People's Democratic Republic**

**Malaysia**

**Myanmar**

**Philippines**

**Singapore**

**Thailand**

**Viet Nam**





# Cambodia

Consolidating rapid growth over the previous 2 years, the economy expanded strongly in 2006, reflecting robust clothing exports, tourism receipts, and construction activity. Forecast growth averaging over 9% in the next 2 years will be more dependent on strengthened domestic economic activity, itself underpinned by improved rural incomes, larger inflows of foreign direct investment (FDI), and greater government capital spending. The main challenge is to diversify sources of growth away from the current narrow base.

## Economic performance

GDP growth in 2006 is estimated at 10.4%, consolidating double-digit growth of the 2 previous years. The outturn was buttressed by stronger industrial production and robust expansion in services and construction activity.

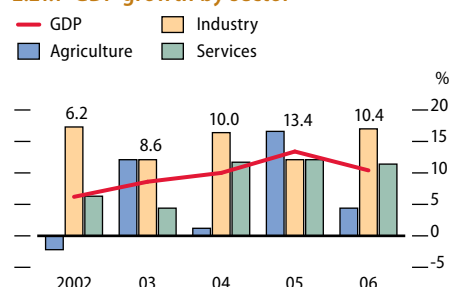
In industry, clothing exports grew by an estimated 32% in volume terms as manufacturers took advantage of temporary safeguard measures imposed against clothing exports from the People's Republic of China (PRC) by the United States (US) and the European Union (EU). Construction activity remained relatively strong due to a boom in residential and commercial buildings in Phnom Penh and Siem Reap. Growth in services was bolstered by solid increases in tourist arrivals. Agricultural production expanded by a stronger than expected 4.4% from the record levels achieved in 2005 (Figure 2.21.1). This was mainly the result of an increase in land under irrigation.

On the demand side, growth was supported by a rise in private investment reflecting growing investor confidence in future economic prospects, and in the Government's ability to maintain economic and political stability. Growth was also helped by a switch to a contribution from net exports (Figure 2.21.2) because of a narrower external deficit.

Budgetary performance continued to improve in 2006 with the overall fiscal deficit estimated at 2.4% of GDP, narrowing sharply from the recent trend deficit. The deficit is 1.5% of GDP if proceeds from the International Monetary Fund (IMF) Multilateral Debt Relief Initiative are included (Figure 2.21.3). Government revenues grew strongly to 11.6% of GDP from 10.4% in 2005, mainly because of an increase in tax collections. The rise in tax receipts compensated for lower capital revenues induced by a lack of privatization activity.

Expenditures are estimated to have risen less rapidly than receipts to 13.1% of GDP, reflecting growth in current spending related to higher outlays on social sectors, defense, and civil-service salaries. Locally financed capital expenditures, however, came in below expectations. Higher than expected revenues and expenditure restraint enabled the Government to reduce its stock of outstanding payment orders to domestic suppliers by about \$32 million, or one third. As in the past, the overall deficit was financed by concessional loans and grants.

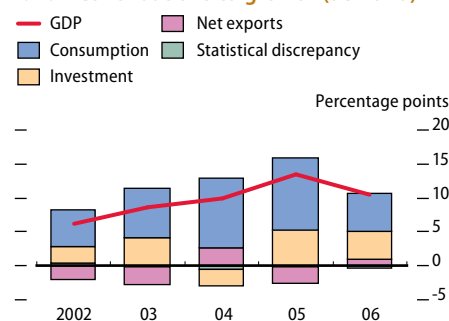
2.21.1 GDP growth by sector



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

2.21.2 Contributions to growth (demand)



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

In a sign of growing confidence in Cambodia's nascent financial system, broad money (M2) growth accelerated by 38% in 2006, largely on the back of a 54% surge in credit to the private sector and a 32% jump in net foreign assets of the banking system.

The private credit surge was fueled essentially by greater demand for loans for construction, real estate, and wholesale and retail trade, though an increased number of small and medium enterprises also borrowed for business expansion. The increase in net foreign assets of the banking sector reflected a more favorable external balance, and receipts from IMF's Multilateral Debt Relief Initiative.

In line with the stronger fiscal performance, the Government did not need to tap domestic banks to finance the budget deficit. The central bank continued to intervene in the foreign exchange market to stabilize the riel, which appreciated by 1.3% in 2006 to 4,061/\$1 by year-end.

Inflation slowed by about 1 percentage point to average 4.7% in 2006. Its fall was mainly a consequence of more moderate rises in food prices, as rice production increased and world market prices for rice stabilized. An easing of international oil prices in the last quarter of 2006 also helped. Year-end inflation at 2.8% showed a downward trend moving into 2007 (Figure 2.21.4).

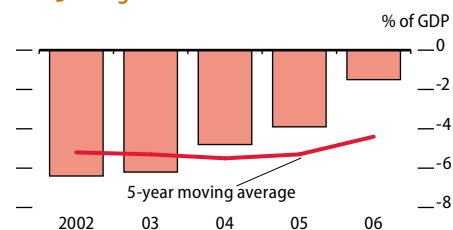
During 2006 merchandise exports expanded by an estimated 26.9%. Clothing shipments, which accounted for 72% of total exports, rose by 20.7% in value terms, despite stronger volume growth, reflecting lower unit prices as a result of stiffer global competition with the end of the Multifibre Arrangement. Exports of natural rubber rose sharply, but from a low base. Imports increased at a lower rate than exports (by 20.3%). The trade deficit, little changed from 2005 levels (Figure 2.21.5), was offset to some extent by significant growth in receipts from tourism, and the current account deficit (excluding official transfers) narrowed to 7.7% of GDP.

As in the past, the 2006 deficit was more than covered by concessional aid and inflows of FDI, leading to a larger overall balance-of-payments surplus. Gross international reserves of \$1.1 billion at end-2006 provided about 2.8 months of import cover. External public debt was estimated at \$3.3 billion or 46% of GDP, nearly 60% of which is owed to the Russian Federation and the US. Debt from those countries is not being serviced while it is being renegotiated. Most other debt is on highly concessional terms. The debt service ratio relative to exports of goods and services at end-2006 was low at 0.6% on a cash basis.

In policy developments, the Government continued to adopt laws and regulations, both to enhance private-sector activity and to fulfill its World Trade Organization (WTO) commitments. A new law on commercial arbitration provides for a mechanism for alternative dispute resolution and efforts are under way to set up a national arbitration center. The Government also adopted a licensing review plan that would pave the way to remove duplicate and unnecessary licenses affecting businesses.

Progress was also made on financial sector reforms. With a view to reducing the cost of borrowing and improving financial intermediation, a credit information system was introduced, providing commercial banks with credit-related information on prospective borrowers.

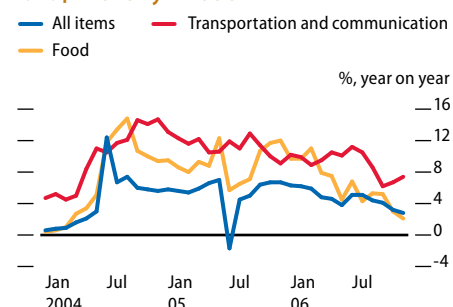
### 2.21.3 Budget balance



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

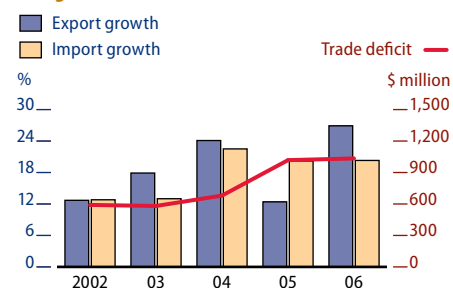
### 2.21.4 Monthly inflation



Source: National Institute of Statistics, available: <http://www.nis.gov.kh>, downloaded 28 February 2007.

[Click here for figure data](#)

### 2.21.5 Trade indicators



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

Legislation relating to negotiable instruments and payment transactions, which encompasses all noncash payment methods, was passed, and an online secured transaction filing system will be ready for launch some time this year. With a greater number of commercial laws being passed, arrangements are under way to adopt commercial law training material into the curriculum of universities for training lawyers, judges, and legal clerks.

The Government's public financial management reform program, launched in December 2004, also started to yield results, with an increasing proportion of customs and tax revenues being collected through the banking system, and a growing share of treasury payments to suppliers made by check instead of cash. The procurement process was streamlined and tightened, and the Government established internal audit departments in several ministries.

## Economic prospects

The following forecasts are predicated on the Government continuing to implement its National Strategic Development Plan 2006–2010, which aims to achieve interim targets of the Cambodia Millennium Development Goals. Toward this end it is assumed that the Government will maintain fiscal discipline and will continue reforming the management of public finances to strengthen revenue collection and increase outlays on social sectors and rural infrastructure, in line with plan priorities. It is also assumed that the monetary authorities will continue to closely supervise the banking sector to ensure that rapid increases in domestic credit do not give rise to balance sheet problems in the banking sector that could undermine the financial system.

In structural reforms, the forecast presupposes that the Government will continue to implement both policies that follow from the country's membership of WTO, and reforms to increase agricultural productivity. The outlook assumes normal weather conditions over the next 2 years, and that Cambodia will not be subject to an economically disruptive outbreak of avian flu.

Based on these assumptions, GDP growth is projected at 9.5% in 2007 and 9.0% in 2008 (Figure 2.21.6). Agriculture is expected to expand gradually because of productivity gains, reflecting an increase in the area under irrigation, the use of improved agricultural inputs, and greater commercialization in farming. With the maintenance of safeguard measures by the EU and US against PRC clothing exports during this period, Cambodia's clothing industry is likely to grow, but at slower pace than in recent years. This deceleration will be attributable to competition from lower-cost producers, including Viet Nam, which joined WTO in January 2007, and slower growth in world trade and in industrial country growth, particularly the US (Cambodia's largest market).

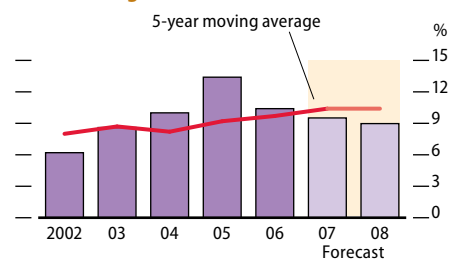
Construction activity is likely to keep expanding with planned construction of a new town, bridges across the Tonlé Sap and Mekong rivers, and a number of special economic zones. These zones will be on Cambodia's borders with Thailand and Viet Nam, where they can take advantage of lower-cost electricity from those countries and transport costs also will be lower.

### 2.21.1 Selected economic indicators

	2007	2008
GDP growth	9.5	9.0
Inflation	4.2	3.5
Current account balance (% of GDP)	-8.6	-10.1

Source: Staff estimates.

### 2.21.6 GDP growth



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

Tourism growth also is projected to continue: tourist arrivals have increased by an average of 25% over the past 5 years (Figure 2.21.7). On the demand side, domestic economic activity looks set to remain upbeat, underpinned by rising rural incomes, by increased inflows of FDI as the economy becomes more commercially oriented and as oil exploration attracts investment (oil and gas were discovered offshore in 2005; Box 2.21.1), and by higher government capital spending on the back of an improved revenue performance.

Inflation is projected to moderate to 4.2% in 2007 and to 3.5% in 2008 (Figure 2.21.8), provided that farm output expands as expected and the world market price for rice and oil are fairly stable. Year-end inflation is likely to decelerate to 3.5% and to 3.0%, respectively. The expected maintenance of a prudent fiscal policy, with no recourse to domestic bank financing, and a broadly stable exchange rate would assist in damping price pressures.

Export demand will moderate as a result of the expected slowing in growth of clothing shipments. Agricultural exports, particularly non-rice crops and fisheries, are projected to expand owing to efforts to promote processing of food products and increased commercialization of the sector. However, due to a low base, such export growth is unlikely to have a significant near-term impact on export values. Exports of tree crops such as rubber are also likely to expand, in part due to robust demand for raw materials from the PRC. Here as well, though, the production base is low, resulting from years of neglect of the sector.

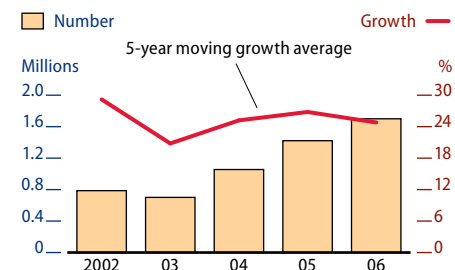
The import intensity of investment projects is likely to mean that import growth exceeds export growth, widening the trade gap and pushing the current account deficit out to 8.6% in 2007 and 10.1% in 2008 (Figure 2.21.9). Continued inflows of concessional loans and grants will partially offset the gap. They will be reinforced by expected higher inflows of FDI for investments related both to nonextractive industries, and to the search for oil, gas, and mineral resources such as bauxite, copper, and gold. Gross international reserves are forecast to be around 3 months of imports in 2007 and 2008.

## Development challenges

Robust growth over the past decade and structural reforms have led to a steady decline in the overall incidence of poverty from an estimated 47% in 1994 to a still-high 35% in 2004. The gains have been widespread but not uniform, with the incidence of rural poverty remaining stubbornly high at around 39% and income disparities increasing between rural and urban areas.

An important contributory factor is that economic growth has been narrowly based on clothing and tourism, both of which are urban focused with limited linkages to the rural economy. Moreover, prospects for Cambodia's clothing industry are uncertain. Its manufacturers will face sharper competition for global clothing markets as a result of the accession of Viet Nam to WTO and the scheduled removal in 2009 of safeguard measures against PRC clothing exports to the US. Viet Nam's clothing exports to the US previously came under quota restrictions; the value of items subject to quotas overlapped with 88% of the value

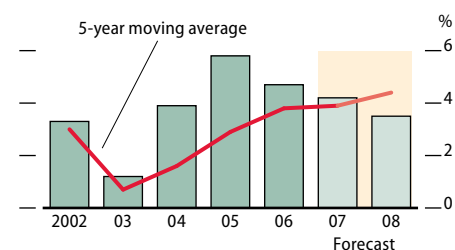
2.21.7 Tourist arrivals



Source: Ministry of Tourism, available: <http://www.mot.gov.kh>, downloaded 28 February 2007.

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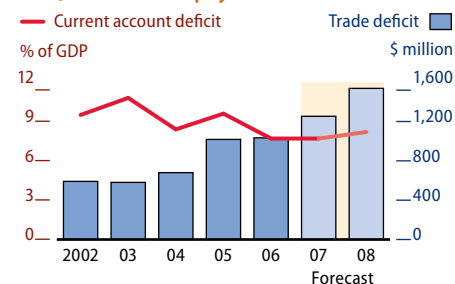
2.21.8 Annual inflation



Sources: National Institute of Statistics, available: <http://www.nis.gov.kh>, downloaded 28 February 2007; staff estimates.

[Click here for figure data](#)

2.21.9 Balance-of-payments indicators



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

of Cambodia's total clothing exports to the US. Moreover, the value of existing safeguard measures against PRC clothing exports to the US overlaps with 70% of the value of Cambodia's garment exports to the US.

Supported by development agencies, the Government has been addressing these challenges through institutional and policy reforms. The unfinished agenda, however, remains large.

In agriculture, the state has pursued a policy of increasing irrigation and land titling to lift productivity. These policies are beginning to yield results, but various deficiencies are threatening to undermine progress. In the area of land management—identified in the National Strategic Development Plan as fundamental for development and poverty reduction—regulations to implement crucial elements of the Land Law passed in 2001 have still not been approved, while some regulations that have been approved are not being implemented as planned. This has resulted in land conflicts, lost livelihoods, a further concentration of wealth, and worsening rural poverty and income inequality.

For the private sector, changes have been made in recent years to reduce the cost of doing business and to improve the business climate through trade facilitation measures and reductions in the cost and time associated with business registration. But little progress has been made to approve the Law on Concessions, which has been before the National Assembly since 2005 and is intended to improve transparency in the management of state assets and to promote private participation in infrastructure.

Progress has also been slow in legal and judicial reform, hindering the effective implementation of laws and forcing the private sector to operate according to uncertain market rules.

### 2.21.1 Oil and gas discovery

The discovery of oil and gas holds out hope for a substantial injection of revenue into the government budget. Exploration is at an early stage, but some estimates suggest that one of six offshore exploration areas could contain as much as 700 million barrels of oil. That could produce a revenue flow for the Government from this block alone of an estimated \$750 million–\$1 billion a year at full production, or roughly of the same order of magnitude as total revenues collected in 2006.

If significant amounts of oil or gas are brought into production, funding for poverty reduction and for development of social and economic infrastructure would be boosted in the medium term.

However, international experience also shows there is a need to guard against the phenomenon of a natural resource curse, where oil wealth leads, paradoxically, to economic stagnation and political instability. This can happen because hydrocarbons production rarely generates much employment, benefits mainly urban areas, can spur inflation and currency overvaluation, and can create more opportunities for corruption.

Such developments could erode the competitiveness of domestic agriculture and manufacturing, sectors that employ many Cambodians. Consequently, diversification of sources of growth, especially in rural areas, becomes a high near-term priority to ensure broad-based development and to avoid the possible damaging economic effects of natural resource wealth.

Effective legal and institutional safeguards are also needed, to ensure that the state collects and spends such wealth for the benefit of all.



# Indonesia

Moderate economic growth last year was based on private consumption and exports, while fixed investment growth dwindled. Inflation eased from high levels as the year progressed, enabling a reduction in interest rates. The economy is expected to pick up in 2007 and 2008, supported by greater development spending and some improvement in the investment climate. There is a window of opportunity to accelerate reforms, which would pave the way for a significant lift in investment, in turn making headway on job creation and poverty reduction.

## Economic performance

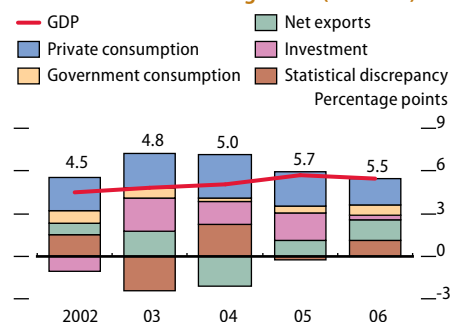
The economy grew by a modest 5.5% in 2006, slightly faster than average expansion over the previous 3 years. In line with recent trends, private consumption made the major contribution to overall GDP growth (Figure 2.22.1), even though spending slowed after the October 2005 reduction in fuel subsidies, which pushed up inflation and interest rates until well into 2006. Sales of motorcycles, a good barometer of confidence, fell by 12% in 2006, and auto sales collapsed by 40%. For all of 2006, growth in private consumption decelerated to 3.2%, from 4.0% a year earlier.

Net exports also made a significant contribution to overall growth. Exports surged by 9.2%, supported by buoyant world trade and high global prices for Indonesia's commodities such as crude oil, natural gas, minerals, and palm oil. Import growth slowed sharply to 7.6%, in part a result of weak investment for most of the year. Fixed investment grew by just 2.9% in 2006, far below rates achieved in 2004 and 2005, although it perked up in the fourth quarter when inflation and interest rates eased. As a result, investment made a relatively small contribution to GDP growth.

The weakness in investment stemmed not only from higher borrowing costs but also continuing deficiencies in the business environment. Planned reforms on tax, investment, and labor laws were bogged down in the parliament. Both realized foreign direct investment and domestic investment fell by a third in 2006, to \$6.0 billion and \$2.2 billion, respectively. Investment approvals, on the other hand, rose, which indicated that investment could turn up soon. As a share of GDP, gross fixed capital formation in Indonesia last year was 24%, up slightly from 2005 (Figure 2.22.2).

By sector, services continued to grow faster than agriculture and industry, and contributed 3.0 percentage points of the total 5.5% GDP growth (Figure 2.22.3). Transport, telecommunications, and domestic trade services performed strongly. Construction, part of the industry sector, grew by 9%, supported by a property market boom in many cities. Industry's contribution to GDP growth was 2.1 percentage points. Growth in manufacturing was moderate but mining growth was low, despite the country's wealth of mineral resources and high world prices for these

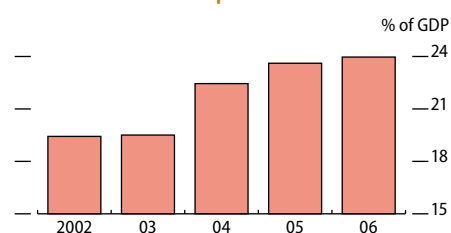
2.22.1 Contributions to growth (demand)



Sources: Asian Development Outlook database; Badan Pusat Statistik, available: <http://www.bps.go.id>, downloaded 26 February 2007.

[Click here for figure data](#)

2.22.2 Gross fixed capital formation



Sources: Asian Development Outlook database; Badan Pusat Statistik, available: <http://www.bps.go.id>, downloaded 26 February 2007.

[Click here for figure data](#)



commodities. A manifestation of weakness in the natural resources sector is Indonesia's continuing status as a net oil importer: crude oil production fell by 8% to 860,000 barrels a day by end-2006, and is down nearly 31% from 2001. Agriculture was hurt by drought in many parts of the country, although it continued to expand and contributed nearly a half percentage point to GDP growth.

Inflation eased from the rapid pace of above 17% in January, to around 7% late in the year as the impact of the 2005 raising of fuel prices faded (Figure 2.22.4). Bank Indonesia, the central bank, lifted its policy interest rate in 2005 to counter the upward pressure on prices. By May 2006, it was able to start reducing the policy rate, and by year-end had cut it by 3.0 percentage points to 9.75%. High interest rates and low levels of investor confidence led to a slowing in credit growth to 12.5% in 2006 from 29% a year earlier. While the central bank lowered its policy rate from May, commercial banks did not cut their lending rate to the same extent owing to perceptions of risk. Indicative of this, gross nonperforming loans increased from 8.3% of total loans at end-2005 to 8.6% in November 2006.

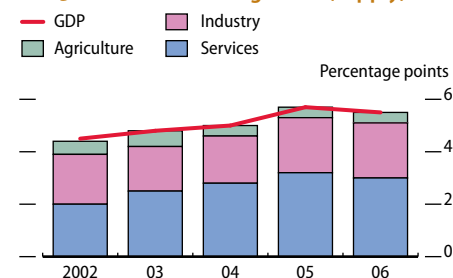
Much of the increase in nonperforming loans since 2004 has been due to operational and governance problems at state-owned banks. Consequently, the adoption in October 2006 of a regulation allowing state banks to restructure and dispose of such loans helped bring down the ratio to 7.0% by year-end. In early 2007, Bank Indonesia cut its policy rate in February and again in March, to 9.0%.

Citing improvements in the country's fiscal management and the Government's efforts to deal with corruption, international rating agencies Moody's and Fitch uprated Indonesia's outlook in early 2007 to positive from stable, though the sovereign rating remains below investment grade. Foreign portfolio investment inflows picked up last year. The Government issued \$2.0 billion in international bonds in 2006 and \$1.5 billion in February 2007. Stock prices soared, with the market index up by 55.3% in 2006, and market capitalization rose to the equivalent of about 40% of GDP from around 30% in 2005.

On the external front, the strength in merchandise exports (up 18.1% in nominal US dollars) and moderate rise in imports (up 5.1%) propelled the trade surplus 69.5% higher to \$29.7 billion. Trade in services remained in deficit, to the extent of \$11.2 billion, largely the result of rising imports of construction and financial services. The current account surplus rose to \$9.6 billion (Figure 2.22.5), or 2.6% of GDP. Foreign reserves reached \$42.6 billion, equivalent to about 7 months of import cover. These developments supported the rupiah, which appreciated by 9% over 2006 to end the year at Rp9,150/\$1.

Overall, the economy's vulnerability to external shocks has been decreasing, reflecting sound debt management. The ratio of total external debt to GDP fell from 46.1% in 2005 to just under 34.0% in 2006. The debt service ratio rose to above 20% from 15.5%, primarily because of the early repayment of \$7.8 billion owed to the International Monetary Fund and the end of a postponement on debt servicing that had been granted by the Paris Club to help the country handle its December 2004 earthquake and tsunami disaster. Public debt was reduced to 42.4% to GDP in 2006 (Figure 2.22.6).

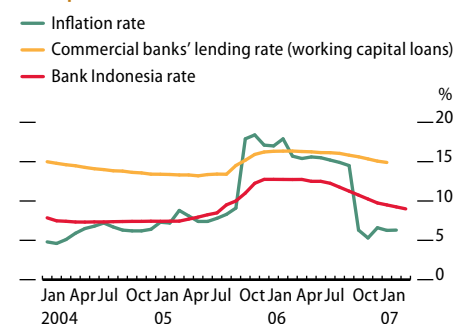
### 2.22.3 Contributions to growth (supply)



Sources: Asian Development Outlook database; Badan Pusat Statistik, available: <http://www.bps.go.id>, downloaded 26 February 2007.

[Click here for figure data](#)

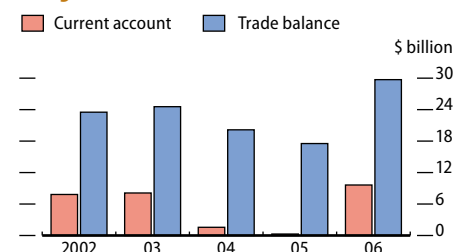
### 2.22.4 Interest and inflation rates



Sources: International Monetary Fund, *International Financial Statistics* online database, available: <http://ifs.apdi.net>, downloaded 26 February 2007; Bank Indonesia, available: <http://www.bi.go.id>, downloaded 14 March 2007.

[Click here for figure data](#)

### 2.22.5 Current account and trade balances



Sources: Asian Development Outlook database; Bank Indonesia.

[Click here for figure data](#)

The Government pressed ahead with its aim to contain the fiscal deficit and redirect public expenditures to development and social goals. The realized fiscal deficit in 2006 was 1.0% of GDP, against a planned level of 1.3% (Figure 2.22.7). Total national public expenditures—at all levels of government—have risen steadily over the past 8 years, and at an accelerated pace in 2004–2006.

As a proportion of GDP, national public expenditures rose from about 19% in the years 2003–2005 to about 20% in 2006. The cost of subsidies, mainly for fuel and electricity, increased to 4.4% of GDP in 2005, and then declined to 3.2% last year. The October 2005 hikes in fuel prices cut about \$10 billion a year from subsidies. Fiscal space generated by these cuts has enabled the Government to increase fiscal transfers to the regions from 5.6% of GDP in 2005 to an estimated 7.4% in 2006. Overall development expenditures are estimated to have risen by 1 percentage point to 7% in 2006.

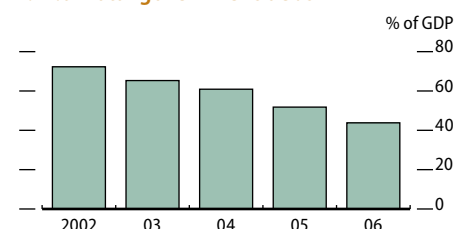
At the central government level, there is a clear effort to redirect spending. Education outlays rose by 34% in real terms last year. They accounted for 17.2% of total government spending and stood at 3.6% of GDP. However, health and infrastructure expenditures remain low, with health less than 1% of GDP in 2006 and new public infrastructure investment below 3%.

Although fiscal transfers to the regions have gone up substantially, the funds often are not spent because of severe capacity limitations. As of November 2006, the regions were estimated to hold the equivalent of almost \$10 billion (3.1% of GDP) in cash deposits. The central Government is rolling out a community-designed development program that could become a vehicle for lifting spending by local governments. The program will provide resources to communities to undertake locally executed small-scale public works projects.

While macroeconomic stability has been restored, much remains to be done to combat unemployment and poverty. The moderate pickup in economic growth since 2001 has not been enough to reverse a persistent increase in unemployment from below 9% to an estimated 10.3% over this period (Figure 2.22.8). Underemployment, based on the Government's estimate, was about 21% in 2003. Consequently, about 42% of Indonesians live on \$1–2 a day, leaving them particularly vulnerable to adversities such as ill health or natural disasters. National poverty incidence is estimated to have increased from 16% in 2005 to 17.8% in March 2006. The reduction in fuel subsidies certainly hurt many people, although it was cushioned by government cash payments that provided subsistence support for 19.2 million poor and near-poor households.

But what appears to have deepened poverty to a greater extent was a 33% rise in rice prices between early 2005 and early 2006, caused by lower output of the crop and the Government's reluctance to lift a ban on rice imports. After a prolonged debate in 2006 over the benefits to the poor of imports against possible damage to domestic growers, the Government imported rice from Viet Nam in the fourth quarter to shore up its buffer stock and stabilize prices. Late seasonal rains and drought in several parts of the country delayed rice planting and pushed up prices by a further 8% in December. The Government therefore imported more rice early this year.

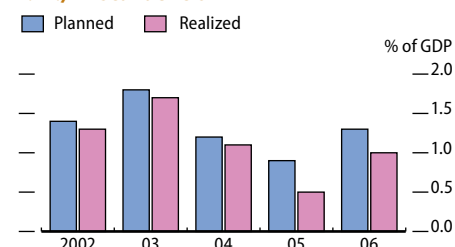
#### 2.22.6 Total government debt



Sources: Bank Indonesia, available: <http://www.bi.go.id>; Ministry of Finance, available: <http://www.dmo.or.id>, both downloaded 28 February 2007.

[Click here for figure data](#)

#### 2.22.7 Fiscal deficit



Sources: Asian Development Outlook database; Ministry of Finance, available: <http://www.fiskal.depkeu.go.id>, downloaded 28 February 2007.

[Click here for figure data](#)

#### 2.22.8 Social indicators and GDP growth



Sources: Asian Development Outlook database; Badan Pusat Statistik, available: <http://www.bps.go.id>; CEIC Data Company Ltd., downloaded 26 February 2007.

[Click here for figure data](#)

Some progress was achieved on policy matters in 2006, but several important issues were not resolved. Government financial management was strengthened with a focus on improving tax and customs administration and on treasury reforms. The parliament enacted amendments to the Law on Customs, enabling customs procedures to be simplified and imposing stiffer penalties on smuggling. This law, and one on warehouse receipts that enables their use as collateral for financial intermediation, were the only noteworthy economic laws approved by the parliament.

Legislators did not resolve their differences over the more important laws on investment, tax, and labor market issues. The proposed investment law would clarify which sectors are open for foreign investment and simplify investment procedures. Proposed amendments to the income tax system would, among other changes, establish a single corporate income tax rate, phase down the maximum income tax rate for individuals, and cut the tax on dividends. The law also would (once on the statute books) provide tax incentives to investment in mining, oil, gas, and geothermal energy and to small and medium enterprises.

Proposed changes to labor legislation also stalled, as discussion continued to resolve the three main weaknesses of the 2003 Labor Law: there is no role for negotiated wage settlements, instead allowing for ad hoc increases in minimum wages by regional administrations leading to unpredictable increases in labor costs; it mandates severance, or layoff, payments that are much larger than in comparable economies; and it limits the ability of employers to outsource tasks, even tasks that cannot be done locally.

The Government fell short of its 2006 privatization target, raising Rp2.5 trillion (\$277.2 million), including Rp2.1 trillion through a 5.1% divestment in the state gas utility Perusahaan Gas Negara, against a budget target of Rp3.0 trillion. For 2007, the budget targets privatization receipts of Rp2.0 trillion.

## Economic prospects

The Government is at the midpoint of its elected term, and the opportunity to implement reforms that could accelerate economic growth may be fairly brief because electioneering and positioning for 2009 parliamentary and presidential elections will probably start from about mid-2008. The following forecasts assume the administration will push harder in the next year or so to implement the policy measures already in place. They also assume that the Government will improve the legal and regulatory environment, and that regional governments will do a better job in spending transfers from Jakarta.

On this basis, economic expansion is projected to accelerate to 6.0% this year and 6.3% the next, rates of growth not seen since the mid-1990s (Figure 2.22.9). A gradual decline in interest rates will likely feed a recovery in bank lending to fuel growth in consumption and investment. The latter should also benefit from the recent strong export performance, as well as an anticipated pickup of manufacturing. A long list of planned infrastructure projects involving public-private partnerships was prepared by the Government in early 2005, but only a handful have been started.

### 2.22.1 Selected economic indicators

	2007	2008
GDP growth	6.0	6.3
Inflation	6.2	6.1
Current account balance (% of GDP)	1.0	0.7

Source: Staff estimates.

The focus now is on a shorter list of projects; some power, transport, and water supply projects are expected to get under way in 2007 or 2008. Gross fixed investment is forecast to climb to 25–27% of GDP over the forecast period. Spurred by investment growing at above 9% and consumption at 4.5%, GDP growth will likely be ratcheted up in 2008 by election-related spending.

In the external accounts, exports are forecast to decelerate to around 10% in nominal terms this year because of softer growth in major export markets. Imports, in contrast, will accelerate to meet the higher investment needs. The current account surplus is expected to decline to 1.0% of GDP in 2007 and 0.7% in 2008 (Figure 2.22.10).

Central government public expenditures are forecast to rise by 1.4 percentage points of GDP to 22.5% in 2007. In particular, development expenditures in nominal terms are budgeted to increase by 25%, or from 3.2% of GDP in 2006 to 3.6% in 2007. Spending looks likely to exceed budget projections for various reasons: January 2007 floods in Jakarta that killed over 80 people and caused extensive property damage; a hot mudflow from an East Java gas exploration site, which requires an estimated \$833 million to clean; repairing earthquake damage in West Sumatra; and buying rice for buffer stocks. With these elements, the overall 2007 deficit is expected to be wider than the 1.1% of GDP forecast in the budget. Still, Government debt is projected to decline because of repayments and may yet reach the targeted 30–32% by 2009.

Inflation is projected to average just over 6% this year and next (Figure 2.22.11). However, these forecasts would need to be raised if the Government decided to reduce subsidies on electricity. A phased increase in power tariffs and a restructuring of the tariffs, so that each market segment paid the true cost of providing electricity, would be desirable, as it would free budget resources for more productive purposes. It would also encourage investment in power generation—the Government provided nearly \$4 billion (1.4% of GDP) in subsidies to the state power generation utility in 2005 and an estimated \$2.6 billion last year.

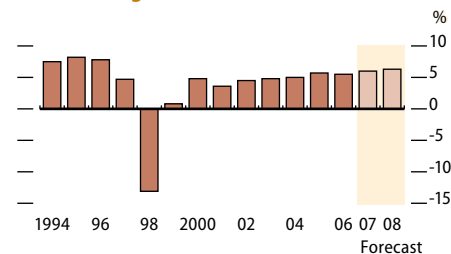
Two key domestic downside risks lurk: agricultural output and avian flu. Drought persists in parts of the country, while other areas have been flooded; and the El Niño weather phenomenon may return, which would cause drier than usual weather. Avian flu has already claimed more than 60 human lives in Indonesia, the largest death toll in the world, and agriculture has suffered from selective culling of poultry in many parts of the country and from bans on backyard poultry-keeping in urban areas.

An optimistic scenario for the next 5 years is that pending laws and regulations are enacted, encouraging private sector development and accelerating GDP growth to 7–8%. A gloomier scenario has the country faltering on implementation of policies and failing to unblock funding constraints at the regional level. In such an event, Indonesia would be locked into sub-6% growth.

## Development challenges

The foremost challenge is to accelerate growth to a level that can create enough jobs to hold back the tide of unemployment and underemployment and reduce the vulnerability of the poor.

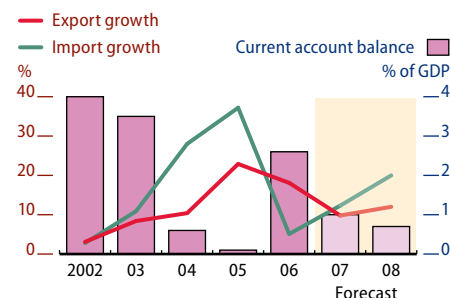
### 2.22.9 GDP growth



Sources: Asian Development Outlook database; Badan Pusat Statistik, available: <http://www.bps.go.id>; CEIC Data Company Ltd., downloaded 26 February 2007.

[Click here for figure data](#)

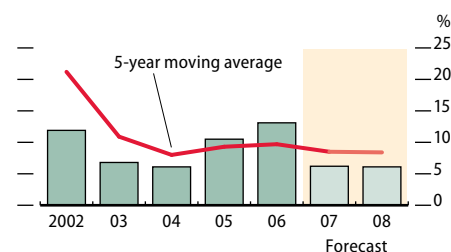
### 2.22.10 External indicators



Sources: Bank Indonesia; staff estimates.

[Click here for figure data](#)

### 2.22.11 Inflation



Sources: CEIC Data Company Ltd., downloaded 26 February 2007; staff estimates.

[Click here for figure data](#)

Macroeconomic stability and sustained modest growth rates have been achieved in recent years through generally sound policy management, but little in the way of major structural improvements. Portfolio investment has been strong, partly a result of the surge in global liquidity, but direct, long-term investment is tepid.

Rankings of national competitiveness (Table 2.22.2) put Indonesia below many comparable economies in factors such as government efficiency, the business environment, and infrastructure quality. The Government has done much to prepare its reform agenda over the period 2003–2006. Effective implementation, though, has lagged. Attention to some vital issues would boost the outlook.

Finalizing and adopting the proposed investment and tax reform packages is vital. While the investment climate-related laws still pending in the parliament are likely to be enacted this year, a long delay and a continuing lack of clarity on institutional arrangements for investment coordination within the Government have undermined credibility. On the labor front, the authorities need to bring labor and business to the negotiating table to achieve consensus on ways to make the labor market more flexible, particularly with regard to outsourcing and payment for layoffs. In this regard, a proposed insurance-based system to fund such payments holds promise.

A significant increase in private investment also requires greater legal and regulatory certainty. The executive branch of the Government can play a key role in two ways. First, it can improve credibility by speaking with one voice, and adopting a concerted approach to resolving contract disputes. Several disputes between the Government and private investors have been protracted, damaging Indonesia's credibility. Second, greater coordination between executive, parliamentary, and judicial institutions, and between central and regional authorities, would be most useful. The judiciary should be adequately resourced and be able to look at the costs imposed by its rulings on the investment climate. Private investment would be encouraged if small and medium enterprises had better access to funding.

The plan to improve physical infrastructure needs a solid push. High-quality projects have to be prepared, and then bid out in a transparent manner. An effort now under way to prepare model projects requires support by all the ministries concerned. Civil service reforms are also needed (Box 2.22.1).

Given Indonesia's vulnerability to natural disasters, another challenge is to enhance disaster management capabilities and risk mitigation. Better coordination and planning can help to reduce the impact on the population and the economy of calamities such as floods and earthquakes. Regional governments in particular need to use their increasing resources to build better roads and flood protection systems and to plan for the perhaps inevitable disasters.

#### 2.22.2 World competitiveness rankings

Country	2001	2003	2006
China, People's Rep. of	26	29	19
India	42	50	29
Malaysia	28	21	23
Philippines	39	49	49
<b>Indonesia</b>	46	57	60
Number of countries/ regions ranked	49	59	61

Source: *World Competitiveness Yearbook*, 2006, published by IMD, Switzerland.

#### 2.22.1 Civil service reforms

Attracting capable people to the civil service will take better incentives, merit-based entry, and a more performance-oriented culture.

Public agencies sometimes perform similar functions with unclear mandates. For instance, there are numerous agencies with different responsibilities on civil service management.

In the audit area, the supreme audit institution has the legal mandate, but inadequate human resources, while an internal government agency with no clear mandate on audits has hundreds of well-qualified auditors. Local governments that are entrusted with severe public resources have huge capacity constraints.

Some ministries, such as finance, are moving to strengthen their organizational structure and improve capacity. This needs to be replicated across the whole government bureaucracy.

Civil service reforms would help the Government sustain its anticorruption efforts.



# Lao People's Democratic Republic

Foreign investment in hydropower and mining, together with rising exports of minerals in 2006, continued to drive double-digit growth in industry, the major contributor to GDP growth. Inflation slowed to levels not seen since 1994. However, progress was slow on reforming fiscal management and on improving the climate for private investment. Economic growth is projected to decelerate moderately this year.

## Economic performance

Growth accelerated to 7.3% in 2006, to average 6.5% over the past 5 years. Robust growth over the period is largely attributable to industry, particularly the development of hydropower projects and gold and copper mining. Industry registered double-digit growth over the period (13% last year), expanding to account for 31% of the economy (up 10 percentage points in a decade). It was the largest contributor to total GDP growth in 2006 (Figure 2.23.1). Services grew by 5.5% and agriculture by 3.3%. Actual gross foreign direct investment (FDI) increased by 30% to \$650 million, driven by large investments in the Nam Theun 2, Nam Ngum 2, and Xe Kaman 3 hydropower projects and in mining.

While growth picked up, average inflation eased to 6.8% in 2006, the lowest rate in 12 years (Figure 2.23.2). Rice output recovered after being hit by floods—and this helped slow inflation.

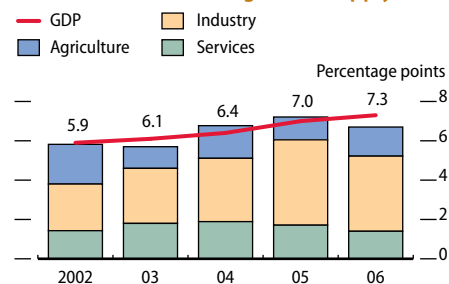
The kip appreciated against the US dollar by 5.2% using average exchange rates for 2005 and 2006, but the currency weakened slightly against the Thai baht (Figure 2.23.3). The Bank of the Lao People's Democratic Republic (Lao PDR) could be expected to take steps if needed to prevent any sharp decline against the baht, owing to the importance of Thailand as a supplier to the country.

Merchandise exports in nominal terms soared by an estimated 51% in 2006 as a result of both higher prices and export volumes of minerals. Over the past 5 years, exports have averaged 23% growth. Imports have been boosted by foreign inputs for hydropower and mining projects. In 2006, imports grew by 13.5% and are expected to accelerate further this year. The current account deficit widened to 14.0% of GDP. External reserves, at about \$300 million, were buoyed by higher mining exports and FDI. Reserves equal 3.3 months of imports of goods and services.

The overall fiscal deficit (excluding grants) narrowed to about 5.7% of GDP in FY2006 (ended 30 September 2006) from 6.0% in FY2005 (Figure 2.23.4). Revenue collection (chronically a weak link in the budget) increased partly because tax collection functions were moved back to the central Government from the provinces. Also, a new tax law that came into effect in 2005 widened the tax base and increased receipts from large projects and tourism.

However, revenues are still hampered by tax exemptions and by lackluster collection of nontax items. Overall, the fiscal position remains

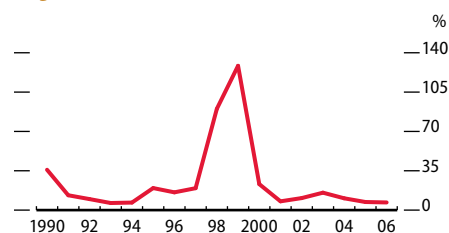
2.23.1 Contributions to growth (supply)



Sources: National Statistics Centre, available: [www.nsc.gov.la](http://www.nsc.gov.la), downloaded 21 February 2007; staff estimates.

[Click here for figure data](#)

2.23.2 Annual inflation



Source: National Statistics Centre, available: [www.nsc.gov.la](http://www.nsc.gov.la), downloaded 21 February 2007.

[Click here for figure data](#)



fragile. Expenditures were generally below allocations in FY2006, especially on the capital side. Overambitious revenue projections compelled the Ministry of Finance to maintain strict cash management of actual budget allocations. This approach has enabled the Government to rein in the overall budget deficit to levels required to maintain macroeconomic stability, but it may well delay planned expenditure. External public debt was estimated at \$1.6 billion (46% of GDP) at end-2006. Much of the debt is owed to multilateral development banks and the Russian Federation on concessional terms.

Efforts were maintained to improve the performance of state-owned enterprises (SOEs). Restructuring of large SOEs continued in 2006 with draft external audits done on four of them. Restructuring plans were prepared on another five. The aim is to promote their commercial viability so as to reduce the funding burden on the budget and on state-owned banks. While SOEs are now less important in terms of their contribution to the economy and employment than a decade ago, they still generate a large share of nonperforming loans (NPLs), which risks the stability of the banking system.

On the fiscal reform front, the National Assembly passed several tax enhancements and a value-added tax is scheduled to come into effect in late 2007. More needs to be done, though, to implement these measures and to more broadly lift efforts to raise revenues (now equivalent to 12.5% of GDP) and reform state-owned banks.

The Government approved the Sixth Socioeconomic Development Plan 2006–2010 in July 2006. It aims to achieve annual average GDP growth of 7.5–8% over the 5 years with agriculture and forestry increasing by 3–3.4%, industry by 13–14% and services by 7.5–8%. GDP per capita is targeted to increase to \$700–750. Inflation is envisaged to average 6–6.5% a year.

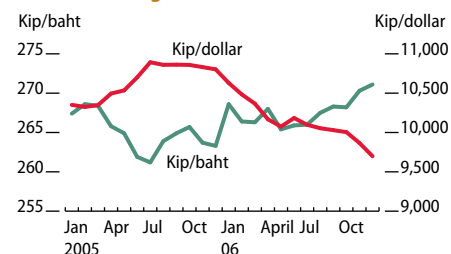
## Economic prospects

Projections for 2007 and 2008 assume that the Government will accelerate structural reforms and meet targets of the Development Plan. As it pursues membership of the World Trade Organization, the Government is expected to improve the climate for investment and trade. The outlook also assumes further economic integration into the subregion—driven by the ASEAN Free Trade Area (AFTA) and other regional initiatives—which should lead to improved transportation links, facilitate trade and investment, and promote tourism with neighboring countries. FDI inflows are projected to remain buoyant, with new investment in rubber plantations, contract farming, and in tourism.

On the downside, global prices of gold and copper are likely to stabilize after sharp gains over recent years. Economic growth is projected to slow in most of the Lao PDR's export markets, including the People's Republic of China, European Union, Thailand, and the United States. Taking into account these influences, GDP growth is projected to slow by a half percentage point to 6.8% this year. Projected lower year-average global prices of fuel and food will bring down inflation to about 5%.

Exports of clothing to the US are increasing, but this industry is constrained by Lao PDR's high transportation costs and need to import much of its raw materials for clothing. While total exports will

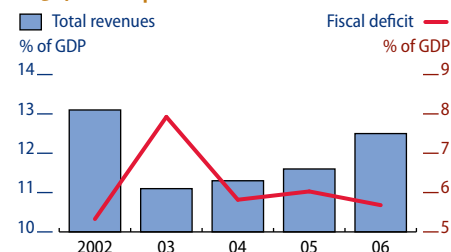
### 2.23.3 Exchange rates



Sources: International Monetary Fund, *International Financial Statistics* online database; Bloomberg; both downloaded 7 February 2007; staff estimates.

[Click here for figure data](#)

### 2.23.4 Fiscal performance



Sources: International Monetary Fund, *Lao People's Democratic Republic: Selected Issues and Statistical Appendix*, November 2006; staff estimates.

[Click here for figure data](#)

#### 2.23.1 Selected economic indicators

	2007	2008
GDP growth	6.8	6.5
Inflation	5.0	5.2
Current account balance (% of GDP)	-15.3	-13.1

Source: Staff estimates.

remain strong, the merchandise trade deficit is projected to widen as a consequence of increased imports required for mining and hydropower projects. Imports of consumer items are also expected to increase as a result of reductions in tariffs required by AFTA commitments. In services, tourist arrivals rose by 15% to an estimated 1.3 million in 2006 and are projected to reach 1.6 million in 2008 (Figure 2.23.5).

The current account deficit will remain substantial in the forecast period. Inflows of grants and FDI should cover the external financing requirement.

Domestic risks to the projections include a possible resurgence of avian flu, which could undermine growth in tourism and agriculture, and put an additional strain on the budget. The slow pace of reforms also puts the economy at risk. Unless improvements continue in the trade and investment climate, the growth outlook will weaken. The main risk on the fiscal side is that revenues from natural resources may be seen as a substitute for undertaking difficult reforms to mobilize nonresource revenues, limiting the improvement in the overall revenue effort and making fiscal consolidation more difficult.

## Development challenges

Solid rates of economic growth have reduced income poverty, though more attention is needed to ensure that growth generates the Development Plan's target of reducing the number of poor households to below 15%, and creating 652,000 additional productive jobs during 2006–2010. Exploiting hydropower (Box 2.23.1), minerals, and forestry resources can maintain GDP growth, but these activities have limited capacity to generate employment.

The population is relatively young and is expected to grow at about 2% annually. Thus, development of commercial agriculture and labor-intensive services should be a high priority if new entrants are to be absorbed into the labor force. Agriculture, which employs about 80% of the population, remains vital to development that lifts more people out of poverty. An improved climate for small and medium enterprises would diversify income sources, add value to agriculture production, and provide steady employment.

The country looks likely to meet its Millennium Development Goals in income poverty reduction. However, some nonincome targets related to basic education, maternal health, child nutrition, and access to clean drinking water may be beyond reach. Although coverage of basic services is improving, service quality and affordability are problems, and several regions are underserved.

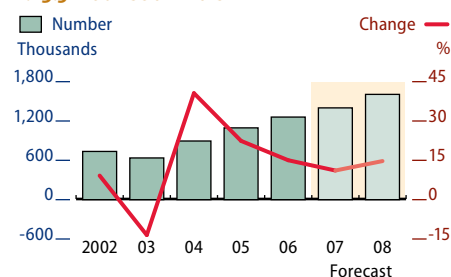
Fiscally, financial management and reporting systems require further strengthening. Government efforts to mobilize revenues have yet to reach expectations and tax administration requires strengthening. Development of much-needed private sector activity requires greater legal enforcement, more efficient business license requirements, and clarity on property rights. Much work remains to be done on restructuring SOEs and state-owned commercial banks.

### 2.23.1 Power and growth

Growth will continue to be supported by construction of the big 1,070-megawatt (MW) Nam Theun 2 hydroelectric project—which began in 2005 and is expected to be completed in 2009—and further expansion of gold and copper production. An energy cooperation agreement signed with Cambodia in 2006 looks likely to lead to a purchase agreement.

Thailand, the main consumer of Lao PDR-generated electricity, is preparing to sign new purchase agreements for power. Additional purchase agreements are expected because the 250 MW Xe Kaman 3, the 70 MW Xe Set 2, and the Nam Ngum 2 hydropower projects are scheduled to start production during 2009–2012. New mines are also due to get under way in the medium term.

### 2.23.5 Tourist arrivals



Source: Lao National Tourism Administration, *Statistical Report on Tourism in Laos, 2004, 2005*.

[Click here for figure data](#)

# Malaysia

Consumption spending produced a pickup in growth in 2006. Private and public investment also strengthened with support from the Ninth Malaysia Plan. Growth is projected to slow by about a half percentage point in 2007 as export markets soften and both household spending and private investment decelerate. Higher government investment is expected over the Ninth Plan period as the Government encourages firms to climb the value chain, but constraints such as gaps in skills will need to be overcome for private investment to follow.

## Economic performance

The economy grew by 5.9% in 2006, largely because of robust consumer spending (Figure 2.24.1). Private consumption continued to be a driver, rising by 7.0% and accounting for 3.5 percentage points of total growth. Last year was the fourth in a row that private consumption rose faster than GDP. Low, though rising, interest rates and favorable terms of trade for agricultural exports such as natural rubber (raising rural incomes), supported household spending.

Strong consumer spending encouraged business investment, which helped push growth in private fixed capital investment to 11.1% in 2006. Higher business confidence also stemmed from several years of robust exports and expectations of higher government spending following publication of the Ninth Malaysia Plan (2006–2010), which commits the Government to large development programs over the 5 years (Box 2.24.1 below). In the first year, public investment rose by 5.4% after much weaker spending in previous years. Total investment (including changes in inventories) contributed 1.7 percentage points of GDP growth.

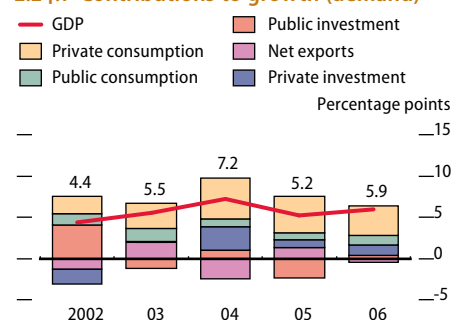
On the production side, agriculture represents less than 10% of GDP, but is important for rural incomes and for exports, and as a basis for large and growing agroindustry subsectors. Growth in 2006 of 6.4% (Figure 2.24.2) represented a longer-term supply response to high international prices for crops, such as rubber and palm oil, and better weather than seen in 2005.

Industrial output rose by 5.3% in 2006, but this masks a combination of strong manufacturing growth (up 7.0%) with continued weaknesses in mining (down 0.2%) and construction (down 0.5%). Mining, at 6–7% of GDP, consists mainly of oil and natural gas production. Output of hydrocarbons in 2006 was hindered by shutdowns of production facilities for scheduled maintenance.

Construction contracted for a third year in a row, although it appeared to be stabilizing during 2006, perhaps in response to the startup of Ninth Plan projects. Manufacturing makes up a third of the economy and has been growing rapidly, supported by export-oriented sectors including electrical and electronic products.

Services account for more than half the economy and grew by 6.6% in

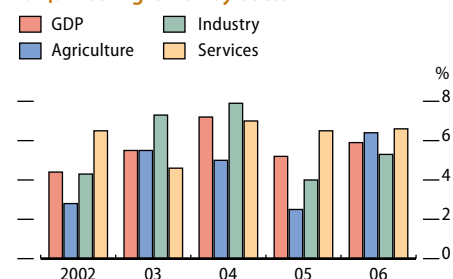
**2.24.1 Contributions to growth (demand)**



Sources: Bank Negara Malaysia, available: [www.bnm.gov.my](http://www.bnm.gov.my), downloaded 28 February 2007; staff estimates.

[Click here for figure data](#)

**2.24.2 GDP growth by sector**



Source: Bank Negara Malaysia, available: [www.bnm.gov.my](http://www.bnm.gov.my), downloaded 28 February 2007.

[Click here for figure data](#)

2006, paced by finance- and trade-related businesses. Total employment rose by 2.5% in 2006 and the unemployment rate steadied at 3.4%.

Pushed by higher international energy prices, consumer prices rose by 3.6% in 2006 after 3.0% in 2005. Inflation peaked in the first half of the year after hikes of 18–24% in administered retail fuel prices in February 2006. (Malaysia is a net exporter of oil and gas and the Government subsidizes retail energy.) Before the sharp price rises in February, retail diesel and gasoline prices were little different from the equivalent costs of crude oil, with production and distribution costs subsidized. After the price rises, the remaining subsidies were estimated to be equivalent to 28% of average retail prices and totaled roughly RM19 billion, or about 14% of federal government spending. Cost pressures, while slower in the second half of 2006, were still apparent later in the year, as, for instance, electricity prices were hoisted in June by an average of 12%, depending on the category of user.

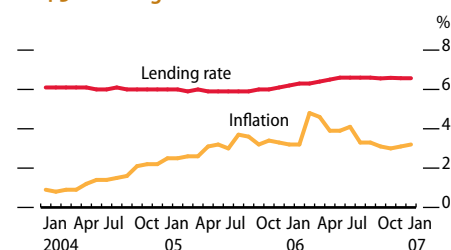
The inflationary pressures prompted increases in interest rates, although monetary policy remains broadly accommodating to growth. Bank Negara Malaysia, the central bank, raised its overnight policy rate from 2.7% to 3.5% in three separate actions between November 2005 and April 2006, and has kept it unchanged since. Lending interest rates have been above comparable inflation rates (Figure 2.24.3). The rise in the overnight policy rate lifted most short-term deposit rates so they were narrowly positive in real terms as inflation moderated. In 2006, broad money (M2) rose by 16.6%, little different from 2005 (Figure 2.24.4).

Malaysia's decision in mid-2005 to move off the fixed peg for the ringgit allowed some flexibility in monetary policy in 2006. The ringgit appreciated by 7.0% from the start of 2006 to year-end against the US dollar. This was somewhat more than the movement of the yuan, but it was less than for other Southeast Asian currencies. The smooth shift to a managed float from a US dollar peg and the steady appreciation relative to the US dollar have enhanced the credibility of the monetary authorities and reduced market concerns of sudden currency revaluations.

Fiscal policy has balanced meeting a longer-term goal of cutting government borrowing with a more immediate concern of encouraging growth. The fiscal deficit has been lowered from above 5% of GDP in the early part of this decade to 2.6% in 2006. As a net hydrocarbons exporter, high international energy prices provide a cushion for government spending. In 2006, a \$1 per barrel rise in the price of crude oil corresponded to RM228 million (\$62 million) higher oil-related revenues. Such revenues represented 37% of central government income; however, remaining retail fuel subsidies could absorb up to one quarter of these receipts.

The external sector lowered GDP growth by 0.4 percentage points in 2006 because growth of imports (in dollar terms) at 24.5% outpaced that of exports of 16.9% (Figure 2.24.5). Total exports still exceeded imports, supported by strong growth in electronic and electrical goods (constituting about half of merchandise exports) and rising prices for oil, gas, and some agriculture products. Imports are linked closely to exports, with intermediate imports making up about 70% of the total. These imports grew apace with exports, while imports for consumer goods grew faster, responding to strong household demand.

### 2.24.3 Lending rate and inflation

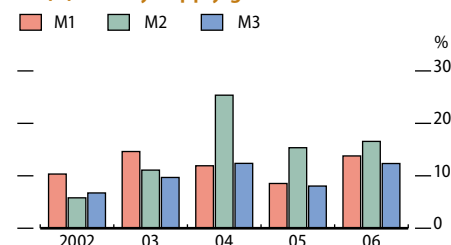


Note: Lending rate is the average for commercial banks.

Source: Bank Negara Malaysia, available: [www.bnm.gov.my](http://www.bnm.gov.my), downloaded 28 February 2007.

[Click here for figure data](#)

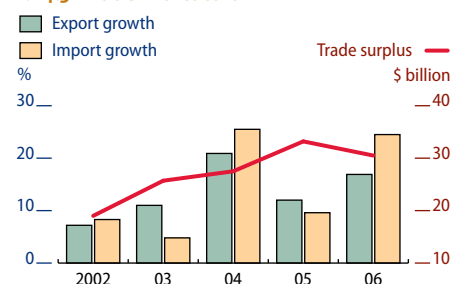
### 2.24.4 Money supply growth



Source: Bank Negara Malaysia, available: [www.bnm.gov.my](http://www.bnm.gov.my), downloaded 28 February 2007.

[Click here for figure data](#)

### 2.24.5 Trade indicators



Sources: Bank Negara Malaysia, available: [www.bnm.gov.my](http://www.bnm.gov.my), downloaded 28 February 2007; staff estimates.

[Click here for figure data](#)

Owing to the smaller merchandise trade surplus, the current account surplus fell slightly to \$19.6 billion or 12.8% of GDP (Figure 2.24.6). The deficit on net services exports widened a little. International reserves climbed to \$82.2 billion, equivalent to seven times external debt falling due within 12 months.

## Economic prospects

The economy is projected to grow by 5.4% in 2007, a half percentage point slower than in 2006, based on the assumption that the external environment will be less supportive. Likely continued moderate appreciation of the ringgit (similar to the appreciation against the US dollar in 2006) will also diminish gains from exports in dollar-denominated markets. The deceleration in export growth will, however, also lower import demand (for intermediate products), mitigating the larger impact on the domestic economy.

Although prices for export commodities might soften, they will likely still be stronger than expected a few years ago, and current expectations are for commodity prices to stay high enough to merit new investment in oil and gas projects as well as rubber and palm oil (Figure 2.24.7). Overall, real private investment is expected to expand at a more moderate 7.7% pace in 2007 compared with 2006. Investment by the public sector, though, is forecast to pick up, encouraged by the Ninth Plan.

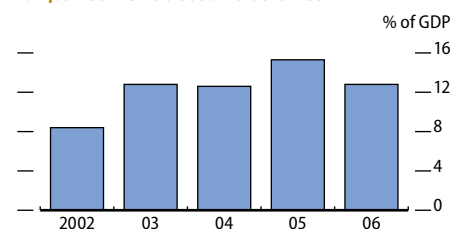
Surveys late in 2006 suggested rising consumer confidence, in line with growing incomes and receding inflation. Consequently, private consumption spending will continue to support growth, but not as strongly as in recent years as trends in expenditure move back in line with the larger pattern of national income growth. This slowing in household spending, an assumed moderate appreciation of the ringgit against the US dollar, and lower global oil prices than in 2006, point to inflation decelerating to about 2.7% in 2007.

The growth of monetary aggregates stepped up in the second half of 2006, so for the monetary authorities it will be important to carefully balance accommodating growth with discouraging any buildup of inflationary expectations. Pressure on the ringgit to appreciate, manifested especially in the buildup of foreign reserves, complicate this balancing act.

By industry, construction is expected to expand as a result of increased investment, especially by the public sector. House construction may soften though, because approvals for housing trended down last year. Mining (largely oil and gas) is set to expand as projects started earlier come on stream. Manufacturing and services will show some slowdown in output growth, especially in segments that rely on overseas trade. Agriculture will benefit from continuing opportunities to supply products such as rubber and palm oil to export markets, but also from structural changes, such as the growing role of supermarket supply chains that can better link higher value-added urban markets to farms.

The policy of gradual fiscal consolidation is likely to be maintained, but will be balanced against the interest of ensuring that the Ninth Plan's investment programs are undertaken. Financing the Government's broader development agenda is helped by large surpluses run by

### 2.24.6 Current account balance



Sources: Bank Negara Malaysia, available: [www.bnm.gov.my](http://www.bnm.gov.my), downloaded 28 February 2007; staff estimates.

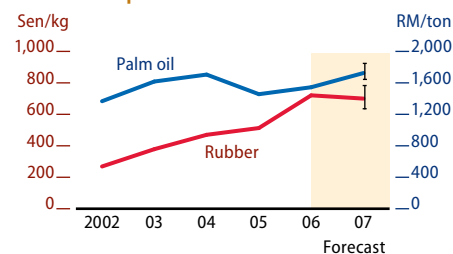
[Click here for figure data](#)

### 2.24.1 Selected economic indicators

	2007	2008
GDP growth	5.4	5.7
Inflation	2.7	2.7
Current account balance (% of GDP)	10.7	10.2

Source: Staff estimates.

### 2.24.7 Price movements of selected exports



Note: Vertical bars indicate the range of price forecasts for 2007.

Sources: Bank Negara Malaysia, available: [www.bnm.gov.my](http://www.bnm.gov.my), downloaded 28 February 2007; staff estimates.

[Click here for figure data](#)



government-linked companies such as the oil firm Petronas. However, the projects that make up the plan will test the capacity of government administrators both to initiate and implement them expeditiously.

The importance of government investment spending to the forecast highlights the domestic risks to the projections: meeting the Ninth Plan's investment agenda is crucial to ensuring that growing business and household confidence is warranted. Maintaining momentum in economic activity will also be important to reduce the impact of possible negative economic shocks such as could come from avian flu or weather-related problems, as seen in floods that swept the state of Johor in late 2006 and early 2007.

## Development challenges

Malaysia is a middle-income country attempting to ensure more rapid, sustained growth and job creation. The Ninth Plan sets an ambitious tone. One focus of the plan—moving up the value-added ladder of manufacturing industries and services—is well articulated, and firms will get encouragement from the Government to enter the fields of biotechnology and of information and communications technology. Some firms have experience in world markets for electronic and electrical goods that should help them expand into these new fields.

It will be a challenge for Malaysia to build the workforce skills that enable it to forge world-class firms in these new areas. The Ninth Plan proposes to revamp the education system. An important role is seen for the private sector, in providing educational services and in linking education curricula with the needs of employers. This will be a long-term endeavor; in the medium term the success of the move into new industries is likely to depend on how well domestic firms partner with foreign firms.

In many respects, the country is well placed to attract business partnerships and investment. It scores better than many others in Southeast Asia in international rankings on the availability of infrastructure services and on the issue of corruption.

But the performance on generating investment has been patchy. During 2000–2006, in real terms private investment accounted for 12.0% of GDP (9.4% in nominal terms), much lower than the 35–36% prior to the 1997/98 Asian financial crisis. One key to encouraging a sustainable increase in investment levels will be improving the performance of government-linked companies, which span a wide range of sectors in the economy, dominating some fields and accounting for more than one third of the domestic stock market capitalization. Efforts have been made to improve management and governance at such companies, but much of the essential market structure of sectors they dominate is unchanged.

More broadly, surveys show that firms say they face a restrictive regulatory environment, especially in the services sectors. Liberalization of the services sector, which is on the agenda of the Association of Southeast Asian Nations (ASEAN), would help ensure that Malaysia meets its target of encouraging growth in high technology industries.

### 2.24.1 Ninth Malaysia Plan

The Ninth Malaysia Plan, issued in 2006, reiterates an official target to lift the economy to “developed nation” status by 2020. It lists specific poverty targets, such as halving the overall rate and eliminating severe poverty by 2010. It also sets ambitious, but not unrealistic, economic targets. Its 6% average annual GDP growth target for 2006–2010 would mean bettering the record of the past half-decade, but by less than 0.5 percentage points a year.

The plan sets the tone for government policies, including:

- An emphasis on government investment to provide infrastructure, support domestic demand, and encourage private investment. The projects providing for the Iskandar Development Region next to Singapore, for instance, encourage private firms to exploit synergies between the two countries, already one of the most successful examples in ASEAN of production sharing and trade.
- Actions to assist firms compete internationally. Thus the Government is encouraging a consolidation of palm-oil plantations into the world's largest listed palm-oil plantation enterprise controlling 600,000 hectares. This should enhance potential for internal productivity gains.
- Continuing financial sector strengthening. In early 2006, a restructuring of the large banking groups was nearly complete, allowing banks to meet more stringent capital requirements. The banking system's net nonperforming loans fell to 4.8% of all loans, from 5.8% in 2005.
- Support to sectors that might have a comparative advantage. Recent liberalization in finance, for instance, was aimed especially at encouraging issuance of Sharia-consistent instruments to strengthen Islamic finance. Assets of Islamic banking institutions made up 11.8% of all assets in mid-2006, and 47% of all outstanding bonds in September 2006 were Sharia compliant.



# Myanmar

High prices for natural gas exports and a good harvest led to a modest pickup in economic activity. But macroeconomic stability remains elusive with monetized fiscal deficits feeding high inflation. The cushion provided by the gas exports makes now an opportune time to embark on structural reforms, including exchange rate unification, fiscal consolidation, and agricultural liberalization, and to redirect public spending to development of social and physical infrastructure.

## Economic performance

According to official data, GDP increased by 13.2% in FY2005 (ended 31 March 2006). The expansion was driven by double-digit growth in agriculture, including livestock and fisheries; energy and power; manufacturing; mining; and services. The economy is heavily dependent on agriculture, which constitutes about half the economy. Industry accounts for roughly 15%, with services and trade the rest.

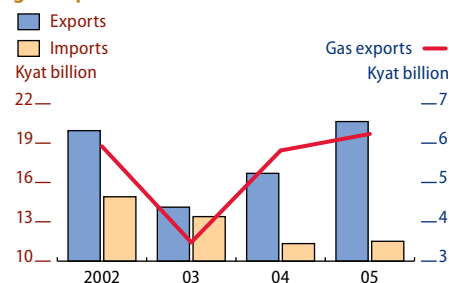
An objective assessment of economic performance and trends is made difficult by fundamental weaknesses in data. Data for variables closely correlated with GDP suggest that economic growth was significantly less than officially estimated. Indicators of inputs, such as energy and fertilizer, imports of capital goods, and expansion of agricultural acreage are consistent with lower than given GDP growth. For example, agricultural acreage grew by 3% in FY2005 when agriculture officially grew by almost 20%, implying a productivity increase not evident in other data. Economic growth in FY2005 nonetheless picked up somewhat, on the back of a stronger export performance (Figure 2.25.1), especially in natural gas; a good agricultural harvest; and growth in construction.

The fiscal deficit, including state enterprises, narrowed to about 4% of GDP. This reflected enhanced tax revenues (Figure 2.25.2) following steps in FY2004 to improve tax administration, reduce evasion, and increase tariff revenues from use of a more depreciated exchange rate than the official rate for valuing imports. Expenditures also declined marginally, but remained high at almost 10% of GDP, reflecting inefficiencies in public expenditure management as well as capital spending associated with a shift of the capital from Yangon to Naypyidaw.

In the absence of a well-developed market for government debt, the deficit is financed through monetization by the Central Bank of Myanmar. Broad money grew by 25% in FY2005 on top of an even higher growth rate the previous year. Inflation consequently accelerated after a pause in FY2004 (Figure 2.25.3), and is in double digits. Fuel price hikes, including an eightfold jump in October 2005, also boosted inflation.

The external balance has been supported by higher export volumes and prices for natural gas. Gross official reserves totaled just over \$1 billion in September 2006, equivalent to 6 months of imports. The market-based parallel foreign exchange rate for the kyat appreciated in the second half of 2006, though for the year as a whole it weakened.

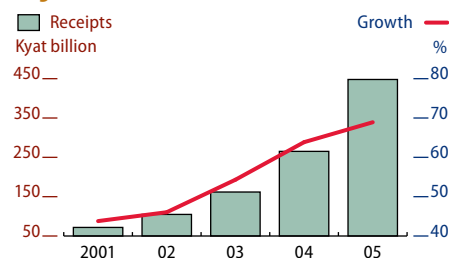
2.25.1 Total exports and imports, and gas exports



Source: Myanmar Central Statistical Organization, available: <http://www.csostatat.gov.mm>, downloaded 2 March 2007.

[Click here for figure data](#)

2.25.2 Tax revenues



Source: Myanmar Central Statistical Organization, available: <http://www.csostatat.gov.mm>, downloaded 2 March 2007.

[Click here for figure data](#)

## Economic prospects

The Government's 5-year plan for 2006–2010 calls for average GDP growth rates of 10%, to be achieved through higher agricultural production, new gas fields, and increases in hydropower generation. The economy would be fortunate to achieve even half that over the medium term. In addition to the trade and investment sanctions by the United States and some others, the investment climate, outside the energy sector, remains poor for policy and infrastructure reasons. One of the few bright spots is the expanding trade relationship with fast-growing neighbors the People's Republic of China and India.

Growth and investment could be constrained as well by inflationary expectations. The economy runs chronic fiscal deficits, financed by monetary expansion. Inflationary pressures will also be influenced by a sharp rise in public sector wages in March 2006. Inflation could move back up from low double-digits to the 30–40% range. This would have a disproportionate impact on the large, poor, majority of the population. It could also prompt further currency depreciation.

The current account was in surplus in FY2005 due to the rising value of gas exports as well as a decline in imports. High gas prices will continue to buffer the external accounts, and exploration for more gas and oil is under way.

Continuing macroeconomic fragility will keep the economy vulnerable to sharp downturns in gas prices, as will shocks such as political strife, poor harvests, or instability in the banking system.

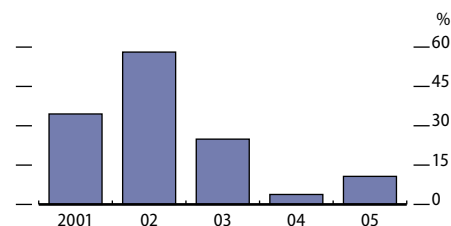
## Development challenges

Given the rise in international reserves to relatively comfortable levels (Figure 2.25.4) and the likelihood that gas prices will remain high for some time, now would be an opportune moment to move toward a unified exchange rate. The current system lacks transparency, creates incentives for corruption, and induces distortions in the economy. Although exchange rate reform may adversely affect inflation and the finances of state-owned enterprises that can import at the official exchange rate, gradually introducing measures would help mitigate any adverse impact.

Some steps have been implemented to expand tax revenues, but public finances require further consolidation, in particular through reforms in state enterprises (they often require subsidies). Fiscal consolidation should be accompanied by steps to improve the debt market and to allow greater autonomy for the central bank. Strengthened public finances would enable greater policy flexibility for measures to assist the poor, such as improved social and physical infrastructure, and would lift growth.

Promotion of private sector development requires, among other reforms, improvements in the investment climate (with greater transparency and predictability in regulations). In view of the importance of agriculture and its impact on poverty, strengthening the sector should be a key goal. In this regard, it would be helpful to move away from administrative measures in the form of price controls and periodic export bans toward greater reliance on market-based mechanisms.

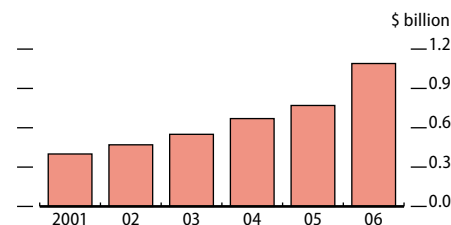
### 2.25.3 Inflation



Source: Myanmar Central Statistical Organization, available: <http://www.csostat.gov.mm>, downloaded 13 March 2007.

[Click here for figure data](#)

### 2.25.4 International reserves



Notes: International reserves exclude gold. Data for 2006 are up to September.

Source: International Monetary Fund, *International Financial Statistics* online database, downloaded 2 March 2007.

[Click here for figure data](#)

# Philippines

Achievements in 2006 included moderate economic growth, a downtrend in inflation, and stronger fiscal and external positions. This year, still-high levels of remittances and low real interest rates, as well as greater fiscal expenditures, should keep expansion at around the same level. However, it has not been strong enough to lift employment sufficiently, mainly because of a declining investment-to-GDP ratio. Improvements in the investment climate are needed, to spur economic expansion, increase employment generation, and provide public resources for social programs.

## Economic performance

GDP rose by 5.4% in 2006, maintaining its slight upward trend of the past 5 years (Figure 2.26.1). With a strong rise in remittances from overseas workers to \$12.8 billion (11.0% of GDP), gross national product growth accelerated to 6.2%, from 5.6% in 2005. Personal consumption expenditures and net exports were the main contributors in 2006. The substantial remittances and low interest rates supported private consumption. However, gross fixed capital formation continued to decline as a share of GDP to the lowest level in 20 years (Figure 2.26.2), reflecting a deficient investment environment and restraints on the public capital spending required to buttress the Government's fiscal position.

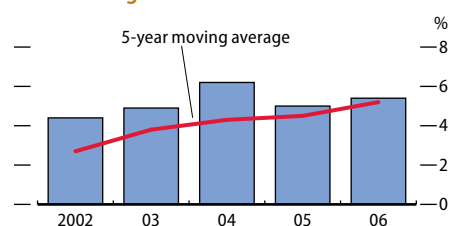
On the supply side, the pace of growth in agriculture more than doubled from 2005 to 4.1% in 2006 with more favorable weather conditions early in the year and a larger harvested area. Production of rice and corn in particular rebounded from a slump the previous year, and fisheries maintained a solid advance.

Industry's growth rate remained just below 5%. Transport and communications, finance, and private services, including business process outsourcing and other information technology-enabled services, led the way in the services sector, which grew by 6.3% and accounted for 3 percentage points of total GDP growth (Figure 2.26.3).

However, growth has not been strong enough to raise the employment level to significantly dent the unemployment rate. In the 3 years 2004 to 2006, employment edged up by 2.5% on average each year, or about half the level envisaged in the Medium-Term Philippine Development Plan 2004–2010. Services, primarily wholesale and retail trade, accounted for two thirds of the employment gain, and agriculture a quarter.

Unemployment remained close to 8% in 2006. Slightly more than half of the unemployed were high-school graduates (32.3%) and college graduates (18.4%), indicating that, in addition to raising the overall level of employment, there may be a mismatch in skills (see *Education and structural change in four Asian countries* in Part 3). In a worrisome trend, the number of underemployed rose to 23% of total employment in 2006 from 18% in 2004.

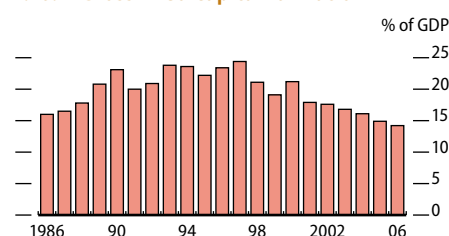
2.26.1 GDP growth



Sources: Asian Development Outlook database; National Statistical Coordination Board, available: <http://www.nscb.gov.ph>, downloaded 31 January 2007.

[Click here for figure data](#)

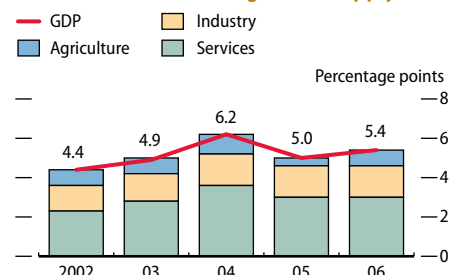
2.26.2 Gross fixed capital formation



Source: CEIC Data Company Ltd., downloaded 12 February 2007.

[Click here for figure data](#)

2.26.3 Contributions to growth (supply)



Sources: Asian Development Outlook database; National Statistical Coordination Board, available: <http://www.nscb.gov.ph>, downloaded 31 January 2007.

[Click here for figure data](#)

The Government's efforts to buttress its fiscal position by raising revenues and restraining growth of current expenditures have contributed to a gradual rise in the gross domestic savings rate to 19.8% of GDP in 2006 from 17.1% in 2001. With both public and private investment weak, the savings-investment gap widened. As a result, the current account balance went from a deficit of 2.4% of GDP to an estimated surplus of 4.0% of GDP over the same period.

Merchandise exports rebounded in 2006 across all major product categories, a result of robust demand in external markets. Exports performed well in spite of a 22% appreciation between 2004 and 2006 of the real effective peso exchange rate. Almost half the export expansion was attributable to semiconductors, which account for 47% of total merchandise exports (Figure 2.26.4). Resource-based exports, especially gold and copper, also surged on high international commodity prices, and contributed close to a third of total export growth.

The import intensity of key exports, such as electronics and garments, led to strong growth of imports as well. The rate of increase was slower than that of exports however, reflecting a more moderate rise in world oil prices and higher domestic production in agriculture, which tempered the growth of food imports. The deficit in the services account narrowed, too, because of higher receipts from communications and business services, as well as tourism. Remittances (Figure 2.26.5) continued to provide important support to the current account.

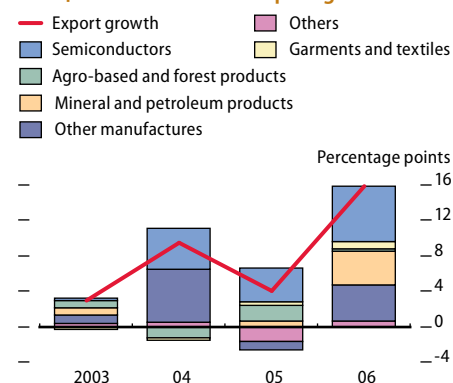
The overall balance of payments posted a hefty surplus of \$2.6 billion in the first 3 quarters of 2006, similar to a year earlier. Although inflows of net portfolio investment slowed from 2005, net foreign direct investment (FDI) during the 3 quarters rose to \$1.6 billion (1.4% of 2006 GDP). However, 43% of the FDI was in the form of intercompany loans rather than new equity; and FDI (in both US dollars and as a share of GDP) remains below the norm for Southeast Asia.

The surplus in the balance of payments put substantial upward pressure on the currency; the central bank tried to mitigate the effect by accumulating foreign exchange reserves. Gross reserves rose by \$4.5 billion in 2006 to \$23.0 billion, or more than 4 months of import cover, enabling the Government in December to pay back early about \$220 million of loans from the International Monetary Fund and about \$83 million from the Asian Development Bank.

The banking system's accumulation of net foreign assets fueled liquidity. Broad money (M3) growth has accelerated in the last few years, driven primarily by this accumulation (Figure 2.26.6). In 2006, net domestic credit also reversed from a decline in 2005 to contribute 7.8 percentage points to M3 growth, in large measure reflecting a recovery in credits to the private sector. A decline in the risk premium (based on improved fiscal performance), expectation of peso appreciation, accommodative monetary policy, and buoyant liquidity exerted downward pressure on interest rates. The nominal yield on 91-day treasury bills declined below comparable US treasuries in November (Figure 2.26.7) for the first time in 25 years.

Inflation slowed markedly in the second half of 2006 (Figure 2.26.8) as the impact of a 2 percentage point rise in the value-added tax (VAT) rate early in the year receded. Lower inflation was also helped by a stronger

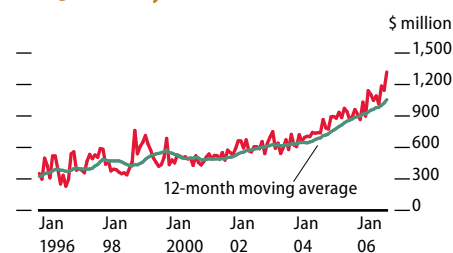
#### 2.26.4 Contributions to export growth



Sources: National Statistics Office, available: <http://www.census.gov.ph>; CEIC Data Company Ltd., downloaded 8 February 2007.

[Click here for figure data](#)

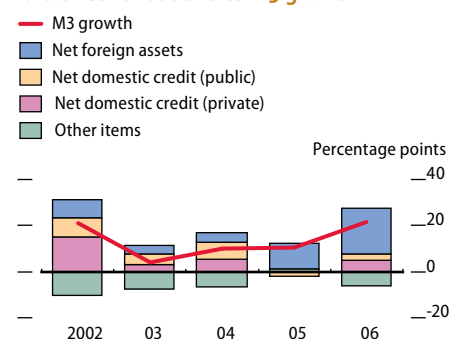
#### 2.26.5 Monthly remittances



Sources: Datastream, downloaded 6 January 2006; Bangko Sentral ng Pilipinas, available: <http://www.bsp.gov.ph>, downloaded 20 February 2007.

[Click here for figure data](#)

#### 2.26.6 Contributions to M3 growth



Source: Bangko Sentral ng Pilipinas, available: <http://www.bsp.gov.ph>, downloaded 15 January 2007.

[Click here for figure data](#)

exchange rate, declining world oil prices, and a moderating increase in domestic food prices. The deceleration in inflation and the peso's strength enabled the central bank to pursue an accommodative monetary policy. While policy interest rates were kept steady, the central bank adopted a tiering scheme in November 2006 to dissuade banks from depositing funds with it and to encourage them instead to lend to the public. Under the tiering scheme, banks' deposits with the central bank earn a lower rate of interest, the higher the amount of their deposits.

A narrowing in the fiscal deficit to 1.0% of GDP (from 5.3% in 2002; Figure 2.26.9) was attributable to a 20% jump in revenues, reflecting the increase in the VAT rate and an expansion of the tax base, set against a rise in expenditures of just 8%. Compared with the Government's target, the deficit was narrower by about half. Revenues slightly exceeded the target, while expenditures were about 5% down as the Congress' disapproval of the 2006 appropriations bill led to the reenactment of the prior year's budget. A stronger currency and lower domestic interest rates also resulted in lower than expected interest payments, accounting for about half the shrinkage in the deficit relative to the target.

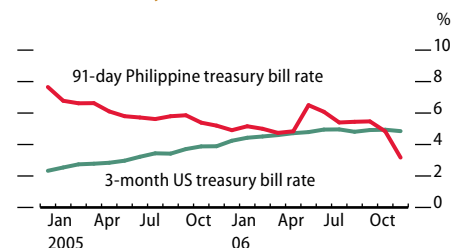
Excluding interest payments, the primary fiscal balance switched to a surplus of 4.1% of GDP in 2006, from a deficit of 0.6% of GDP in 2002. Coupled with lower interest rates, a stronger currency, and an improvement in economic growth, this contributed to a reduction in the Government's outstanding debt from a recent peak of 78.5% of GDP in 2004 to 64.2% in 2006 (Figure 2.26.10). This figure excludes about 9.5% of GDP in contingent liabilities, comprising the national Government's guarantees on debt of government-controlled corporations and financial institutions. Debt levels are still high in spite of the favorable trend, and interest payments consume close to a third of revenues, compressing the fiscal space for development expenditures.

The privatization program gained some traction last year, with the realization of P5.8 billion (more than twice receipts in 2005). The Government sold its stake in the Philippine National Oil Corporation–Energy Development Corporation through an initial public offering for P4.6 billion. In early 2007, the sale of the stake in the Philippines Long Distance Telephone Company yielded P25 billion (0.4% of 2007 GDP).

The Government made encouraging progress in privatizing its assets in the power sector as well. Its aims are to reduce the sector's drain on public finances and to provide an adequate and efficient supply of energy through the private sector. In September 2006, the Power Sector Assets and Liabilities Management Corporation, the agency set up to manage and privatize the generation and transmission assets of the National Power Corporation, sold a 112 megawatt plant for \$129 million. In January 2007, it finalized the sale of another 360 megawatt plant for \$530 million.

Prior to these sales, only five small plants with a total generating capacity of 8.5 megawatts had been sold for \$5.2 million. These sales, however, represent only about 12% of total generation capacity to be sold. In February 2007, an attempt to sell a 25-year concession of the transmission grid failed for the fourth time, as only one of three potential bidders submitted a bid.

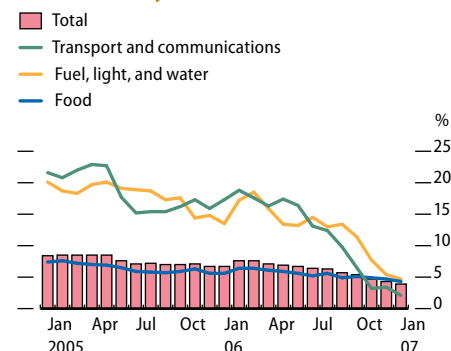
### 2.26.7 Treasury bill rates



Sources: CEIC Data Company Ltd., downloaded 8 February 2007; Board of Governors of the Federal Reserve System, available: <http://www.federalreserve.gov>, downloaded 17 January 2007.

[Click here for figure data](#)

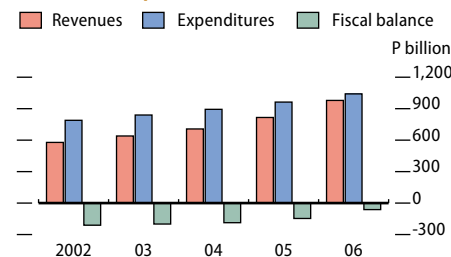
### 2.26.8 Monthly inflation



Sources: National Statistics Office, available: <http://www.census.gov.ph>; CEIC Data Company Ltd., downloaded 8 February 2007.

[Click here for figure data](#)

### 2.26.9 Fiscal performance



Source: Bureau of the Treasury, available: <http://www.treasury.gov.ph>, downloaded 7 February 2007.

[Click here for figure data](#)



## Economic prospects

The modest growth trajectory is projected to be maintained this year and next. The baseline international assumptions are for the global economy and trade to slow from last year's pace. With its share of exports (on a national accounts basis) close to 50% of GDP in 2006, and its dependence on capital inflows, the Philippines is closely tied to the global economy and to sentiments in international financial markets. This is offset somewhat by the seeming independence of remittances to global disturbances, likely reflecting their diversified origins. Low real interest rates and higher fiscal spending on priority projects should also support growth.

Against this backdrop, GDP is projected to grow by 5.4% this year before picking up to 5.7% in 2008 on the expectation of a more favorable external environment (Figure 2.26.11). The key domestic assumption underlying these projections is that fiscal reforms remain broadly on track. Another assumption is that the current El Niño weather phenomenon remains mild.

The services sector will remain the main contributor to growth on the supply side, expanding by a forecast 6.3% in 2007 and continuing its secular increase as a share of GDP. Agricultural production is likely to grow slightly below its trend rate of 4.0% (Figure 2.26.12). The enactment of the Biofuels Act in January 2007, which mandates a gradual phase-in of ethanol blends in fuel, is likely to boost cultivation of sugarcane and cassava for ethanol production.

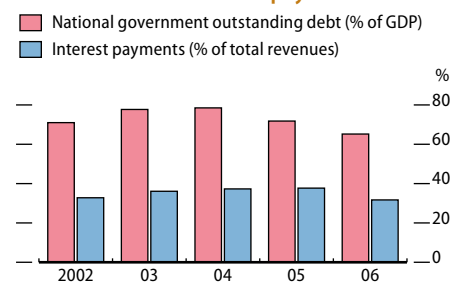
Construction will benefit from the planned upturn in public spending on infrastructure. However, the expected softening of the global electronics market and the slowdown in overall external demand will crimp manufacturing output. Industry as a whole is expected to grow by 4.8%, again underperforming aggregate GDP growth. The shares of the economy that agriculture and industry accounted for will thus continue to decline.

Private consumption and, to a lesser extent, net exports will support demand. Consumption should continue to benefit from buoyant remittances and low real interest rates, which for some maturities of deposits remained negative in 2006 (Figure 2.26.13). The contribution of net exports to growth will likely fall to less than 1 percentage point (from about 4 percentage points in 2006), against a backdrop of softer demand in external markets, a strong currency, and higher import requirements consistent with a modest recovery in investment.

Investment will likely recover to 4–6% growth, compared with 2.0% in 2006 and an average annual increase of just 0.4% in 2002–2006. It will be supported by higher government expenditures and low real interest rates. Bank balance sheets have strengthened (Figure 2.26.14), and so banks' willingness to lend may rise, especially as the lending–deposit spread is at the top of the range seen over recent years. However, businesses are unlikely to sharply lift spending on new plant and equipment without deeper reform of the investment environment.

The trade deficit is expected to widen slightly to about 6.6% of GDP in 2007, reflecting the trends in external demand, exchange rates, and investment, although the value of imported petroleum products (15.8% of total imports) should fall from the levels of 2006 (Figure 2.26.15).

### 2.26.10 Debt and interest payments



Source: Bureau of the Treasury, available: <http://www.treasury.gov.ph>, downloaded 13 March 2007.

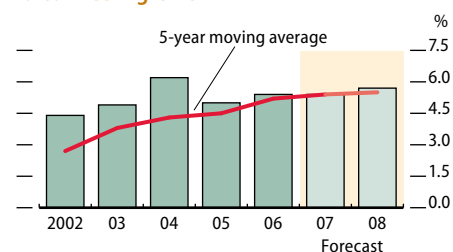
[Click here for figure data](#)

### 2.26.1 Selected economic indicators

	2007	2008
GDP growth	5.4	5.7
Inflation	4.8	5.0
Current account balance (% of GDP)	3.2	2.9

Source: Staff estimates.

### 2.26.11 GDP growth



Sources: Asian Development Outlook database; National Statistical Coordination Board, available: <http://www.nscb.gov.ph>, downloaded 31 January 2007; staff estimates.

[Click here for figure data](#)



Remittances are projected to remain at about 11% of GDP. Consequently, the current account surplus is likely to post a healthy, but smaller, surplus of about 3.2% of GDP in 2007. The privatization of several significant assets in late 2006 and early 2007 and the increase in FDI approvals (Figure 2.26.16) in 2006 suggest that FDI inflows may retain the gains made last year and contribute to a surplus in the overall balance of payments.

The peso is likely to maintain its strength, supported by foreign exchange inflows from the balance-of-payments surplus. However, to preserve the price competitiveness of exports against the backdrop of slowing external demand and the appreciation of the peso (in real trade-weighted terms), the central bank may again accumulate foreign exchange reserves to stem the pace of currency appreciation. Measures to liberalize foreign exchange outflows to be effective from April 2007 may also relieve some upward pressure on the peso. They include doubling the amounts of foreign exchange that residents can buy to pay for overseas services and investment abroad.

Some of the increase in reserves may be used to further prepay official external debt, in line with the Government's strategy to reduce the proportion of external debt to domestic debt (Figure 2.26.17). Inflation is likely to remain within the target of 4–5%, affording scope for monetary policy to remain accommodative.

Congress approved a budget for 2007 that envisages a continuation of fiscal consolidation with a rise in development spending. The deficit is programmed at about 1% of GDP, similar to the actual gap in 2006. Revenues are likely to be 14.3% stronger than the outturn in 2006, equivalent to 16.9% of projected 2007 GDP. This rate of increase is higher than the average annual 10% improvement in the 2001–2005 period, before VAT reforms led to a jump in revenues in 2006.

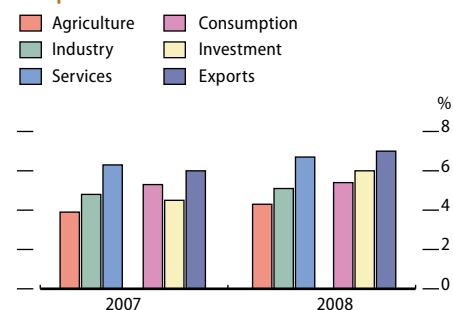
This suggests that, in the absence of new tax measures, efforts to enforce tax collection need to continue over the medium term both to finance higher expenditures on infrastructure and to reduce the deficit. For 2007, given privatization receipts from asset sales (counted as revenues, not a financing item) in late-2006 and early this year, the projected strengthening in receipts should be achievable.

Spending is programmed to go up by 13.5%, to 17.9% of projected 2007 GDP from 17.3% in 2006, the first pickup in its share of GDP in 5 years. Outlays on infrastructure are planned to increase by 16.4%, including a notable rise in spending for public works, transport and communications, and, to a lesser extent, education.

The main risk to the projections, apart from the extent of the slowdown in external markets, is the potential impact of the Congressional elections in May 2007. The elections need to be transparent and peaceful, and the fiscal and structural reforms kept on track. Steady progress on privatization will be an important signal to investors on the Government's commitment.

If reforms related to better tax collection and privatization stall, the country risk premium is likely to rise, with an adverse impact on capital inflows, the exchange rate, and interest rates, reversing some of the gains made in recent years and dimming the outlook for future growth. El Niño and the uncertain incidence of typhoons pose an additional risk.

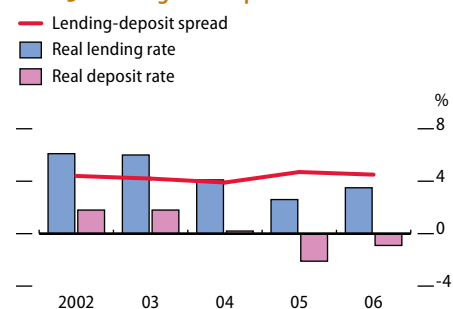
#### 2.26.12 Growth of supply and demand components of GDP



Source: Staff estimates.

[Click here for figure data](#)

#### 2.26.13 Lending and deposit rates

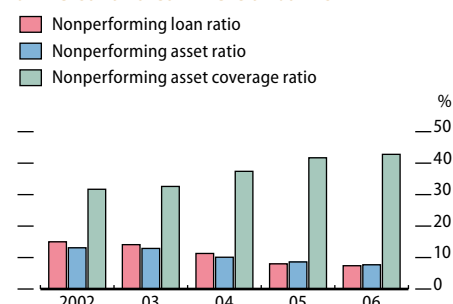


Note: Deposit rate refers to 61–90 day peso time deposit.

Source: CEIC Data Company Ltd., downloaded 8 February 2007.

[Click here for figure data](#)

#### 2.26.14 Banking performance indicators: universal and commercial banks



Note: Data for 2006 are as of end-September.

Source: CEIC Data Company Ltd., downloaded 9 February 2007.

[Click here for figure data](#)

## Development challenges

The key challenge is to move to a higher growth trajectory and create more and higher-quality jobs for the unemployed, underemployed, as well as new entrants into the labor force. Growth and employment have lagged behind the Government's medium-term targets of 6.8–7.8% in 2008 and 7–8% by 2010. Expanding at close to these targets, with the associated increase in employment by an average of 1.4 million–1.6 million annually, will require sustained efforts to improve the investment climate. Inadequate investment is the main factor that has curtailed growth and employment. The medium-term targets, for example, were based on investment picking up at double-digit annual rates in 2006–2010 to reach 28% of GDP by 2010, almost twice the current level.

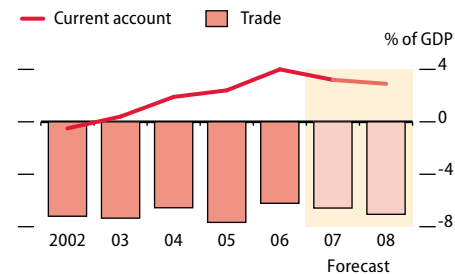
In agriculture, which accounts for 36% of employment, investment has been weak because of factors that include farmers' poor access to credit and support services, expensive inputs, high costs of transport, and the incomplete land reform program. In manufacturing, sampled firms in a 2003 survey of the investment climate cited as the major constraints: macroeconomic instability (at that time) and uncertainty in economic policies; inadequate infrastructure services, especially of power and transport; and corruption and the costs of complying with regulations, especially related to customs, trade, and labor markets.

Improvements in the fiscal position have since fostered greater macroeconomic stability. Nevertheless, the still-high debt and the large share of interest payments in the budget expose the economy to swings in sentiment in financial markets and underscore the importance of containing the risk premium with steady progress on reforms. Further increases in revenues as a share of GDP, reduction of debt and interest payments, and restraint in other current expenditures are required to deploy necessary resources toward development spending on infrastructure and social programs.

Certainly the requirements for investment in infrastructure, education, and health are huge. According to the Medium-Term Public Investment Program 2006–2010, such investment needs total P2,915 billion over the 5 years, including P1,711 billion for infrastructure. Of the infrastructure investment, P775 billion is set to be financed by the national Government, P460 billion by the private sector, and the remainder mainly by government-controlled corporations and state financial institutions. Given that around P100 billion is allocated to infrastructure in the 2007 budget, the targeted average of P155 billion a year in investment by the national Government seems ambitious, and underscores the importance of policy reforms to encourage greater private sector participation in infrastructure.

A 2006 study of progress toward the 2015 Millennium Development Goals by countries in Asia and the Pacific indicated that, although the Philippines is on track to achieve (or has already achieved) several targets, including reducing the proportion of the poor (based on \$1-a-day criterion), it is behind targets in some health, education, and environment indicators. An important contributor to this regression is the declining share of resources devoted to social spending. Improvement of the investment climate to boost growth and employment, and further efforts to expand the tax base and enforce collection, are required.

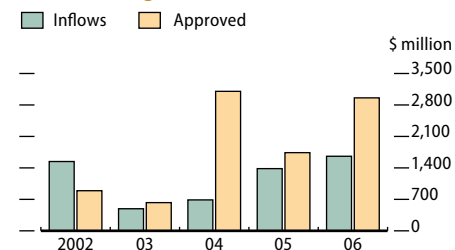
### 2.26.15 Current account and trade balances



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

### 2.26.16 Foreign direct investment

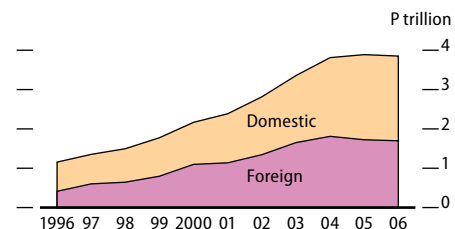


Note: Data for 2006 are for January to September.

Source: CEIC Data Company Ltd., downloaded 8 February 2007.

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### 2.26.17 National government outstanding debt



Source: Bureau of the Treasury, available: <http://www.treasury.gov.ph>, downloaded 13 March 2007.

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# Singapore

Growth in 2006 remained well above the economy's trend rate for the third year running. External demand was the main driver, although domestic demand, especially investment, also picked up. The pace of growth is expected to decelerate in 2007 to a still-strong but more sustainable rate. Closer links with global economic networks and structural reforms have contributed to the healthy performance, but also led to widening income gaps, posing challenges for the longer term.

## Economic performance

Supported by a favorable international economic environment and accommodative domestic policies, the economy expanded by a robust 7.9% in 2006, well above its trend rate of 4–6%, for the third year in a row. Growth of manufacturing moderated on a quarter-on-quarter basis in the first and second quarters, reflecting a cyclical softening in global information technology markets, a contraction in the computer hard-disk industry, and a dip in production of pharmaceuticals. In the second half, manufacturing growth rates picked up to double-digit levels, lifted by a strong performance in semiconductors, transportation engineering, and pharmaceuticals.

Services maintained robust growth over most of the year, providing a buffer against cyclical swings in manufacturing. Overall, quarterly growth in 2006 was less volatile than in previous years, which suggests that the economy has indeed become more diversified (Figure 2.27.1).

For all of 2006, manufacturing grew by 11.5%, led by the transport engineering and biomedical subsectors. The marine and offshore engineering industry expanded by 40.7% in 2006, boosted by strength in global shipbuilding, ship repair, and oil-rig building. Biomedical manufacturing output rose by 22.5% in the year, double the rate of 2005, driven by rapid growth in pharmaceutical exports to Europe. Electronics recorded a modest rise of 3.2%, well down from 2005, as expansion in semiconductors was largely offset by declines in production of hard disks, consumer electronics, and computer peripherals.

In line with a rebound in property market activity, construction accelerated a little to 2.7% from 0.7% growth in 2005. A vibrant economy, robust demand for high-end housing, as well as major planned projects—including two casino-resorts, the renovation of a major shopping district, and the building of a new business district—have lifted confidence among property investors and developers. Services expanded by 6.7% in 2006, underpinned by continued robust growth of wholesale and retail trade and of financial services.

On the demand side, the external arena was again the key driver of growth. Merchandise exports increased by 18.3%, with pharmaceuticals and petrochemicals particularly buoyant. However, exports of domestically made electronic products rose more modestly, by 9.3%,

2.27.1 Quarterly GDP growth

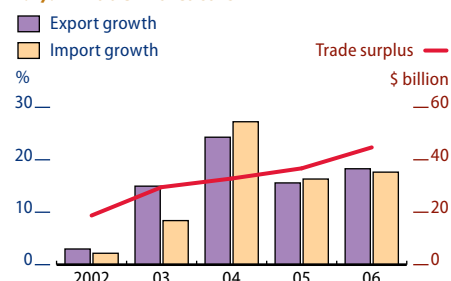


saar = seasonally adjusted annualized rate.

Source: Singapore Department of Statistics, available: [www.singstat.gov.sg](http://www.singstat.gov.sg), downloaded 1 March 2007.

[Click here for figure data](#)

2.27.2 Trade indicators



Source: Singapore Department of Statistics, available: [www.singstat.gov.sg](http://www.singstat.gov.sg), downloaded 1 March 2007.

[Click here for figure data](#)

weighed down by the secular contraction in hard-disk drives. Led by growth in reexports of semiconductors, Singapore's entrepôt exports rose rapidly by 22.2%, supported by the trend toward regional production networks and booming regional demand (particularly from the People's Republic of China).

Merchandise imports expanded by 17.6%, largely matching exports (Figure 2.27.2), and reflecting domestic investment in machinery and equipment. Net exports of goods and services in national account terms rose by 10.4% and contributed 3.1 percentage points to total GDP growth (Figure 2.27.3).

Private fixed investment jumped by 16.3%, underpinned by a cyclical rebound in machinery and equipment investment and a pickup in construction (spurred by the recovering property market and strong foreign investment). However, public investment fell by 11.8%, trimming total fixed investment growth to 11.5%. Despite stronger economic expansion last year, growth in private consumption moderated to 2.5%, partly a result of sluggish wages growth. Also, a reduction in the employers' mandated contributions to the national pension fund in 2003 has likely encouraged employees to increase their own retirement savings.

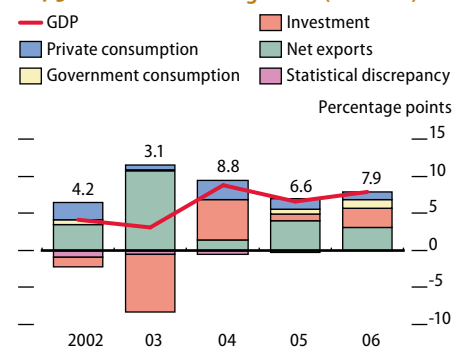
Overall, domestic demand accounted for 4.7 percentage points of total GDP growth in 2006, with a contribution of 2.5 percentage points from total investment (including inventory investment), 1.0 percentage point from private consumption, and 1.2 percentage points from public consumption.

Labor market conditions continued to improve on the back of vigorous economic activity: total employment expanded by 7.6% over the year. Accordingly, unemployment fell from an annual average rate of 3.1% in 2005 to a 5-year low of 2.7% (Figure 2.27.4). Nominal wages rose by just 3.2%, slightly below the pace of 2005 (Figure 2.27.5), even as the labor market tightened. An increase in the number of foreign workers (accounting for 49% of employment growth in 2006) alleviated some of the tightness. Domestic cost pressures were well contained, but the pass-through of higher oil prices intensified. Moreover, prices of imported food rose. As a result, inflation edged up to a year-average 1.0% from 0.5% in 2005.

Against the backdrop of sustained economic growth and rising inflation, the Monetary Authority of Singapore maintained its policy, in place since April 2004, of a modest and gradual appreciation of the trade-weighted nominal effective exchange rate to maintain price stability. Over the year, the Singapore dollar appreciated by 8.5% and 10.1% against the US and Japanese currencies, respectively, but weakened slightly against the euro.

In tandem with US rate hikes in the first half of 2006, Singapore's 3-month interbank interest rate rose by 31 basis points to 3.56% by June, before ending the year at 3.44% (Figure 2.27.6). However, overall liquidity conditions remained loose. Domestic credit creation turned up after a long period of sluggishness, supported by lending to corporations, particularly those in the construction, and the transportation and communications, industries. Partly pushed by the increased credit activity, money supply growth (M2) surged to 19.4% in December 2006, its fastest pace in 8 years (Figure 2.27.7).

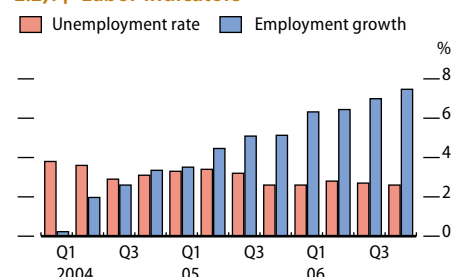
### 2.27.3 Contributions to growth (demand)



Source: Singapore Department of Statistics, available: [www.singstat.gov.sg](http://www.singstat.gov.sg), downloaded 1 March 2007.

[Click here for figure data](#)

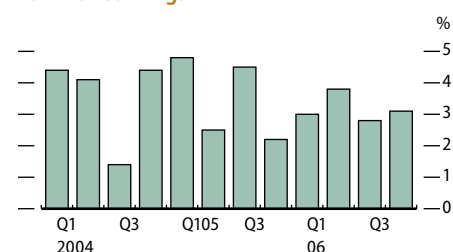
### 2.27.4 Labor indicators



Source: Ministry of Manpower, available: [www.mom.gov.sg](http://www.mom.gov.sg), downloaded 7 March 2007.

[Click here for figure data](#)

### 2.27.5 Growth in average monthly nominal earnings



Sources: Ministry of Manpower, available: [www.mom.gov.sg](http://www.mom.gov.sg); Ministry of Trade and Industry, available: [www.mti.gov.sg](http://www.mti.gov.sg); both downloaded 7 March 2007.

[Click here for figure data](#)

The primary operating fiscal balance, boosted by 2 years of strong economic growth, swung into surplus by S\$1.2 billion (0.6% of GDP) from a S\$665 million deficit (0.3% of GDP) in 2005. Government operating revenues, which exclude investment income, interest income, and capital receipts, rose by 10.5%, driven by higher corporate income tax collections (which reflected stronger corporate profits). Total government expenditures increased modestly by 3.8%, mainly on a reduction in development spending with the completion of transport infrastructure projects.

In the external account, the surplus of trade in goods rose to US\$44.7 billion in 2006, and the current account surplus advanced to US\$36.3 billion, equivalent to 27.5% of GDP. The net outflow in the financial and capital accounts was slightly higher than that in 2005, yet gross international reserves still rose to US\$136.8 billion by end-2006.

## Economic prospects

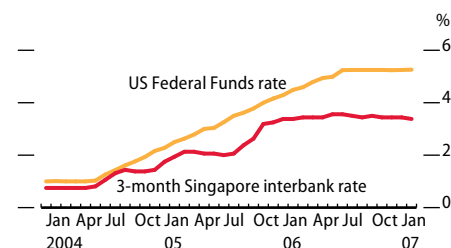
Global growth, after an above-trend period, is expected to moderate, but remain robust, in 2007 and 2008. The global electronics market is projected to grow at a slower pace this year than last. In domestic policies, Singapore's budget for FY2007 (starting 1 April 2007) targets a small deficit of 0.3% of GDP. The corporate tax rate will be lowered from 20% to 18% in an effort to attract more foreign investment. Partly as a means to offset this revenue loss, the Government will raise the goods and services tax (GST) by 2 percentage points to 7.0% from 1 July this year. To compensate for an expected rise in costs for consumers induced by the GST hike, the budget for FY2007 includes a S\$4.0 billion offset package over 5 years.

On the monetary side, domestic inflationary pressures will likely pick up in 2007, though the risks from imported inflation are tempered somewhat by lower international oil prices. The labor market is at its tightest in 5 years and, with the increase in foreign workers unlikely to continue at 2006's rate, this will eventually feed into wages growth. Moreover, the recent liquidity surge, strong asset prices, and the GST hike will also generate pressures, lifting inflation to 1.6% in 2007. The monetary authorities are likely to maintain the current moderately tight stance (Figure 2.27.8).

On the basis of these assumptions, economic growth is expected to ease to 6.0% in 2007 and 5.5% in 2008 (Figure 2.27.9). Domestic demand is likely to play an augmented role in supporting growth. Consumer sentiment will continue to improve because of employment growth, gains in real wages, planned assistance for low-income groups, and the positive wealth effects from the recovering property market. Private consumption growth is forecast to accelerate modestly to 3.5% in 2007. The growth of fixed asset investment is set to continue at a rapid clip, driven by both the public and private sides.

Momentum in manufacturing investment will moderate, slowed by decelerating global economic growth and softening electronics demand. However, construction investment is likely to accelerate in 2007–2008, underpinned by the two major resorts, some public infrastructure projects, and the strong residential property market. Import growth, spurred by solid domestic demand, will outpace the forecast deceleration

### 2.27.6 Interest rates



Sources: Monetary Authority of Singapore, available: [www.mas.gov.sg](http://www.mas.gov.sg); US Federal Reserve, available: [www.federalreserve.gov](http://www.federalreserve.gov); both downloaded 2 March 2007.

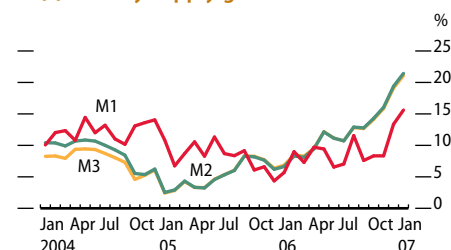
[Click here for figure data](#)

### 2.27.1 Selected economic indicators

	2007	2008
GDP growth	6.0	5.5
Inflation	1.6	1.0
Current account balance (% of GDP)	27.0	27.0

Source: Staff estimates.

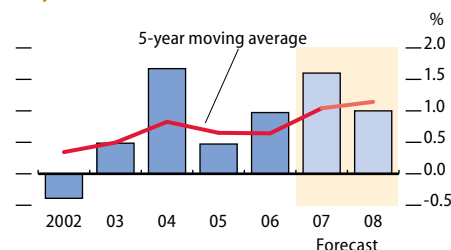
### 2.27.7 Money supply growth



Source: Monetary Authority of Singapore, available: [www.mas.gov.sg](http://www.mas.gov.sg), downloaded 2 March 2007.

[Click here for figure data](#)

### 2.27.8 Inflation



Sources: Singapore Department of Statistics, available: [www.singstat.gov.sg](http://www.singstat.gov.sg), downloaded 1 March 2007; staff estimates.

[Click here for figure data](#)



in exports. The current account surplus as a share of GDP is seen falling slightly to 27.0% in 2007–2008 (Figure 2.27.10).

This outlook would be undercut by a harder than expected landing of the US economy and, to a smaller extent, by a sharp inventory adjustment in global electronics. Conversely, a broadening of the domestic property market rebound could burnish it. There are signs that the rise in prices of high-end housing could spill over to other categories of the private residential market. A broader property rebound could provide additional impetus to investment and consumption growth.

## Development challenges

Over the past decade, Singapore has undertaken a range of structural reforms in response to challenges posed by accelerated globalization and increased competition from other Asian economies. The Government has reduced corporate and personal income tax rates, lowered the employer's contribution to the national pension fund, adopted more flexible policies on employment of foreign labor, and stimulated the private sector by divestment of government-linked companies.

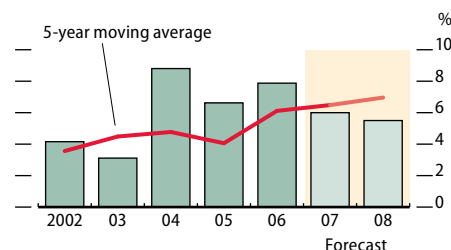
These supply-side reforms have helped make the city-state one of the world's winners in globalization, with a rising share of world trade, increased inflows of foreign capital and talent, and sustained, above-trend growth. The more flexible labor supply response and increased foreign investment have lifted the growth potential above the 3–5% range previously regarded as a longer-term limit.

But not all Singaporeans benefit from linking the economy into global networks. Many older and less educated workers have been left behind as manufacturing and services move up the value-added ladder. Consequently, some structural unemployment has persisted, and wages for low-skill jobs have stagnated. The Government is trying to balance a need for structural reforms with concerns over income inequalities that may undermine social cohesion and the political support for further policy changes. Support for low-income households through retraining and targeted social programs is likely to be a priority of fiscal policy.

The authorities also face challenges in maximizing the effectiveness of future structural reforms. Given both the significant cuts to corporate and personal income tax rates since 2001 (Figure 2.27.11) and the diminishing returns to lowering tax rates further, against a background of needing to support low-income groups and an aging population, additional aggressive tax cuts are unlikely. Instead, supply-side reforms should put more emphasis on investment in education, research and development, and public services.

Tapping into regional and global manufacturing, trade, and financial networks has helped boost growth, diversify its sources, and reduce vulnerability to downswings in the global electronics market. But closer links with the rest of the region, amplified by Singapore's growth as a regional financial center, have increased its exposure to some other risks. These include interruptions in the regional production chain, financial weaknesses in regional economies, and economic or political instability in countries where Singapore has made significant investments.

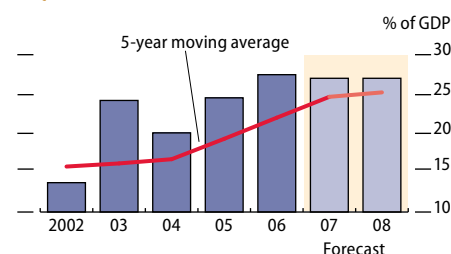
2.27.9 GDP growth



Sources: Singapore Department of Statistics, available: [www.singstat.gov.sg](http://www.singstat.gov.sg), downloaded 1 March 2007; staff estimates.

[Click here for figure data](#)

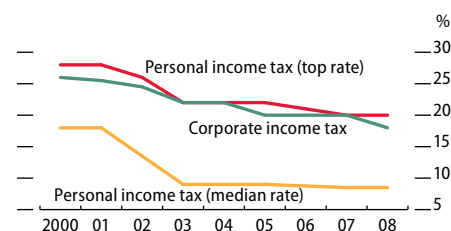
2.27.10 Current account balance



Sources: Singapore Department of Statistics, available: [www.singstat.gov.sg](http://www.singstat.gov.sg), downloaded 1 March 2007; staff estimates.

[Click here for figure data](#)

2.27.11 Tax rates



Source: Inland Revenue Authority of Singapore, available: [www.iras.gov.sg](http://www.iras.gov.sg), downloaded 7 March 2007.

[Click here for figure data](#)

# Thailand

Strong exports drove a pickup in economic growth last year, since domestic demand was damped by several factors including rising interest rates and inflation in the first half, flooding, and political uncertainties for much of the year. Inflationary pressures eased in the second half, paving the way for the central bank to start lowering rates early in 2007. Economic growth is projected to slow this year, and the outlook for next year depends heavily on elections actually being held and on the incoming government providing a clear and credible economic program.

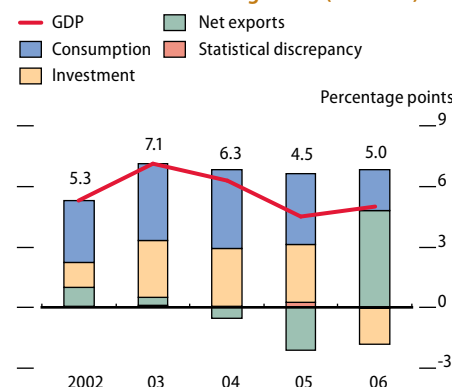
## Economic performance

Economic growth picked up by a half percentage point to 5.0% in 2006, though that still left it nearly 1 percentage point below the 2002–2005 average. Driven by strong exports and a slowing in imports, net exports of goods and services contributed nearly all the overall GDP expansion (Figure 2.28.1). Domestic demand weakened, hurt by the rise in global oil prices, inflation and rising interest rates, flooding, and most important, political uncertainty throughout most of the year. Results of elections held in April were annulled, and a caretaker government took office pending new polling in October. However, in September, after a coup, the military took over the administration, suspended the 1997 constitution, and installed an interim government. A new constitution is being drafted, on which a referendum will be held, and national elections are planned before the end of this year.

Growth stepped down over 2006 from 6.1% on a year-on-year basis in the first quarter to 4.2% in the fourth (Figure 2.28.2), mainly as a result of heightened political uncertainty and of flooding in the northern and central regions, which affected farm incomes. The index of consumer confidence declined from the second quarter. For the year, private consumption growth decelerated to 3.1%. Fixed investment growth slowed to 4.0% as firms waited for political and policy positions to become clear. In addition, most of the large public infrastructure investments planned by the previous government were delayed.

This program targeted investment of as much as \$42 billion over 2005–2009 on physical and social infrastructure. The interim government did not scrap the program, but has been reviewing it and changing the priorities. This delayed some projects, in particular new mass transit rail lines for Bangkok. A few projects under the program were implemented through the 2006 budget, including construction of power plants and gas pipelines, improvement of water supply systems, and provision of low-cost housing. Investments under the infrastructure program are now expected to be extended well beyond 2010, which is a more realistic schedule than originally planned given the size and complexity of the investments. Investment overall was a drag on GDP growth in 2006 for the first time since 1998, subtracting 1.8 percentage points.

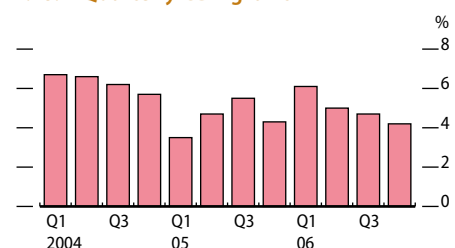
2.28.1 Contributions to growth (demand)



Source: National Economic and Social Development Board, available: <http://www.nesdb.go.th>, downloaded 9 March 2007.

[Click here for figure data](#)

2.28.2 Quarterly GDP growth



Source: National Economic and Social Development Board, available: <http://www.nesdb.go.th>, downloaded 8 March 2007.

[Click here for figure data](#)

Average inflation in 2006 accelerated to 4.6%, the highest rate in 7 years. The elimination of fuel subsidies in July 2005 pushed up inflation over the next 12 months. As world oil prices eased and the impact of the elimination of the fuel subsidies faded, price pressures subsided (Figure 2.28.3). To lean against inflation, the Bank of Thailand, which follows an inflation targeting policy, had hoisted its policy interest rate seven times between early 2005 and July 2006. As inflation pressures then diminished, the central bank kept the policy rate steady until early 2007, when it cut its benchmark in January and again in February, to 4.7% (Figure 2.28.4), in a context of moderating inflationary pressures and weakening economic growth.

Merchandise exports grew by a nominal 17.4% as a result of strong external markets and high prices for export commodities, including natural rubber and rice. Import growth, in contrast, pulled back sharply to 7.0%, reflecting weakness in both consumption and investment demand. This saw the trade balance switch to a surplus of \$2.2 billion, from a deficit of \$8.5 billion a year earlier. The services balance was in surplus by \$4.3 billion, supported by a recovery in tourism from the impact of the December 2004 tsunami (tourism receipts rose by nearly 30% in 2006).

The current account surplus amounted to \$3.2 billion, or 1.6% of GDP, turning around from a \$7.9 billion deficit in 2005. The return to a current account surplus, together with large inflows of equity portfolio investment and a surge in foreign purchases of domestic debt securities, boosted official foreign exchange reserves to a record \$65.1 billion in December (Figure 2.28.5), partly reflecting Bank of Thailand intervention to stem rapid appreciation of the baht.

The current account surplus, allied with significant capital inflows, put strong upward pressure on the baht: it averaged B37.9/\$1 in 2006, compared with B40.2/\$1 a year earlier, and it hit a 9-year high of B35.1/\$1 in mid-December (Figure 2.28.6). On 18 December the monetary authorities, aiming to curb capital inflows and slow currency appreciation, announced controls, in the form of a 30% noninterest-bearing reserve requirement on many capital inflows. If the reserve-associated funds are withdrawn from Thailand within 1 year, only two thirds of the reserve will be released, equivalent to a tax of 10%.

That decision prompted, on 19 December, a plunge in the stock market. The Bank of Thailand that day stated it would exempt inflows into the stock market from the reserve requirement. In the following weeks it further rolled back the restrictions and indicated that controls would eventually be lifted.

Despite the controls, the baht ended 2006 strongly, at B36.05/\$1. The clampdown on capital inflows, in addition to shaking the stock market, exacerbated concerns about the broader investment climate. It also led to the baht trading at different levels onshore and offshore. Thai banks could sell US dollars for baht only in the offshore market, and importers had to pay for imports in US dollars. This limited the supply of baht offshore, causing it to appreciate by as much as B2/\$1 against its onshore value. The gap may encourage speculators to arbitrage by buying dollars offshore and selling them onshore.

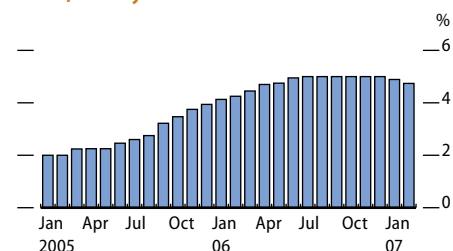
2.28.3 Quarterly inflation



Source: Bureau of Trade and Economic Indices, available: <http://www.price.moc.go.th>, downloaded 30 January 2007.

[Click here for figure data](#)

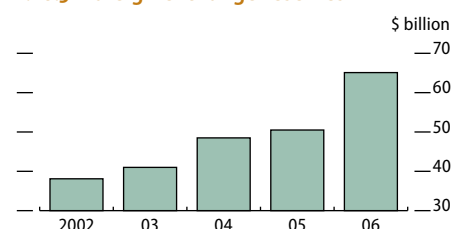
2.28.4 Policy interest rate



Source: Bank of Thailand, available: <http://www.bot.or.th>, downloaded 17 March 2007.

[Click here for figure data](#)

2.28.5 Foreign exchange reserves



Source: Bank of Thailand, available: <http://www.bot.or.th>, downloaded 16 March 2007.

[Click here for figure data](#)

## Economic prospects

The projections for 2007 and 2008 assume that national elections will take place not later than the fourth quarter of this year. With an elected government in place, if it quickly adopts a credible economic program, business and consumer confidence should start to pick up, which would revive domestic demand in 2008. The incoming government will need to carefully prioritize and accelerate infrastructure investment, which has lagged in recent years and contributed to an erosion of industrial competitiveness.

Net exports look likely to play a smaller role in driving economic growth over the next 2 years, with domestic demand picking up some of the slack. Export growth will ease in 2007 from the fast pace of recent years, based on expectations of a softer global economy and on baht appreciation. Exports in nominal terms are projected to grow by about 7.9% in 2007, with exports of manufactures in particular curbed by the appreciation.

Imports will accelerate somewhat as companies rebuild inventories, though sluggish domestic demand is likely to keep import growth to about 8%. Imports should rise faster after the elections, when both private and public investment is expected to revive. The trade balance this year is forecast to notch up a surplus of \$2.3 billion, but that will shrink in 2008. The current account is projected to record a surplus of 1.3% of GDP this year, but move into deficit in 2008 (Figure 2.28.7).

Retail sales data late in 2006 showed a slowdown of private consumption, already suggesting weakness heading into 2007. Subsequent bombings in Bangkok, which killed seven people during the new year's celebration, helped bring down consumer confidence to a 5-month low in January, and it remained weak in February.

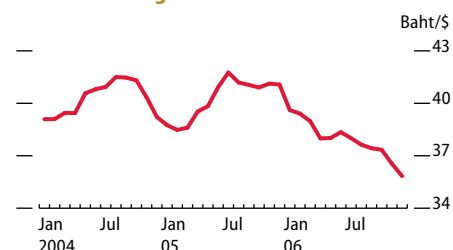
Government consumption spending in 2007 is expected to rise significantly as a result of a decision to accelerate budget disbursements and because of the elections. Hence, total consumption is projected to grow by about 4% in 2007, up slightly from 3.2% in 2006.

Private investment is likely to be modest owing to the political uncertainties and dented foreign investor sentiment, though it will no doubt strengthen in 2008 if confidence in the economy comes back. Public investment will pick up in 2007 and gain pace in 2008 as the Government moves ahead with some infrastructure investments. Contract bidding for new mass transit rail lines was expected to start in May 2007. Five lines have been approved, but construction will probably start on only two this year. Growth in fixed investment in 2007 is projected at 5%, accelerating to 8% in 2008. The mixed outlook on the demand side suggests that GDP growth in 2007 will fall to around 4%, before rising to 5% in 2008 (again, if confidence returns).

The budget for FY2007 (ending 30 September 2007) projects a deficit of B142.6 billion, equivalent to 1.7% of GDP. However, revenue collection could again fall short of the target if economic growth is weaker than the official projection of 4.5–5.5% (set in late 2006). The budget deficit will raise public debt to about 41% of GDP this year, though still well within a 50% ceiling under the Government's fiscal sustainability framework.

Average inflation this year and next is forecast to decelerate to 2.5%, from 4.6% in 2006, in large part a result of lower international oil prices

2.28.6 Exchange rate



Source: Bank of Thailand, available: <http://www.bot.or.th>, downloaded 22 February 2007.

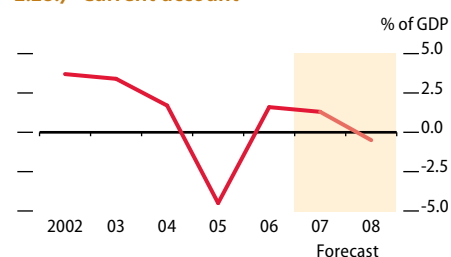
[Click here for figure data](#)

2.28.1 Selected economic indicators

	2007	2008
GDP growth	4.0	5.0
Inflation	2.5	2.5
Current account balance (% of GDP)	1.3	-0.7

Source: Staff estimates.

2.28.7 Current account



Sources: Bank of Thailand, available: <http://www.bot.or.th>, downloaded 16 March 2007; staff estimates.

[Click here for figure data](#)

(Figure 2.28.8). This could pave the way for further reductions in the policy interest rate.

Thailand's ambitions to become a financial center have been hurt by the imposition of capital controls, the political turmoil, and a halt to privatization of state-owned companies. A capital market plan adopted early in 2006 set a target to double the size of the domestic bond market by 2010. The plan also called for more privatization to broaden the equity market. However, privatization has been on hold since a late-2005 decision by the supreme administrative court that a share offering by EGAT, the state power generating company, may violate the constitution, and no privatization is expected until a new government is elected. The interim government plans to pursue reforms in the financial sector this year with amendments to the Bank of Thailand Act, the Securities and Exchange Act, and the Insurance Act. These amendments aim to free the three regulatory bodies from political interference.

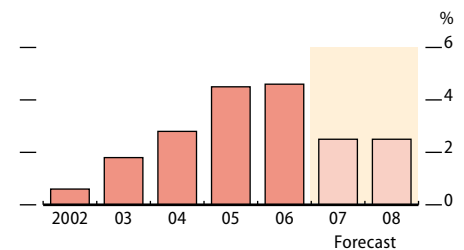
Domestic risks for the economy stem mainly from political uncertainties. A delay in returning to an elected government would most likely lead to public agitation, which would worsen consumer and investor sentiment. Alternatively, an elected government seen to be weak and without a clear economic program would also prolong uncertainty, and result in continued low growth. Violent outbreaks in southern provinces so far have had limited impact on the national economy. Finally, more cases of avian flu were reported in Thailand early in 2007. This disease has the potential to damage the economy because Thailand is a major exporter of poultry products.

## Development challenges

The political and policy uncertainties generated over the past year need to be resolved if faster growth is to be achieved. In addition to the capital controls, followed by backtracking on those measures, the Government put forward amendments to foreign investment regulations that jolted international companies. The amendments, which were intended to clarify rules on the use of local nominees by foreign-invested companies, mainly affect the services sector. Changes proposed would cause some foreign investors to reduce their shareholdings and limit their voting rights.

Moreover, the Government is advocating the concept of a "sufficiency economy," which underpins the formulation of the 10th National Economic and Social Development Plan (2007–2011). The concept centers on the idea of building economic resilience to outside shocks, keeping investment and household debt within sustainable levels, and ensuring inclusive growth. The Government has given assurances that the sufficiency economy philosophy does not mean backing away from market principles or from welcoming foreign investment. However, many international businesspeople have expressed misgivings about the concept, worried that it may presage a more inward-looking stance.

2.28.8 Inflation



Sources: Bureau of Trade and Economic Indices, available: <http://www.price.moc.go.th>, downloaded 30 January 2007; staff estimates.

[Click here for figure data](#)



# Viet Nam

The economy maintained a rapid rate of growth in 2006, supported by robust exports, rising consumption spending, and strong investment. Inflation also stayed high. Membership of the World Trade Organization (WTO) from January 2007 has added impetus to development and market-oriented reforms. Provided that further progress is made on structural reforms, further brisk economic growth is projected this year and next.

## Economic performance

The economy expanded by an estimated 8.0% in 2006 (against a government-estimated figure of 8.2%), above its trend rate of the past 5 years. Demand was strong for the country's exports of commodities, crude oil, and manufactures. Private investment and private consumption recorded robust growth, too. Growth in private consumption was supported by rising incomes and inward remittances of about \$4 billion. Retail sales of goods and services increased by 20.9% in 2006 (about 13% after adjusting for inflation; Figure 2.29.1).

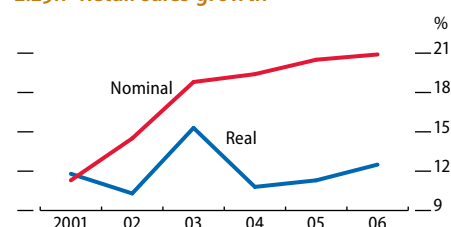
Investment levels remained high at an estimated 39.4% of GDP in 2006. Private investment was encouraged by further simplification of administrative procedures for businesses and moves toward equal treatment between state enterprises and the private sector and between domestic and foreign enterprises. The domestic private sector accounted for 33.6% of total investment in 2006 (Figure 2.29.2). That proportion is up sharply from 22.6% 5 years earlier. Foreign direct investment (FDI) commitments rose to \$10.2 billion last year, the highest since the country opened to investment in 1986.

On the production side, the industry and services sectors contributed more than 90% of total GDP growth in 2006 (Figure 2.29.3). Industry expanded by a robust 10.4%, slightly below the year-earlier pace. The manufacturing and the utilities subsectors maintained strong growth (12.4% and 11.6%, respectively; Figure 2.29.4). But mining production barely grew because of a fall in the volume of crude oil production from 18.5 million tonnes in 2005 to 17.0 million tonnes in 2006. Planned development of several new oil fields in coming years is expected to lift production.

Services, on the back of buoyant performances of trade, tourism, transportation, communications, and finance, grew by an estimated 8.2% (Figure 2.29.5). Surging demand for mobile phones is helping drive the expansion. As sales soared, the number of telephones per 100 people rose to about 31 in 2006 from 19 in 2005, and is expected to exceed 50 by the end of 2009.

Production in agriculture rose by 2.9% last year, below average for recent years, because of floods and typhoons. Rice output fell, partly due to a decrease in acreage planted. Agricultural land is being converted

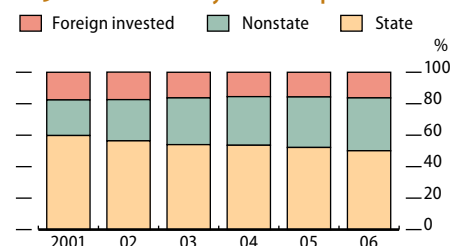
2.29.1 Retail sales growth



Sources: General Statistics Office of Viet Nam, available: <http://www.gso.go.vn>; CEIC Data Company Ltd., downloaded 16 February 2007.

[Click here for figure data](#)

2.29.2 Investment by ownership



Source: General Statistics Office of Viet Nam, available: <http://www.gso.go.vn>, downloaded 16 February 2007.

[Click here for figure data](#)

into industrial parks, which reflects the changing economic structure: agriculture's share of GDP declined to 20.4% in 2006 from 24.5% in 2000. Production of tea, coffee, and natural rubber was buoyed by high export prices. Strong external demand also underpinned growth in the fisheries subsector.

Exports performed strongly in 2006, rising by 23.0% in nominal US dollar terms. The ratio of exports to GDP increased from about 46% in 2000 to 66% in 2006, indicating the openness of economy even before Viet Nam joined WTO in January this year. The structure of exports is becoming more diversified—commodities such as crude oil, rice, marine products, and coffee remain important, but the share of manufactured products is rising. Exports of clothing, electronics, and wood products each expanded by at least 20% in 2006.

Robust domestic demand, particularly from investment projects, lifted imports by a third, widening the trade deficit to \$4.5 billion. Vigorous expansion in both private remittances and tourism receipts helped limit the current account deficit to \$1.3 billion, or 2.1% of GDP. Buoyant FDI inflows supported the balance of payments, resulting in a rise in gross international reserves to \$11.4 billion, equivalent to 3.5 months of imports (Figure 2.29.6).

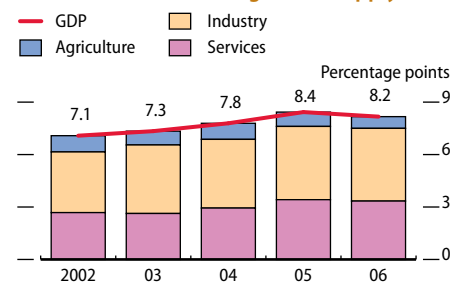
Inflation continued to run high, exceeding 7% on average during 2006 for the third year in a row (Figure 2.29.7). Rising food prices were one cause; increases in administered prices of domestic fuels and in transport charges were others. In February 2007 inflation was 6.5%, and is expected to stay around this level through the year. For employers, rapid growth in demand for workers and professionals pushed up payroll costs. The minimum salary of civil servants was increased by 30% in October 2006, a component of reforms to the civil service. Administered domestic fuel prices were raised in April and in August 2006, by a cumulative 18.5%, and then reduced twice by a cumulative 12.5%. Subsidies have been largely eliminated for gasoline and kerosene, and the Government plans to eliminate fuel subsidies completely next year. The International Monetary Fund has estimated that subsidies, mainly on diesel fuel, were still equivalent to 1.3% of GDP in 2006.

Moving to curb inflation, the State Bank of Viet Nam set a 2006 year-end target of 20% growth in credit, compared with rapid growth of 40% in 2005 (though actual credit growth was about 24% late in 2006; Figure 2.29.8). The slower rate of credit growth in 2006 was attributable to more cautious lending by state-owned commercial banks, which were following new prudential standards.

Officially, the authorities follow a managed float of the dong. The currency depreciated in nominal terms against the US dollar by about 1% in 2006 (Figure 2.29.9). In a step toward more flexible exchange rate management, the central bank widened the daily trading band for the dong against the US dollar, from 0.25% to 0.5%.

The overall fiscal deficit was high in 2006 at 5.0% of GDP as the Government pursued the building of infrastructure. Fiscal revenues surpassed the planned target by 10%, attributable to higher oil income (29% of the total), improvements in tax administration, and a growing number of tax-paying businesses in the formal sector (Figure 2.29.10). Receipts from value-added tax have increased significantly in recent

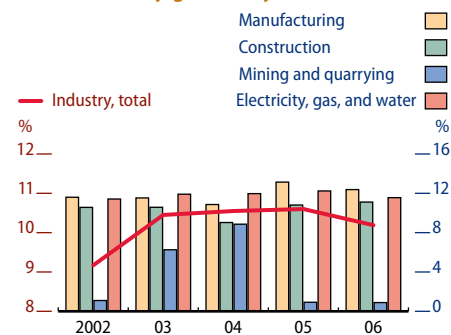
### 2.29.3 Contributions to growth (supply)



Sources: Asian Development Outlook database; General Statistics Office of Viet Nam, available: <http://www.gso.go.vn>, downloaded 16 February 2007.

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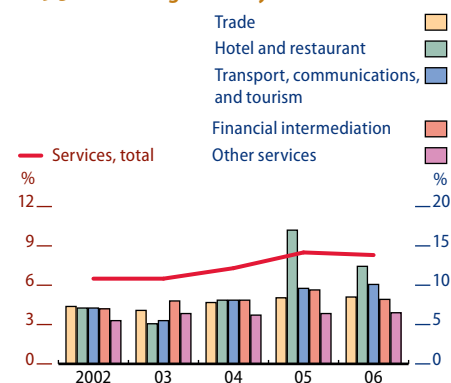
### 2.29.4 Industry growth by subsector



Source: CEIC Data Company Ltd., downloaded 16 February 2007.

[Click here for figure data](#)

### 2.29.5 Services growth by subsector



Source: CEIC Data Company Ltd., downloaded 16 February 2007.

[Click here for figure data](#)

years. Strong revenue growth is critical to funding the state's 30% share of the estimated \$140 billion investment required to achieve targets set out in the socioeconomic development plan for 2006–2010. Off-budget expenditures rose from 1.2% of GDP in 2004 to an estimated 2% of GDP in 2006. These are used mainly for investment in infrastructure and education. Investment in infrastructure now exceeds 9% of GDP and is expected to reach 11% in coming years. The off-budget expenditures are subject to National Assembly scrutiny, as is budgetary spending. Public and publicly guaranteed debt was an estimated 45.5% of GDP in nominal terms at end-2006. External debt was estimated at 32% of GDP. Moody's upgraded the country's Baa3 foreign-currency sovereign rating outlook to positive from stable.

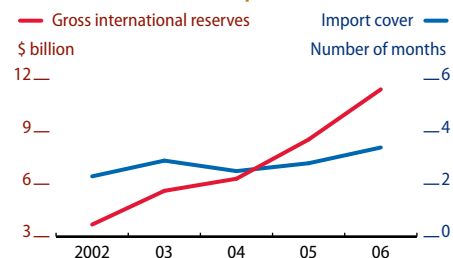
The growth of the private sector has been a significant feature of Viet Nam's economic development over the past decade. The nonstate sector accounted for more than half of GDP in 2006. Preliminary estimates show that private businesses generated almost 90% of the 7.5 million jobs created during the 5 years to 2005. Most of the 1.6 million new jobs Viet Nam needs to create annually in 2006–2010 are expected to come from the private sector. However, shortages of skilled labor have become apparent. The industrial park and export processing zone authority for Ho Chi Minh City has stated that the city's vocational schools can only supply about 15% of the 500,000 workers that the city's industry will likely need through 2010.

In the policy arena, the Government in May 2006 outlined a strategy for banking reform. The State Bank of Viet Nam is to be converted into a modern central bank with a mandate (and capacity) to manage monetary policy and supervise financial institutions. State-owned commercial banks are to be restructured in an effort to improve their performance, and are to be "equitized," or partly privatized, by 2010. The Viet Nam Foreign Trade Bank (Vietcombank) will be partially privatized in the second half of this year. A stock market boom has enabled many joint-stock commercial banks to raise equity capital and so increase their capital-adequacy ratios. Several domestic banks also took major international banks as strategic partners.

The securities market expanded beyond expectations in 2006. The number of listed companies rose to 193 from 41, and total market capitalization increased by almost 20 times from 2005 levels, to \$14 billion, or 22.7% of GDP. The main index of share prices soared from 307.5 at end-2005 to 751.8 12 months later, and climbed further to 1,138 at the end of February this year (Figure 2.29.11). There are concerns that speculators using funds borrowed from banks may face repayment difficulties if stock prices dropped precipitously, and big fund flows could cause problems for the implementation of monetary and foreign exchange policies. With this in mind, the central bank warned commercial banks of the risk of increasing securities-backed loans and requested commercial banks to report on such loans.

Moves were made to improve corporate governance and market regulation. A law on securities and securities markets was approved, and came into force in January 2007. It provides a legal base for investor protection and market transparency, including disclosure requirements for publicly held companies. The maximum foreign ownership in listed

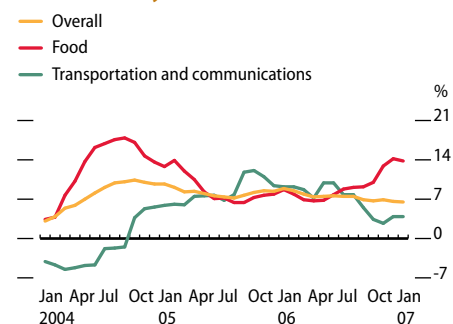
#### 2.29.6 Reserves and import cover



Sources: International Monetary Fund, *International Financial Statistics* online database, downloaded 7 February 2007; staff estimates.

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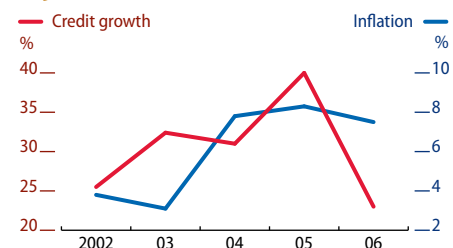
#### 2.29.7 Monthly inflation



Sources: General Statistics Office of Viet Nam, available: <http://www.gso.go.vn>, downloaded 19 February 2007; International Monetary Fund, *Vietnam: Statistical Appendix*, November 2006.

[Click here for figure data](#)

#### 2.29.8 Prices and credit



Sources: International Monetary Fund, *International Financial Statistics* online database, downloaded 7 February 2007; staff estimates.

[Click here for figure data](#)

companies was lifted from 30% to 49%. The stock market boom also encouraged more state-owned enterprises (SOEs) to issue shares to investors. Subsidiaries of several major SOEs in areas such as hydropower made successful initial public share offerings. The prime minister in December approved a list of state firms to be equitized during 2007–2010, including major ones such as Viet Nam Airlines.

## Economic prospects

Prospects for the economy are predicated on the assumption that WTO accession will maintain the momentum for structural reforms. Commitments given to liberalize the financial sector should speed up bank restructuring. Anticipated reforms to state banks, partnerships between foreign and domestic banks, and the boost to equity capital for joint-stock commercial banks likely will mean a strengthened banking system, a broader range of products for customers, and better access to finance, particularly for small and medium enterprises.

Similarly, the pace of reform in SOEs should be stimulated by additional competitive pressure that these firms will face as more international businesses enter the domestic market. The stimulus of the successful initial public offerings in 2006 and the record of SOEs improving their operating performances after equitization are expected to lift the pace of equitization, particularly of large SOEs. The country has also committed, under its WTO membership terms, to allow foreign ownership of services firms.

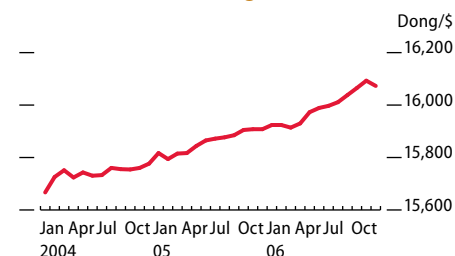
On these assumptions, the economy is predicted to grow by 8.3% in 2007 and 8.5% in 2008. Growth will be underpinned by strong private consumption, private investment, and FDI. Total investment as a share of GDP is projected to be about 40% in the next 2 years. Industry (projected to expand by 10.5%) and services (8.5%) will continue to drive overall growth (Figure 2.29.12). The Government aims to lift spending on infrastructure toward 11% of GDP in the medium term, from about 9% now, which will spur construction activity.

WTO accession also provides greater opportunities for exporters as the country becomes eligible for most-favored-nation treatment by WTO members and is no longer subject to quotas. This will benefit competitive industries such as clothing, wood products, footwear, and marine products. Exports are projected to maintain strong growth of around 18% this year and next. Robust consumption and investment demand will keep import growth high, and the trade account is estimated to be in deficit by 4.7% GDP in 2007, and 3.8% GDP in 2008 (Figure 2.29.13). However, buoyant inward remittances and tourism receipts are likely to mean small current account surpluses in the forecast period.

Fiscal policy will remain expansionary, with additional outlays on public sector wages and on infrastructure. Improved tax administration and the expansion of the formal sector of the economy will broaden the tax base. The impact on revenues of tariff cuts in compliance with WTO commitments will be slight: average tariffs come down just 4 percentage points to 13.4%, and this happens over 5–7 years. The fiscal deficit is projected to remain around 5%.

The political leadership has stepped up efforts against corruption,

### 2.29.9 Nominal exchange rate



Source: International Monetary Fund, *International Financial Statistics* online database, downloaded 12 March 2007.

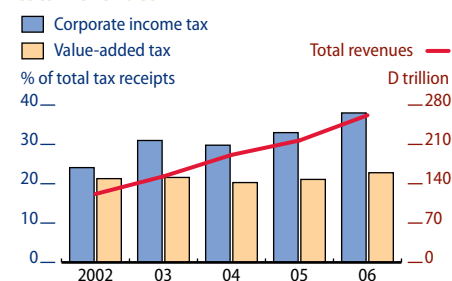
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### 2.29.1 Selected economic indicators

	2007	2008
GDP growth	8.3	8.5
Inflation	6.8	6.3
Current account balance (% of GDP)	0.2	1.3

Source: Staff estimates.

### 2.29.10 Selected components of total revenues



Sources: International Monetary Fund, *Vietnam: Statistical Appendix*, November 2006; staff estimates.

[Click here for figure data](#)

and a committee headed by the prime minister was established to coordinate the campaign. A decision by the Communist Party in January 2007 to streamline its organization and to strengthen the transparency of enterprises under the defense and police ministries suggests a commitment by leaders to improve the performance of the public sector. The Government has this year made public administration reform a high priority.

Domestic risks to the projections include a possible backtracking in the Government's commitment to implementing reforms and controlling corruption, which would discourage investment. This risk currently appears low. Power shortages remain a problem, given an estimated 15% annual growth in demand. Power sector investment needs are large (\$2.5 billion–3.5 billion) a year. Hydropower accounts for 56% of power supply, but this leaves the country vulnerable to droughts. A failure to meet energy demand and to reduce reliance on hydropower could undermine growth.

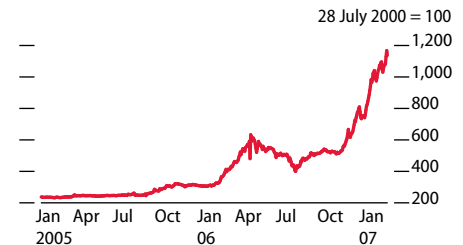
## Development challenges

The socioeconomic development plan for 2006–2010 seeks high rates of economic growth (7.5–8.0% annual average) based on an investment-to-GDP ratio of about 40%. Investment levels already are high; the challenge now is to improve the efficiency of investment. Studies suggest little improvement in the productivity of capital in recent years. Worse, public investment is sometimes used inefficiently. The rising proportion of domestic and foreign private investment in total investment (it was 46% in 2001–2005) should improve the productivity of capital, and the restructuring of SOEs should do the same in the public sector. However, SOE reforms need to be accelerated, especially now that WTO entry will allow more foreign firms to operate in the country.

Related to the productivity issue is the shortage of skilled workers. This has been cited in surveys as the third most important constraint faced by manufacturers, after access to finance and to land. The education system is not up to the task at this time, with generally out-of-date curricula, a lecture-centered method of teaching, and research activities separated from teaching.

Another challenge is to maintain controlled development of the stock market in the face of the boom in share prices. A sudden reversal and capital outflows could jolt the economy. While the supply of securities has been increasing, demand has been even stronger, given limited outlets for savings. Investor education and better corporate disclosure would seem part of the answer. On the macro level, a timely and comprehensive set of data on capital flows is needed to guide policy making and to facilitate market functioning.

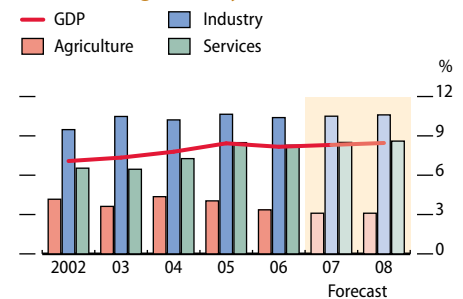
### 2.29.11 Ho Chi Minh City stock price index



Source: CEIC Data Company Ltd., downloaded 20 March 2007.

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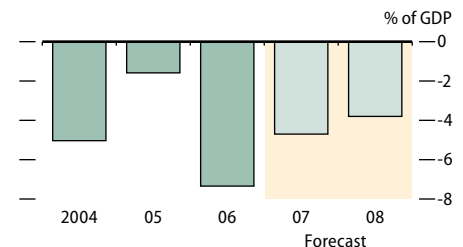
### 2.29.12 GDP growth by sector



Sources: General Statistics Office of Viet Nam, available: <http://www.gso.gov.vn>, downloaded 16 February 2007; staff estimates.

[Click here for figure data](#)

### 2.29.13 Trade balance



Sources: International Monetary Fund, Vietnam: Statistical Appendix, November 2006; staff estimates.

[Click here for figure data](#)



# The Pacific

**Fiji Islands**

**Papua New Guinea**

**Democratic Republic of Timor-Leste**

**Cook Islands**

**Kiribati**

**Republic of the Marshall Islands**

**Federated States of Micronesia**

**Nauru**

**Republic of Palau**

**Samoa**

**Solomon Islands**

**Tonga**

**Tuvalu**

**Vanuatu**



# Fiji Islands

Growth improved in 2006 because of a pickup in sugar production, expansion in construction, and growth in services stimulated by consumption demand. However, exports were weak and the current account deficit widened, placing pressure on foreign reserves. Even before the Government was removed from office by a military coup in December, the outlook for 2007 was a concern. Recession is now forecast for this year, followed by a modest recovery. Development challenges are myriad, including a need to attract more private investment.

## Economic performance

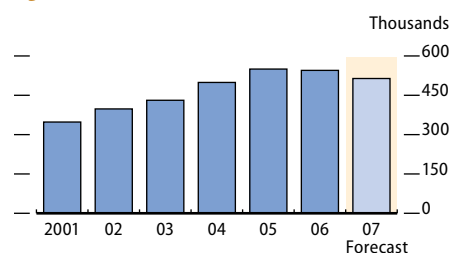
The economy grew by an estimated 3.4% in 2006, having averaged 2.4% growth in the 5 years following a coup in 2000. Growth last year was achieved despite a decline in tourism and the closure of the country's gold mine. Visitor arrivals fell slightly to 545,000 from 549,900 in 2005 (Figure 2.30.1), reflecting the impact of the 5 December military coup that removed the Government elected in May 2006. Several governments advised their citizens not to travel to the country and many December and forward bookings were canceled. An estimated 1,100 employees in tourism lost their jobs while others were placed on short working hours. As a result, growth in the wholesale and retail trade and hotel and restaurants sector was estimated at a modest 2.0%. The closure of the unprofitable Emperor gold mine, also in December, led to the loss of 1,800 jobs. The impetus for growth thus came from other sectors.

Construction powered forward at 12.3%, driven by major government projects as well as hotels and resorts. The electricity and water sector expanded by 5.0%. The agriculture, forestry, and fisheries sector grew by 3.9% as sugarcane production rose by 9.3%, and as both forestry and fisheries activity continued rising. However, the quality of sugarcane itself in 2006 was inferior to that of the previous year, and raw sugar production grew at the slower rate of 7.3%. Growth of 4–5% was recorded for services including transport and communications.

Following the loss of preferential access to some export markets over recent years, the steep decline of the clothing industry continued in 2006, with production dropping by 25%. In contrast, mineral water production for export expanded further.

On the demand side, credit-fueled consumption growth was reflected in a 4% increase in retail sales volume in 2006, and investment demand (helped by the construction projects) continued to expand, though private investment remained low at the equivalent of 8% of GDP. Public sector fixed capital formation was 10% of GDP. The deficit in trade in goods and services widened as domestic demand spilled over into imports and the export performance was disappointing. Imports (in US dollar terms) grew by 12.7% in 2006, while exports fell by 1.8%. The surplus on the services and transfers accounts climbed, with the increase primarily due

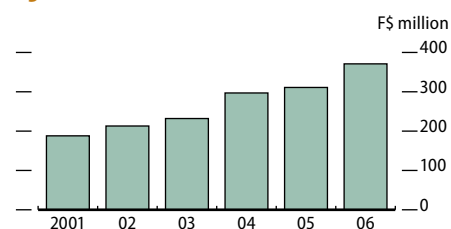
2.30.1 Visitor arrivals



Source: Reserve Bank of Fiji, Presentation to the Fiji Employers Federation, 21 February 2007.

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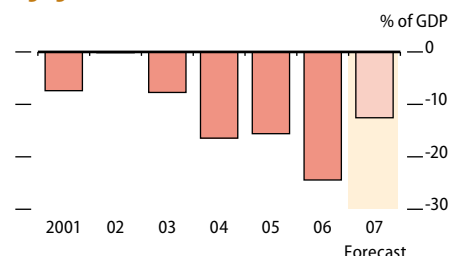
2.30.2 Personal remittances



Source: Reserve Bank of Fiji, Presentation to the Fiji Employers Federation, 21 February 2007.

[Click here for figure data](#)

2.30.3 Current account balance



Sources: Ministry of Finance, Economic and Fiscal Update, 3 November 2006; staff estimates.

[Click here for figure data](#)

to personal remittances (Figure 2.30.2), but this was insufficient to offset the broadening trade gap. The current account deficit widened to an estimated 24.4% of GDP from 15.6% in 2005 (Figure 2.30.3).

As a result of the deterioration in the current account, foreign reserves came under pressure. The Reserve Bank of Fiji (RBF), the central bank, raised its policy indicator rate twice in the first 6 months and increased the banks' reserve-deposit ratio. In September, the Government raised \$150 million from its first international bond issue. Post-coup, RBF further tightened exchange controls, introduced credit ceilings on noninvestment lending, and raised interest rates on RBF lending to commercial banks. The bond issue and the other measures eased the pressure on foreign reserves, which totaled \$476.5 million at end-2006 (3.3 months cover of goods imports), down slightly from 2005.

The nominal and real effective exchange rates of the Fiji dollar appreciated by 0.1% and 0.6%, respectively, in the year to December 2006. Monetary tightening and exchange rate stability contributed to moderate average inflation of 2.5% in 2006. The budget deficit was estimated at 2.9% of GDP if sales of government assets are included in revenues and 3.6% if asset sales are excluded (Figure 2.30.4).

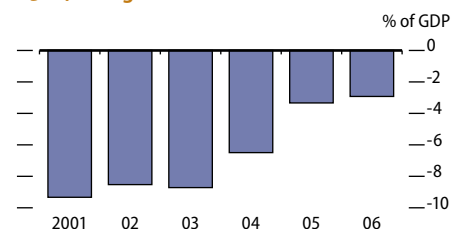
A policy framework for the 2007 budget reaffirmed the Government's intention of narrowing the deficit over the medium term to reduce its debt burden, which stood at 55% of GDP at end-2006 (inclusive of the international bond issue). Strategies included slowing the growth in operating expenditures by restructuring the public service over the period of the Strategic Development Plan 2007–2011. Following the December coup, the military-installed interim administration—the coup leader and commander of the Royal Fiji Military Force is prime minister—began formulating its own policies that incorporate elements of the 2007–2011 plan, such as restructuring the public service.

## Economic prospects

The economic outlook was of concern even before the latest coup (and see Box 2.30.1). Growth from 2001 had been driven by unsustainable fiscal expansion and credit-based consumption, both of which put increasing pressure on the balance of payments. The previous Government's 2007 budget and the Strategic Development Plan projected that growth would slow to just over 2% in 2007 and 2008 as construction contracted from its 2006 peak, fiscal consolidation led to a shrinkage in public administration, and major export industries grew modestly. The sugar industry, which accounted for 6% of GDP and 26% of exports in 2005, faces a progressive reduction in preferential prices in the European Union (EU) market of 5% in the 2-year period 2006–2007, 12% in 2008, and 19% in 2009, as well as issues of renewal of land leases and declining productivity. Growth for this industry was predicated on the effective resolution of land lease issues and the implementation of reforms. It was expected that production in the clothing industry, which provided 14% of export income in 2005, would stabilize and that tourist numbers would rise by 6–8% in both 2007 and 2008.

Growth projections have been revised down since the coup and the closure of the Emperor mine. Previous coups in May and September 1987

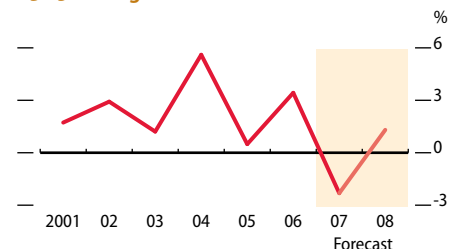
### 2.30.4 Budget balance



Sources: Reserve Bank of Fiji, *Quarterly Review*, December 2006; Ministry of Finance, *Economic and Fiscal Update*, 3 November 2007.

[Click here for figure data](#)

### 2.30.5 GDP growth



Sources: Fiji Islands Bureau of Statistics, *Key Statistics* December 2006; staff estimates.

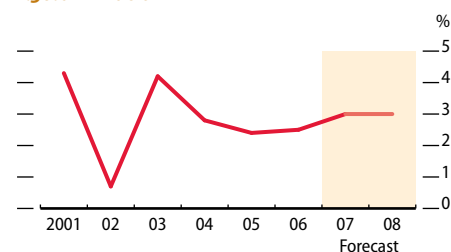
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### 2.30.1 Selected economic indicators

	2007	2008
GDP growth	-2.3	1.3
Inflation	3.0	3.0
Current account balance (% of GDP)	-12.6	-

Source: Staff estimates.

### 2.30.6 Inflation



Sources: Fiji Islands Bureau of Statistics, *Key Statistics* December 2006; staff estimates.

[Click here for figure data](#)

and May 2000 undermined investor confidence, damaged the country's tourism image, led to trade bans, and reduced international funding. GDP fell by 6.4% in 1987 and 1.7% in 2000. The December coup may have a similar impact. Several donors suspended most new aid proposals, although many existing projects have continued. The EU has announced consultations with Fiji Islands authorities that could result in suspension of new aid, including assistance crucial to restructuring the sugar industry. A return to democracy seems unlikely to happen soon, given that the prime minister has stated that a general election will not be held until 2010.

The official forecast is that GDP will contract by 2–4% in 2007. A decline of 2.3% is a plausible outcome (Figure 2.30.5 above). Tourist arrivals are now forecast at 514,000, down 5.7% from 2006. Regional airline Air Pacific reported a 40% drop in forward bookings for the first 3 months of 2007. A tourism action group formed after the 2000 coup was reestablished to strengthen marketing efforts, in the hope that hotel occupancy rates would pick up from 25% lows. However, accommodation capacity was earlier expected to increase by up to 1,500 new rooms in 2007–2008 as new hotels were completed. A much more severe contraction is now forecast in the construction sector as some projects are postponed or canceled.

Elsewhere, it is assumed that clothing production for export will decline only marginally in 2007, but this could prove optimistic if overseas buyers switch their orders to other countries, or if trade sanctions are imposed. About 1% growth in sugarcane and raw sugar production is forecast, but the medium-term outlook for the industry will sour considerably if the EU suspends subsidies and aid.

The public administration sector will probably contract more than envisaged in the 2007 budget. A revised budget announced by the interim Government has targeted a deficit of 2% of GDP in 2007. Given that the new administration has decided not to proceed with a rise in value-added tax, as well as the implications for revenue collection of a recession, arriving at that target has required proposing cuts in spending across all departments. The interim Government sought to cut the wages bill by reducing pay rates and the retirement age for public servants, but has confronted labor union opposition to the proposals.

The loss of gold export earnings in 2007 and a decline in clothing exports will be only partly offset by rises in exports of mineral water, sugar, and fisheries and forestry products. If the marketing efforts persuade visitors to stay longer and spend more, tourism earnings may not fall in lockstep with lower tourist numbers.

Recession and the tightened monetary and exchange rate policies will have a crimping effect on import growth in 2007, but official transfers will fall to an extent that partly depends on the decision regarding the EU aid program. The current account deficit is forecast to narrow to 12.6% of GDP. Foreign reserves, which fell further to \$449 million in February 2007, will remain under pressure through the year, but tight fiscal and monetary policies should contribute to financial stability. Inflation is expected to remain moderate at about 3% (Figure 2.30.6 above). The economy is seen emerging from recession in 2008, with growth of 1.3%.

### 2.30.1 Development challenges

The historical drivers of growth have been sugar, clothing, gold, and tourism. All except tourism faced uncertain futures before the latest coup. Sugar had seen a decline in growing and milling productivity due to underinvestment; suffered from poor working relationships between mill management, unions, and farmers; and confronted the progressive loss of farmers as land leases ended without renewal. In consequence, sugar production fell by nearly half over a decade to 289,000 tons in 2005, after which a phased 4-year 36% reduction in the preferential price paid by the EU began.

Wide-ranging reform of the sugar industry remains a core challenge, as underlined by the fact that the country's unit cost of production is about four times that of best-practice sugar-producing countries.

A future for the clothing industry depends on the extent to which producers can shift from the past low-value-added "cut, make, and trim" approach to higher-value-added production for niche markets. Gold mining has stopped. And tourism has to engineer a recovery in a competitive market, a process that took 4 years after the 2000 coup. New industries also need to be identified. For example, pine and mahogany have potential, but need sustainable use of natural resources and substantial investment.

The broader challenge is to encourage private investment and export development that together generate faster, sustained economic expansion that is compatible with external balance. The Government has targeted an investment ratio of 25% and a GDP growth rate of 5% as minimal requirements if inroads are to be made into unemployment and a poverty rate of 30%. Yet to achieve these aims, the business environment has to be improved through legal and regulatory reform.

# Papua New Guinea

Rising global prices for export commodities and strong supply responses from the agriculture and mineral sectors lifted economic growth in 2006. The outlook is for continued expansion with macroeconomic stability in the context of softer global prices for key commodities and sustained business and consumer confidence. Impediments to faster private sector-led growth are law and order problems, poor infrastructure, and inadequate service delivery by the public service and state-owned utilities.

## Economic performance

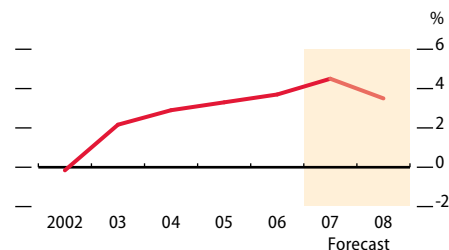
Economic growth accelerated for a fourth year in succession, reaching an estimated 3.7% in 2006 (Figure 2.31.1). A major contribution came from the agriculture, forestry, and fisheries sector, which accounts for about one third of GDP; it expanded by 2.9%. This rise primarily reflected increased production of logs for export and of palm oil. Global prices for both commodities, which were the country's two major agricultural export earners in 2006, trended upward through the year. The world price of coffee, the number three agricultural export, trended down and production declined, with producers continuing to suffer from inadequate transport infrastructure. Copra production is estimated to have risen in response to an improving world price, whereas cocoa production remained stable in the face of price volatility.

Other contributions came from construction, where expansion of 10.0% was stimulated by mining projects and public expenditure on infrastructure, and from oil and gas, where 13.7% growth reflected both the start of production at two new fields and improved extraction rates from existing fields. Climbing oil production was encouraged by the high world oil price. Manufacturing and services also made contributions to growth. However, despite rising world prices for copper and gold and the start of two new mines, mining (excluding oil and gas) contracted by 4.9%. This reflected disruption of production by a landslide at the major Porgera gold mine. On the demand side, net exports were a major driver, supported by increases in private and public investment and in consumption.

A relatively stable political environment facilitated the improved economic performance. The Government entered its fourth year in office under one prime minister and looked set to serve out its full term, with general elections scheduled for June–July 2007.

Higher economic growth fed through to formal private sector employment in agriculture, trade, manufacturing, construction, transportation, and finance and business services, which collectively increased by 4.6% in the 12 months to September 2006. Employment rose particularly fast in construction (13.3%). Over the same period, mineral sector employment (i.e., oil, gas, and mining) registered negligible growth. Only about one in 10 of the total labor force is in paid

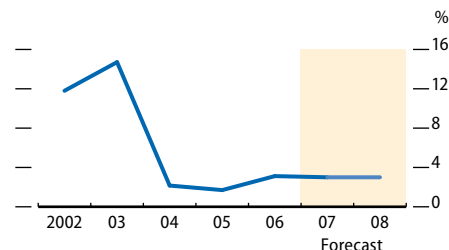
2.31.1 GDP growth



Sources: Department of Treasury, 2007 Budget Volume 1: Economic and Development Policies, 14 November 2006; Bank of Papua New Guinea, Monetary Policy Statement, 31 January 2007.

[Click here for figure data](#)

2.31.2 Inflation



Sources: Bank of Papua New Guinea (BPNG), Quarterly Economic Bulletin September 2006, available: <http://www.bankpng.gov.pg>, downloaded 7 February 2007; BPNG, Monetary Policy Statement, 31 January 2007; staff estimates.

[Click here for figure data](#)



employment, so that formal sector employment growth, while important, is not the major determinant of the economic welfare of most Papua New Guineans, who are subsistence farmers and engage in supplementary cash crop production.

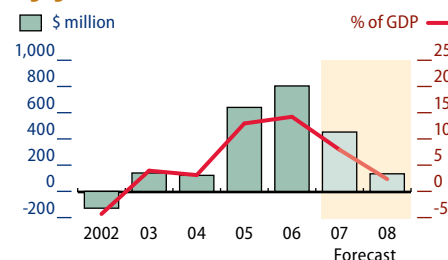
Inflation edged up to an estimated 3.1% (Figure 2.31.2). This good outcome was underpinned by exchange rate stability, which in turn reflected a strong external sector performance and the maintenance of sound macroeconomic management. In 2006, the kina appreciated by 2.1% against the US dollar and depreciated by 5.5% against the Australian dollar. In the first 9 months of 2006, exports (in nominal US dollars) shot up by 33.2% on the year-earlier period, imports rose by 16.0%, and the trade surplus widened by 8.3%. Copper, gold, and oil were the main boosts to export earnings, supplemented by palm oil and logs. The transfers account also improved, but deficits on the net services and income accounts widened. The current account surplus picked up to an estimated 14.2% of GDP (Figure 2.31.3). Gross foreign exchange reserves jumped by 90% to \$1.45 billion, sufficient to cover 9.2 months of total imports (Figure 2.31.4).

The Bank of Papua New Guinea maintained a neutral monetary policy in 2006 on the basis that the macroeconomic environment was stable and that short-term, mostly imported, inflationary shocks could most effectively be dealt with through foreign exchange market interventions aimed at reducing exchange rate volatility, rather than through interest rate adjustments. The kina facility rate—the official interest rate—was left at the 6.0% set in September 2005. Credit to the private sector grew by 36.8% and, along with the 58.2% rise in net foreign assets, accounted for a 39.0% rise in the broad money supply (Figure 2.31.5). The high level of liquidity in the banking system posed a potential inflationary threat that the monetary authorities monitored closely.

The Government's fiscal position strengthened because of mineral tax revenue windfalls attributable to the high global prices for oil, copper, and gold. Total revenue collections were 60% above the level required to meet original budget estimates and permitted the passage of a supplementary budget in August approving the early retirement of some external debt, payment of outstanding state obligations, and the allocation of more resources to the priority expenditure program identified in the Medium-Term Development Strategy 2005–2010. The spending priorities include transportation infrastructure, promotion of income-earning opportunities in agriculture, basic education, HIV/AIDS prevention (Box 2.31.1), and law and justice. The Government's revised estimate was for a balanced budget in 2006 (Figure 2.31.6), instead of an earlier expected deficit of 0.6% of GDP, with a primary surplus run for the fourth year in a row. Public debt was reduced in line with the medium-term debt strategy, which provides for replacement of external debt by domestic debt and the restructuring of domestic debt from short-term treasury bills to longer-term government bonds. Total public debt is estimated to have fallen in 2006 by almost 1% in absolute terms, to 42.4% of GDP. External debt was 21.4% of GDP and was mostly on concessional terms (Figure 2.31.7).

In policy areas, the Government pursued implementation of a public sector reform program. Senior ministers endorsed the objectives of a

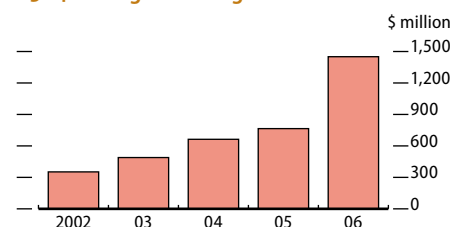
### 2.31.3 Current account balance



Sources: Bank of Papua New Guinea, available: <http://www.bankpng.gov.pg>, downloaded 7 February 2007; Department of Treasury, 2007 Budget Volume 1: Economic and Development Policies, 14 November 2006.

[Click here for figure data](#)

### 2.31.4 Foreign exchange reserves



Sources: Bank of Papua New Guinea (BPNG), *Quarterly Economic Bulletin September 2006*, available: <http://www.bankpng.gov.pg>, downloaded 7 February 2007; BPNG, *Monetary Policy Statement*, 31 January 2007; staff estimates.

[Click here for figure data](#)

### 2.31.1 HIV/AIDS prevention and the economy

An immediate challenge in health policy that has long-term economic implications is the rising incidence of HIV/AIDS, since about 2% of the population is HIV positive. A 2002 report by the Australia-based Center for International Economics concluded that the country faced a serious epidemic, that the working-age population could be smaller than it otherwise would be in 2020 by 13–34%, and that GDP could be 2.6–7.5% lower. Although GDP per capita would increase as (largely foreign) capital substituted for labor, national per capita income could fall by 6–16%. Understanding the threat, the Government has made HIV/AIDS prevention a priority area of expenditure under the Medium-Term Development Strategy.

report on restructuring the public service, but deferred consideration of its recommendations for abolishing or merging departments and functions until after the 2007 general elections. Law and order and corruption remained priority issues. Unrest in the energy-rich Southern Highlands province led to a declaration of a state of emergency in August 2006.

## Economic prospects

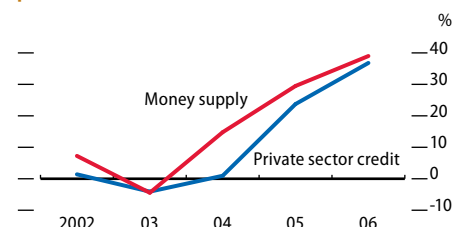
Economic growth is expected to accelerate further in 2007 before slowing in 2008 (Figure 2.31.1 above). Global prices for key commodities are projected to soften from the high levels of 2006, but mining production will recover from the contraction of 2006 as a result of earlier investments and the exploitation of higher-grade ore bodies. This recovery will offset an expected decline in oil and gas output resulting from depletion of fields. Mineral production overall is likely to grow by about 7% in 2007 before easing a little in 2008. The forecast is not affected by the cancellation in early 2007 of a planned gas pipeline from the Southern Highlands to Australia, since this facility would not have had an impact on output for several years. Energy companies involved in the project have indicated willingness instead to consider developing the gas fields for liquefied natural gas exports and petrochemical production.

Mining investment will stimulate construction, notably in the first year of building the Ramu nickel mine. The sector will also benefit from public expenditure on infrastructure and strong private demand in a low interest rate environment. Construction is forecast to grow by 10.0% in 2007 and 7.0% in 2008. Manufacturing, such as food and beverage processing, is expected to grow at a modest rate on the back of growth in consumer demand, which will also underpin growth in areas like transport and communications. The agriculture, forestry, and fisheries sector is expected to grow by 3.6% in both 2007 and 2008 as cash crop production rises in response to new investments and transport infrastructure improvements, as forestry output expands when new project areas are developed, and as fisheries production maintains a steady rate of increase. Palm oil and log production will be the major contributors to growth in the sector. Nonmineral GDP is forecast to grow by 4.2% in 2007 and 4.0% in 2008.

Growth at these rates will mean a continued increase in per capita GDP, given population growth of 1.8%. More important, growth in nonmineral GDP implies that the benefits will be more widely distributed, since mineral sector production is not labor intensive. Sustained and faster agricultural growth in particular will be the foundation for reducing poverty, since 85% of the population live in rural areas. An estimated 41.3% of the rural population live below the national poverty line, compared with 16.1% for the urban population.

Inflation is forecast to remain at 3.0% (Figure 2.31.2). Continued fiscal prudence and sound monetary management should maintain exchange rate stability, and a move to a productivity-based wages policy will be more effective in containing supply-side pressures, because inflationary expectations have fallen in 3 years of relatively low inflation. The 2007 budget targets a deficit of 0.2% of GDP (Figure 2.31.6), in accordance with objectives established in the Medium-Term Fiscal Strategy 2002–2007.

### 2.31.5 Growth in money supply and private sector credit



Sources: Bank of Papua New Guinea (BPNG), *Quarterly Economic Bulletin* September 2006, available: <http://www.bankpng.gov.pg>, downloaded 7 February 2007; BPNG, *Monetary Policy Statement*, 31 January 2007; staff estimates.

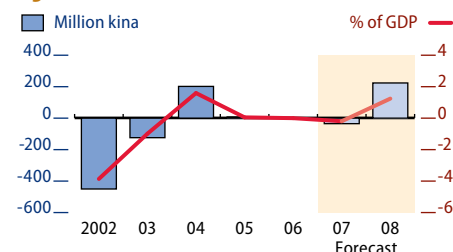
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### 2.31.1 Selected economic indicators

	2007	2008
GDP growth	4.5	3.5
Inflation	3.0	3.0
Current account balance (% of GDP)	7.9	2.3

Source: Staff estimates.

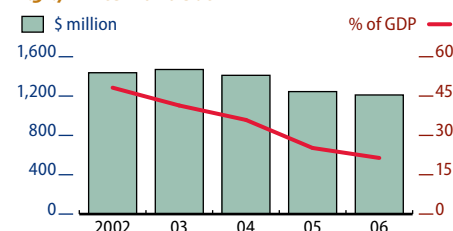
### 2.31.6 Fiscal balance



Sources: Bank of Papua New Guinea, available: <http://www.bankpng.gov.pg>, downloaded 7 February 2007; Department of Treasury, *2007 Budget Volume 1: Economic and Development Policies*, 14 November 2006.

[Click here for figure data](#)

### 2.31.7 External debt



Sources: Bank of Papua New Guinea, available: <http://www.bankpng.gov.pg>, downloaded 7 February 2007; Department of Treasury, *2007 Budget Volume 1: Economic and Development Policies*, 14 November 2006.

[Click here for figure data](#)

Pressures on the budget are expected in the lead-up to the elections, but responsible fiscal management is likely to be maintained. In 2008, a budget surplus of 1.2% is projected on the basis that revenues from the mineral sector will decline and that expenditures will be reduced accordingly. Public debt is expected to fall to 39.7% in 2008 as both domestic and external debt stocks come down from 2006 levels. Continued fiscal prudence and exchange rate stability will permit the central bank to maintain a neutral monetary policy stance, and interest rates are expected to be steady.

Softer prices for mineral exports and declining oil production are projected to reduce the current account surplus in 2007 and 2008. Moreover, imports for major mining projects will rise (Figure 2.31.8). The cancellation of the gas pipeline points to a smaller drop in the external surplus than earlier penciled in, since the pipeline-associated high level of imports will no longer be required. The decline in the current account surplus does not reflect excess demand pressures or structural imbalance. Imports arising from mining projects are fully funded by capital inflows related to private sector decisions to launch financially viable projects. Foreign reserves are forecast to provide over 9 months of import cover.

General elections scheduled for this year will be the first based on a limited preferential voting system, rather than a first-past-the-post system. This change is expected to reduce, to some degree, the large number of political parties in the parliament, but coalition governments still seem likely.

The major downside risks in the medium-term economic outlook are a sharper than expected weakening in global commodity prices, disruptions to mining and petroleum projects from civil unrest or natural disasters, political instability, and the abandonment of sound macroeconomic policies by the incoming government.

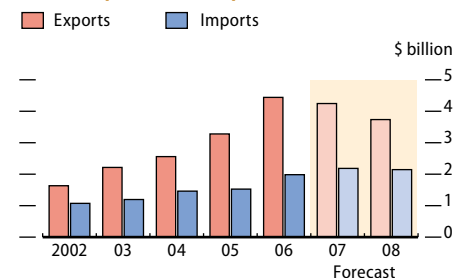
## Development challenges

The Government acknowledges that much remains to be done to remove obstacles to greater domestic and foreign private investment, particularly in nonmineral sectors. The main concern is the longstanding problem of lawlessness and disorder (Box 2.31.2).

Other impediments to private sector development include corruption, weak service delivery from the public sector including state-owned power and water utilities, poor road maintenance, high transport costs, and inefficient telecommunications. In 2005, the country ranked 130 out of 158 surveyed for the Corruption Perceptions Index for degrees of corruption, scoring 2.3 out of 10, where zero is highly corrupt. Yet successes have been notched up in dealing with corrupt practices, notably in the pension fund industry. However, the challenge remains to ensure compliance with policies, laws, and regulations. In the forestry sector, for example, sustainable production is at risk from illegal logging, even though the necessary regulations are in place to prevent it.

The private sector also raises concerns that land tenure, access, and utilization issues impede business investment, and the Government has stated that it will at some stage review land legislation. However, this is a complex and sensitive area that is unlikely to be tackled in an election year.

### 2.31.8 Exports and imports



Sources: Bank of Papua New Guinea, available: <http://www.bankpng.gov.pg> downloaded 7 February 2007; Department of Treasury, 2007 Budget Volume 1: Economic and Development Policies, 14 November 2006.

[Click here for figure data](#)

### 2.31.2 Installing law and order

Issues of lawlessness and disorder damage the country's image as a desirable destination both for foreign investors and for tourists. In 2005, net foreign direct investment was only \$27 million and about 18,000 tourists visited (less than 2% of total holiday visitors to the South Pacific and 10,000 below a 1999 peak).

The Enhanced Cooperation Program with Australia originally had a policing component intended to assist in dealing with law and order, but this was removed in 2005 following a dispute over whether or not Australian Federal Police would be subject to domestic law. (The 2007 budget papers indicate that future discussions with Australia will examine reintroducing the policing component of the program.)

In the long run, much faster economic growth that generates employment for young labor market entrants would contribute to curbing the law and order problem, but successful short- and medium-term interventions are needed, precisely in order to encourage the investment that generates faster growth.

# Democratic Republic of Timor-Leste

Estimates show a contraction in non-oil GDP last year after an extended outbreak of civil unrest, though a sharp rebound is projected for 2007, based on increased spending by the Government and by international personnel deployed in the country. Achieving development objectives hinges on the state's ability to translate a strong flow of oil and gas revenues into capital spending, since the public sector's limited capacity restricts budget execution, hindering the growth of sectors that could generate employment and reduce poverty.

## Economic performance

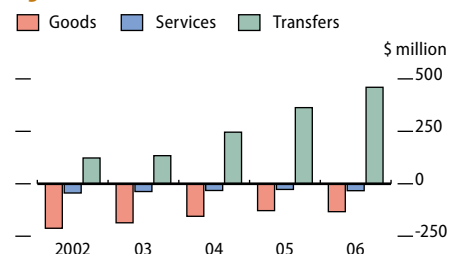
Economic activity in 2006 was severely hampered by civil unrest, which began in the capital, Dili, in April, culminated in armed conflict between the National Defence Force and the National Police, and continued until September, with occasional disturbances reported after that. About 2,200 houses were burned, which led to around 50% of Dili's population leaving the city, according to United Nations (UN) estimates. By the end of May, the UN and many foreign embassies had withdrawn nonessential staff. The Government requested external assistance to guarantee the peace, and by end-2006 more than 2,000 international forces were deployed. Somewhat earlier, in June, the prime minister had stepped down to be replaced by the former foreign minister. This year, a presidential election is scheduled for April and a parliamentary election in May.

Before the upsurge in violence, the economy was in an expansionary phase that indicated some success in meeting its major development challenge since independence in 2002: to use wealth from offshore oil and gas resources to generate growth that reduces severe poverty. About 40% of a fast-growing population of 1 million is estimated to live below the national poverty line, with three quarters living in rural areas and having limited access to safe water and sanitation. Two thirds of the rural population relies almost exclusively on subsistence agriculture, and coffee is the major cash crop.

In 2005, oil and gas income and non-oil GDP were approximately of equal size at \$350 million, with oil and gas revenues paid into a petroleum fund that is invested abroad and supports government spending under a long-term fiscal sustainability policy that allows only "permanent" interest income from the fund to be appropriated annually. Non-oil GDP, which includes agriculture (32%), the public sector and the UN (35%), and nonfarm private sector activity (33%), was originally expected to grow by around 5% in 2006, boosted by higher public investment financed by income from the petroleum fund. The private sector should have benefited from planned public construction projects, and coffee exports were expected to increase.

The civil unrest, which occurred at the peak of the coffee harvest season, damaged production. Other agricultural products, notably

2.32.1 Balance of trade



Source: International Monetary Fund, Article IV Consultation, July 2005 and February 2007.

[Click here for figure data](#)

livestock and dairy, also suffered. Public investment projects were suspended and commercial activity was heavily restricted. Capital left the country and banks were closed for a time, during which bad loans accumulated and new loans ceased being filed. One bank reported that the typical loan default rate of 5% jumped to 30% by year-end, as many borrowers fled.

These negative impacts were offset by the presence of the international forces and restart of some projects, which increased aggregate demand and thus imports. A surge in fund transfers to pay staff at international agencies injected an estimated \$40 million–\$50 million into the economy in December (Figure 2.32.1 above).

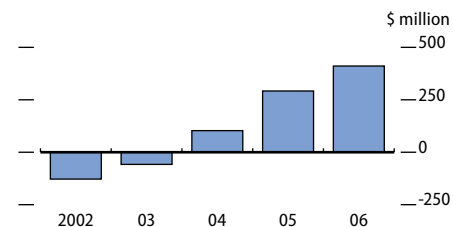
Official national accounts are not prepared, but the International Monetary Fund estimates a 1.6% contraction in non-oil GDP in 2006. Given population growth of 4.0%, per capita non-oil GDP declined significantly. In contrast, the offshore oil and gas sector was not directly affected by the civil unrest, with production increasing in the context of high global prices. Oil and gas revenues rose by an estimated 44% to \$492 million in 2006, increasing the current account surplus and foreign reserves (Figure 2.32.2). At year-end, the book value of the petroleum fund was \$1.0 billion, with the fund gaining an estimated \$80 million a month (Figure 2.32.3).

Growth in oil and gas receipts also ensured a considerable surplus in the Government's accounts for FY2006 (ended 30 June 2006), equivalent to 103% of non-oil GDP (Figure 2.32.4). While revenue growth exceeded budget estimates, both recurrent and capital expenditures fell short. Capital spending in the combined sources budget, which included donor-funded recurrent and capital projects equivalent to 59.0% of total expenditures, again fell short of planned figures, indicating a continuation of capacity constraints in executing budget projects. The FY2007 budget estimates that revenues will rise by 85.6% because of further growth in oil and gas receipts, while expenditures are estimated to more than double to \$309 million, leaving an overall surplus of \$424 million, or about 100% of non-oil GDP.

The increase in planned outlays includes spending on emergency assistance, urban reconstruction, and grants to rural communities, as well as civil service wages. Capital spending estimates are more than three times the FY2006 budget estimate as the Government substitutes its spending for that of declining donor-funds and seeks to accelerate implementation of sector investment programs formulated under the 2002 National Development Plan. The focus is on sector projects in the transportation, education, and power generation sectors. However, given past difficulties in budget execution, actual spending is likely to be below the planned level, which is within the sustainable level determined under a long-term fiscal expenditure and savings policy.

Timor-Leste uses the US dollar as the official unit of currency and consequently has no independent monetary policy. Inflation is largely determined by inflation rates in trading partners, but the civil unrest created some inflationary pressures last year. The consumer price index rose by less than 1% year on year in early 2006, but this rate of increase accelerated to about 6% from June through December (Figure 2.32.5). This reflected both limited supplies of goods caused by the violence and strong

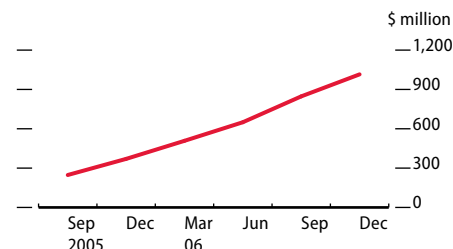
### 2.32.2 Current account balance



Source: International Monetary Fund, Article IV Consultation, July 2005 and February 2007.

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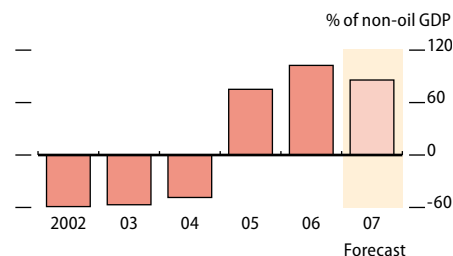
### 2.32.3 Petroleum fund assets



Source: Banking and Payments Authority, January 2007.

[Click here for figure data](#)

### 2.32.4 Fiscal balance



Sources: Ministry of Planning and Finance; International Monetary Fund, 2006 Article IV Consultation, February 2007.

[Click here for figure data](#)



demand by international defense forces for goods and services, notably housing and transportation. For 2006 as a whole, inflation averaged 4.2%, up from 1.8% in 2005.

Efforts to strengthen the legislative framework and judicial system and to implement the National Development Plan continued in 2006, but the environment for the private sector remained poor. The country ranked second to last among 175 countries in the World Bank's *Doing Business* indicators. It takes 160 days to set up a business as against an average of 70 days in the Asia-Pacific region, and an overloaded court system means 175 days to enforce a contract. Weak infrastructure and utility services add to the difficulties.

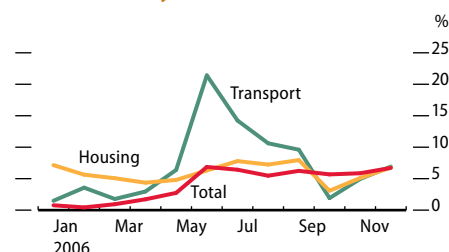
## Economic prospects

Hydrocarbons production is expected to grow substantially and provide funding for development spending. The petroleum fund set up in 2005 is managed in a transparent manner, is subject to independent audit, and is integrated into the government budget in a way that ensures that the fund's asset base is protected while fund income supports public spending. Potential revenue flows in the medium term are boosted by high global prices, and in the long term by an agreement with Australia to share royalties from exploitation of the Greater Sunrise gas field, which could start production in 2013 and generate \$10 billion in revenues over its productive life. The Timor Sea has other potential fields that are under 100% Timorese jurisdiction. Oil and gas income is projected to more than double in 2007–2008 as production from existing fields increases.

The non-oil economy is expected to rebound from the 2006 contraction and expand by about 32% in 2007 and 3.5% in 2008 (Figure 2.32.6). The sharp recovery seen for this year reflects a jump in government spending in FY2007 (though probably not to the planned level), and the establishment of a UN Integrated Mission (to stay until February 2008) to support recovery and improved governance. The presence of more than 2,000 international personnel for peacekeeping and to assist in the conduct of the elections will generate high demand for housing, goods, and services that will put some upward pressure on prices, but will contribute to the maintenance of law and order and the expected smooth completion of the elections, which are prerequisites to a revival of investor confidence.

The growth and inflation projections assume that a new government will be formed after the elections and will adhere to the economic policies of the previous administration. These include the fiscal sustainability policy, implementation of sector investment programs, continued use of the US dollar as the official unit of currency, and efforts to stimulate private sector investment through legal and regulatory reform and infrastructure development. It is also assumed that commercial bank lending will gradually improve as borrowers return to Dili. In this scenario, macroeconomic stability is ensured, with inflation anchored by the use of the US dollar and likely to run at about 5.0% in 2007, slowing to 4.0% in 2008 (Figure 2.32.7). The modest growth forecast for 2008 reflects both some recovery in private investment and further expansion in public spending (on the assumptions of continued legal and regulatory

### 2.32.5 Year-on-year CPI movements



Source: National Statistics Directorate, Consumer Price Index, December 2006.

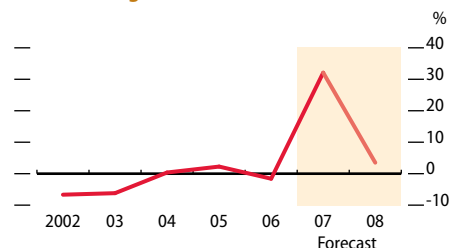
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### 2.32.1 Selected economic indicators

	2007	2008
GDP growth	32.1	3.5
Inflation	5.0	4.0
Current account balance (% of GDP)	-	-

Source: Staff estimates.

### 2.32.6 GDP growth



Sources: Ministry of Planning and Finance; International Monetary Fund, 2006 Article IV Consultation, February 2007.

[Click here for figure data](#)

reform and of improved budget execution). Growth could be faster if public investment in infrastructure accelerates further because of funding available under the United States Millennium Challenge Account. The Millennium Development Corporation is expected to approve a compact with the country by the middle of this year.

Downside risks to the forecasts would emerge if the elections were marred by civil unrest that proved difficult to subdue, if oil and gas prices dropped below forecast levels, or if the new administration adopted an irresponsible fiscal policy. A surge in public spending that was not in alignment with the priorities of the National Development Plan and involved, for example, public service wage rises beyond those granted in the 2007 budget, would jeopardize efforts to facilitate rural development, push up inflation, and retard the restoration of investor confidence.

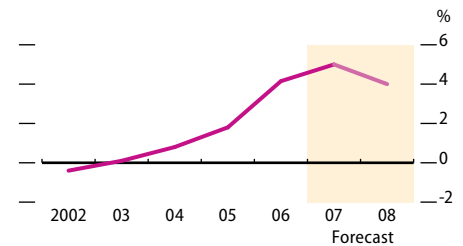
Growth needs to accelerate significantly to make inroads into poverty. In turn, that requires a substantial rise in private investment in agriculture, fisheries, and tourism, complemented by improved implementation of public investment projects in infrastructure, health, and education.

## Development challenges

Near-term challenges are to ensure political stability, prevent civil unrest, and maintain macroeconomic stability. Longer term, the effort to reduce poverty and develop the economy faces two major tasks. One is to ensure that oil and gas wealth is managed to protect the interest of future generations while supporting current investment for essential social and economic development. Fiscal sustainability and intergenerational equity are being achieved through the long-term fiscal expenditure and savings policy, whereby the Government's annual sustainable spending is equal to domestic revenues plus the estimated permanent income from petroleum fund assets. However, actual public capital expenditures fall short of planned levels because of weak budget execution. The Government intends to improve this by outsourcing large infrastructure projects internationally, carrying out a donor-supported financial management reform program, and using rural development and education cash grants more frequently (though these will need to be carefully targeted and reported).

The second task is to encourage private investment by reducing the costs of doing business. A low, uniform tariff regime is in place, but there is room for tax reforms, especially given the strong growth in oil revenues. Such reform would involve the passage of pending consolidated tax legislation and would be aimed at reducing administrative costs and encouraging compliance through reducing rates, increasing minimum thresholds, and simplifying procedures. Foreign investment would be encouraged if legislation were passed permitting long-term leasing of state-owned land. Investment in general would be encouraged if business licensing procedures could be streamlined, dispute resolution through arbitration introduced (to relieve the burden on the court system), and contract enforcement strengthened.

### 2.32.7 Inflation



Sources: Ministry of Planning and Finance; National Statistics Directorate; staff estimates.

[Click here for figure data](#)

## Small Pacific countries

The smaller Pacific Island economies recorded divergent performances in 2006. Several benefited from an expansion of tourism and remittances, while others suffered from declines in aid or in farm output. GDP growth increased in about half the economies, mostly to modest levels, although rates above 5% were achieved by Palau, Solomon Islands, and Vanuatu. Inflation generally increased as a result of higher costs for imported fuel. The outlook is for a similar mixed growth performance in 2007. External conditions are mostly favorable. However, a pickup in development requires many economies to create a more hospitable climate for the private sector, to strengthen governance, and to improve delivery of public services.

### Cook Islands

Gross domestic product (GDP) growth for FY2006 (ended 30 June 2006) was estimated at 1.8%, slowing from 2.2% in FY2005 (Figure 2.33.1).

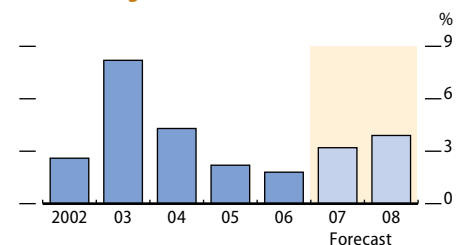
The agriculture sector was hurt by five cyclones that hit the islands in early 2005. Fisheries income was little changed from a year earlier, but the value of pearl exports fell by 28% from NZ\$2.9 million in FY2005, reflecting lower world prices and increased production costs. Tourism remained the key growth sector, with visitor arrivals rising by 5.7% in FY2006 (Figure 2.33.2), with over half coming from New Zealand, the Cook Islands' largest trading partner.

Inflation in FY2006 was estimated at 3.3% (Figure 2.33.3), in line with that of New Zealand (the Cook Islands uses the New Zealand currency). The removal of most import duties from July 2006 is expected to lower inflation to 2.8% in FY2007.

The merchandise trade deficit was NZ\$107.5 million in FY2006 and is projected to widen to NZ\$114.6 million for FY2007. The deficit is caused by the high import dependency and the narrow export base of this small economy. This is redressed by a high level of service receipts, primarily from tourism, which provided for a current account surplus last fiscal year.

Budget operating surpluses have been achieved since 2000. In FY2006, the operating surplus was estimated at NZ\$8.9 million, largely due to higher than expected tax revenues. In June 2006, the Government settled an outstanding external debt incurred in the mid-1990s to fund a major hotel project, more than halving the net public debt to NZ\$30.1 million. The debt level is at a point where the Government could tap commercial loans for infrastructure projects. The Government intends to take a cautious approach to new debt and has stated that debt servicing should be met through user charges or operating income. Progress also was made in reducing excess employment in the public service, reforming the state bank, improving banking supervision, and encouraging foreign investment and foreign workers.

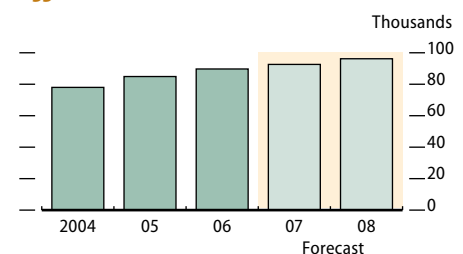
2.33.1 GDP growth



Sources: Cook Islands Statistics Office, available: <http://www.stats.gov.ck>, downloaded 9 January 2007; Ministry of Finance and Economic Management, *Half-Year Fiscal and Economic Update*, December 2006; staff estimates.

[Click here for figure data](#)

2.33.2 Visitor arrivals



Source: Ministry of Finance and Economic Management, *Half-Year Fiscal and Economic Update*, December 2006.

[Click here for figure data](#)

In FY2007 and FY2008 economic growth is projected to recover to about 3.5%. Visitor arrivals are expected to grow by 3.2% and 3.9%, respectively, with FY2007 growth partially attributable to the filming of the “Survivor Cook Islands” United States (US) television series on the island of Aitutaki in 2006. Pearl exports are expected to increase by about 10% annually from FY2007 through FY2009 as the industry recovers from a period of consolidation when many small producers left the industry (Figure 2.33.4). This growth will be supported by the Government’s reestablishment of the Cook Islands Pearl Authority, which will coordinate and improve marketing, and by the removal of fuel levies on the industry.

A balanced budget is expected in FY2007—a change from the surplus of FY2006—the result of an expected increase in expenditures and a fall in revenues induced by the removal of import duties on many products. This action on duties is aimed at stimulating development of the private sector and is consistent with obligations under the Pacific Island Countries Trade Agreement.

The absence of a clear planning framework for infrastructure has contributed to a backlog of public works. Inadequate roads, water supplies, sewerage, electricity, and ports on Rarotonga and Aitutaki are likely constraints on growth over the medium term. Existing infrastructure imposes high costs on users and, in some cases, is unable to meet the demand at a reasonable standard. The Government is preparing an infrastructure master plan that will involve examining the shortcomings and development requirements. A decline in population also poses a development challenge. Cook Islands’ residents hold New Zealand citizenship and can access the New Zealand and Australian job markets and the New Zealand health, education, and social security systems. More than three times as many Cook Islanders live overseas as at home. An improvement in social services, notably education, could help stem emigration. Private sector development has picked up on Rarotonga and Aitutaki, but not elsewhere. Another issue requiring attention is protective tariffs retained on some locally produced goods, especially food and agricultural products, which raises costs for the important tourism industry.

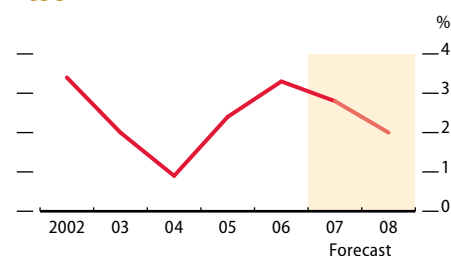
## Kiribati

Economic growth slowed to an estimated 0.9% in 2006 (Figure 2.33.5). Small increases in government activities (which contributed about 40% of GDP) and in wholesale and retail sales were nearly offset by declines in financial services and public transportation. Construction activity leveled off. The country uses the Australian dollar as its domestic currency, so there is no independent monetary policy. The inflation rate in 2006 was estimated at 1.5%.

In recent years the trade deficit has widened (Figure 2.33.6). Exports comprise a small amount of coconut products and some marine products, while the economy imports a wide array of essential goods from food to vehicles.

Fishing license fees are a major foreign exchange earner and contributed 87% of nontax income last year. Import duties constituted the

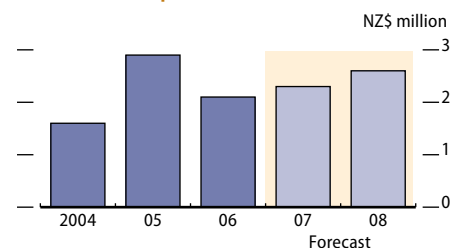
2.33.3 Inflation



Sources: Cook Islands Statistics Office, available: <http://www.stats.gov.ck>, downloaded 9 January 2007; Ministry of Finance and Economic Management, *Half-Year Fiscal and Economic Update*, December 2006.

[Click here for figure data](#)

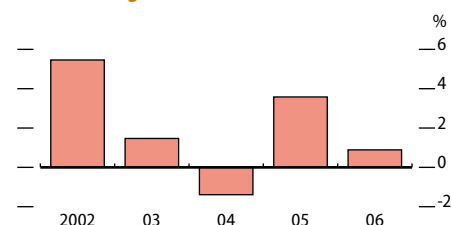
2.33.4 Pearl exports



Source: Ministry of Finance and Economic Management, *Half-Year Fiscal and Economic Update*, December 2006.

[Click here for figure data](#)

2.33.5 GDP growth



Source: Ministry of Finance and Economic Development, 24 January 2007.

[Click here for figure data](#)

second largest source of government revenues. Civil servants' salaries and benefits accounts for almost half of total government expenditures, which exceeded revenues by A\$23.8 million, representing an 8.7% widening of the deficit from 2005 (Figure 2.33.7). Most of the gap was financed by an A\$18.5 million drawdown from the Revenue Equalization Reserve Fund, created to provide a cushion for fiscal shortfalls. The market value of this fund has increased from A\$97.1 million in 1984 to about A\$666 million in October 2006. The 2007 budget projects an underlying deficit of A\$20.5 million, to be funded entirely from the Revenue Equalization Reserve Fund.

Kiribati, a low-lying atoll nation, is highly vulnerable to climate change and natural disasters, including coastline erosion. Furthermore, it is susceptible to fluctuations in fishing license fees, which currently make up 43% of total government revenues. In addition, returns on the revenue fund that supports essential government spending depend on the performance of international stock and bond markets.

Infrastructure development is a key challenge. Telecommunications costs are high. Air Pacific, Air Marshall Islands, and Our Airline (formerly Air Nauru) provide international air connections to the capital, Tarawa, but at high cost, deterring tourism. Internal travel also is costly, and domestic air and sea services are irregular.

Performance in the public sector has been weak, illustrated by low profits and high staffing levels in public enterprises. Line ministries need technical assistance to improve their capacities. The level of tax evasion, particularly of import duties, is significant, hurting government revenue collection. Like many other small Pacific island nations, Kiribati also faces relatively high costs of imported fuel, due to its small volume shipments and limited storage facilities.

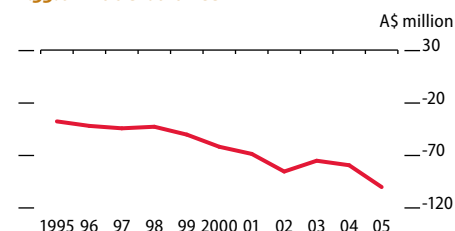
Tourism could be an avenue of development, especially in Kiritimati, which offers game fishing, natural beauty, and has potential for bird-watching and diving, but it is held back by the high cost of travel and inadequate infrastructure.

## Republic of the Marshall Islands

GDP expanded by an estimated 3.0% in FY2006 (ended 30 September 2006), driven largely by increased government capital expenditures (Figure 2.33.8). Nonetheless, the continued fast rate of population growth saw GDP per capita decline by 0.53%. This economy depends heavily on funds from the US under the Compact of Free Association. Compact payments have led to substantial increases in government spending in infrastructure, but have also fed into higher public sector employment and wages. The reliance on government spending is high and the private sector contribution to GDP has remained at 30–40% for a decade. Key productive sectors comprise wholesale and retail trade, fishing, construction, transport, and copra. Fishing license fees are an important revenue source for the Government.

The beneficial impact of Compact funds has been constrained by a tendency to give priority to creation of public sector jobs and support of public sector activities, over management for public service delivery and to support development of the private sector. The long-term implications

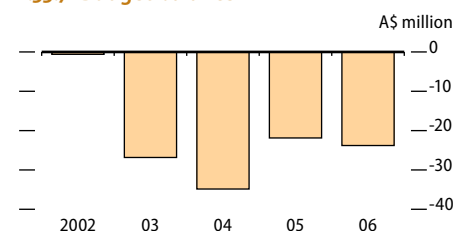
2.33.6 Trade balance



Source: Ministry of Finance and Economic Development, 24 January 2007.

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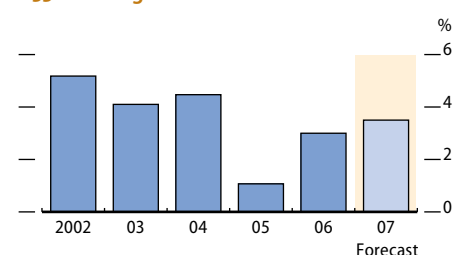
2.33.7 Budget balance



Sources: Kiribati National Statistics Office, *Statistical Yearbook 2002*, June 2002; Ministry of Finance and Economic Development, *Kiribati Government Budget*, various years.

[Click here for figure data](#)

2.33.8 GDP growth



Source: Republic of the Marshall Islands, *FY2005 Economic Review*, June 2006.

[Click here for figure data](#)



of such prioritization are evident from the education system: education spending is among the highest in the Pacific, but education outcomes are among the worst. This contributes to an unemployment rate of 30% (with youth unemployment estimated at about 60%) as well as to social problems.

Fiscal management continues to be weak, with little growth in domestic revenues, unmanaged expenditures (particularly in wages bills), and planned declines in compact grants. The central government overall budget was in deficit by 3.0% of GDP in FY2005 (Figure 2.33.9). Manifestations of a problematic fiscal situation include the imposition of a budget freeze on nonessential expenditures in February 2006, difficulties in meeting the Government's payroll, and an inability to meet all debt service requirements.

Estimates of debt sustainability put the net present value debt-to-GDP ratio at 60–80%, and debt service as a share of exports at 78%. Both indicators suggest the country is well beyond a safe debt threshold. Debt service payments for FY2006 were budgeted at \$1.0 million (considered to be lower than the levels required), with actual repayments likely to be below this because of revenue shortfalls. Even if no further borrowing is undertaken, debt service payments will increase over the next 5 years, and debt repayment will remain a concern. This may strengthen pressures for structural reforms in the public sector.

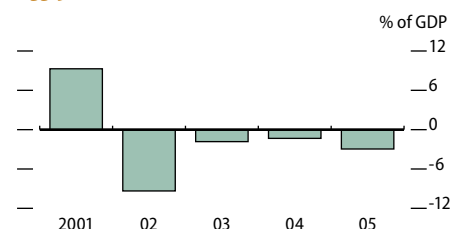
The current account surplus continued to decline in FY2006 to 4.8% of GDP (Figure 2.33.10). Official reserves of \$1.5 million at end-2006 were sufficient to cover just 1 week of imports. However, a guaranteed flow of Compact funds reduces pressure on the Government to act on the external account weakness. Inflation has become a less pressing concern, slowing to 3.0% in FY2006, and is forecast to ease further to 2.4% in FY2007 because of lower global oil prices.

Economic stress has been signaled over recent years by various problems, such as: the failure of two local retailers that led to a government-sponsored rescue package; the end of international flights by Aloha Airlines owing to insufficient returns on the route; and cash-flow difficulties at the Marshalls Energy Company. Two continuing issues limit the economy's growth potential—a weak environment for private sector activity and a tendency for the Government to seek to attract private investment through use of incentives. Private sector constraints include problems with access to finance and land, ineffective laws and regulations, poor infrastructure, and abrupt changes in government policy. Investments attracted through incentives such as tax holidays may prove to be transient. Implementation of reforms may be delayed until after elections scheduled for November 2007. Economic growth forecast at 3.5% in FY2007 is expected to be supported by continued high public expenditures. In FY2008, though, a decline in compact grants could damp growth.

## Federated States of Micronesia

The economy contracted by an estimated 0.7% in 2006, continuing a trend of poor economic performance despite significant per capita levels of financial grants (Figure 2.33.11). The country is heavily dependent

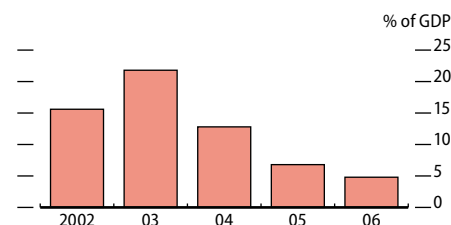
2.33.9 Fiscal balance



Source: Republic of the Marshall Islands, *FY2005 Economic Review*, June 2006.

[Click here for figure data](#)

2.33.10 Current account balance



Sources: Republic of the Marshall Islands, *FY2005 Economic Review*, June 2006; International Monetary Fund, 2005 *Article IV Consultation*, January 2006.

[Click here for figure data](#)

2.33.11 GDP growth and per capita grants



Sources: Department of Economic Affairs, available: <http://www.spc.int/prism/country/fm/stats/>, downloaded 3 January 2007; International Monetary Fund, 2004 *Article IV Consultation*, March 2005.

[Click here for figure data](#)

on aid (predominantly from the US) and performance has been driven by public sector expenditures. Services account for about 70% of total employment and agriculture and fisheries for less than 10%. Indeed aid flows have contributed to some poor habits going unchecked—limited financial responsibility, limited monitoring of performance, reliance on the public sector, reduced pressure for raising domestic revenues, and no strong pressure for policy change. The amended Compact of Free Association with the US came into effect in FY2004 (ended 30 September 2004) and goes some way to addressing issues of financial responsibility and performance monitoring through requiring quarterly financial and performance reports as well as providing the US with the ability to withhold or suspend funds.

The recent weakness in the economy reflects partly a reduction in funding under the terms of the amended Compact. Fiscal pressures have also been created by stricter controls on the use of Compact funds and will further build from FY2007 when grants decline as more of the funds are channeled into a trust fund. The Government has struggled to find funds for many functions that do not fit readily into the Compact-supported sectors, while available funds for other sectors have not always been fully used. For example, the inability of the Federated States of Micronesia (FSM) and the US to agree on a mechanism to disburse an infrastructure grant, budgeted at \$17 million, meant this resource was not tapped during 2004–2006. Capacity constraints also prevented the economy from fully using five operational grants provided under the Compact.

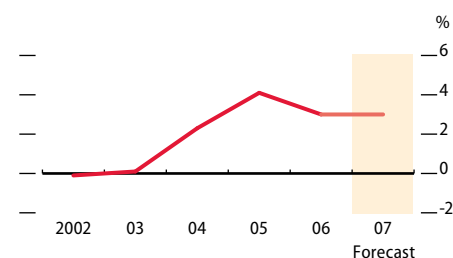
Inflation slowed to an estimated 3.0% in 2006 (Figure 2.33.12). External debt service indicators suggest that external debt is manageable (Figure 2.33.13), but this, too, is expected to come under pressure as Compact grant receipts decline from FY2007. The federal and state governments may seek alternative sources of funds, such as from donors or further debt, to finance expenditures.

Like many Pacific nations, FSM has a persistent trade deficit because it is highly import dependent and produces few exports. High costs and irregular transport limit export potential. The development of exports and, more broadly, of the private sector, is also hindered by certain policy settings, in particular in access to land and in restrictions on foreign investment. The regular flow of Compact funds reduces pressures to promote potential growth sectors and develop revenue sources.

Overall economic difficulties are magnified at the state level where governments are more heavily reliant on grant funding to support expenditures (grants formed around 75% of state revenues in FY2005), and where fiscal discipline has been uneven. The fiscal situation is particularly precarious in Chuuk and Kosrae states. A fiscal adjustment and transition plan has been developed, based largely on tax reform, but it will take an estimated 3 years to fully implement. Measures are needed in the short term to manage a situation in which some states could be unable to meet wage bills or debt repayments to the national Government.

Core issues for the medium term include public enterprise reform, implementation of tax reforms, strengthening of accountability and transparency, and creation of a supportive environment for private sector development. To date there has been little progress in implementing

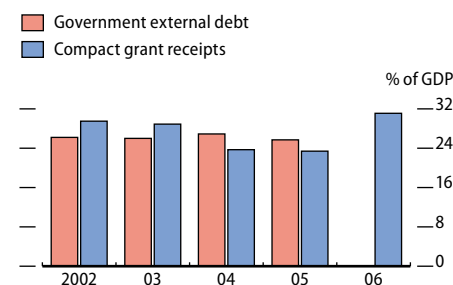
2.33.12 Inflation



Sources: Department of Economic Affairs, available: <http://www.spc.int/prism/country/fm/stats/>, downloaded 3 January 2007; Department of Economic Affairs, *Consumer Price Index*, January 2006.

[Click here for figure data](#)

2.33.13 Compact grant receipts and external debt



Note: No data available for 2006 government external debt.

Sources: Department of Economic Affairs, available: <http://www.spc.int/prism/country/fm/stats/>, downloaded 3 January 2007; International Monetary Fund, *2004 Article IV Consultation*, March 2005.

[Click here for figure data](#)

reforms in the Strategic Development Plan 2004–2023 and, in effect, FSM is at least 2 or 3 years behind in its plan for self-sufficiency by 2023. The public appetite for reform needs to be developed so that difficult decisions that the Government has to take, which will affect employment and provision of services, are widely understood and supported. The lack of progress is also symptomatic of capacity constraints. Weak public sector capacity hampers basic functions, including the formulation of policies and the resolution of problems.

Some pressure has been eased by a slowing in population growth, reflecting emigration to neighboring US territories and the US mainland, where FSM citizens have the right to seek employment. However, gross private transfer receipts totaled only an estimated \$3.3 million in FY2005, or 1.4% of GDP (Figure 2.33.14). This figure, which included inheritances and support payments as well as remittances, amounted to just \$80 annually from each of the estimated 30,000 FSM nationals living overseas. Policies should aim to build both the skills of potential migrants and links between emigrants and their homeland.

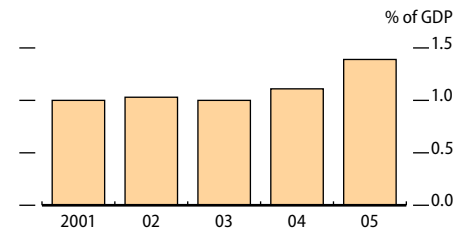
Low levels of growth of about 1.0–1.5% are expected in 2007 and 2008 because of the fiscal pressures. The difficult adjustments required suggest that the economy will continue to face important budgetary and economic constraints over the medium term. Yet it will be crucial to push ahead with reforms as otherwise the private sector will remain stagnant and the economy heavily reliant on the public sector, supported by aid. Without a significant upturn it is unlikely that the economy can be self-reliant on trust fund income by 2023, given low trust fund returns received to date and a likely lack of a budget surplus to build the fund.

## Nauru

The Government and public enterprises dominate this small economy. Public administration accounted for an estimated 41% of 2005 GDP, and there is little in the way of private sector activity other than a declining retail trade sector. Phosphate mining was the main economic activity, with production running at around 2 million tons a year until the early 1980s, after which it declined and then ended in 2003. An Australian phosphate company, Incitex Pivot, has invested in repairing basic mining infrastructure, so that phosphate exports restarted in September 2006. GDP growth in FY2006 (ended 30 June 2006) was estimated at 4.5%, primarily reflecting investment in transport and mining. Gross national income was boosted by A\$33 million of aid in FY2006, of which A\$20 million came from Australia. Other inflows included A\$7 million for a refugee processing center, A\$7 million in fishing licenses issued to foreign fleets, A\$6 million in repatriated capital, and A\$1.7 million under a land rehabilitation settlement.

Nauru uses the Australian dollar as its currency, and imports almost all its basic requirements, mainly from Australia. The inflation rate is therefore determined largely by the rate in Australia, and is estimated to have been about 4.0% in FY2006. The merchandise trade deficit widened to A\$31 million in FY2006, and the services account was also likely to be in deficit on account of such imports as education and freight services. A small current account deficit was covered by repatriation of capital.

2.33.14 Gross private transfers



Source: Department of Economic Affairs, available: <http://www.spc.int/prism/country/fm/stats/>, downloaded 3 January 2007.

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A budget surplus of A\$571,800 was run in FY2006. Total revenues of A\$27.0 million included capital transactions and cash grants from donors. The main source of domestic receipts was fishing license fees. Total expenditures of A\$26.4 million included several one-time items, including port refurbishment that allowed larger ships to moor for phosphate loading, and funds from Taipei, China that were allocated to Air Nauru (now Our Airline) to cover charter flight costs following repossession of its solitary aircraft. The FY2007 budget estimates a small surplus of A\$62,600. Domestic revenues are projected to decline 15% because of falling fishing license receipts, which has required some new revenue-raising measures as well as expenditure cuts. The budget projects A\$800,000 in dividend income from state-owned phosphate company RONPhos as a result of the resumption of phosphate mining. Expenditures will fall by about 16% because of the completion of major projects and also cuts in areas that were not identified as priorities in the National Sustainable Development Strategy launched in FY2006. These cuts involve abolition of the Department of Works in favor of contracting out of public works, abolition of the Computer Bureau, and the reduction or cessation of subsidies to some public enterprises.

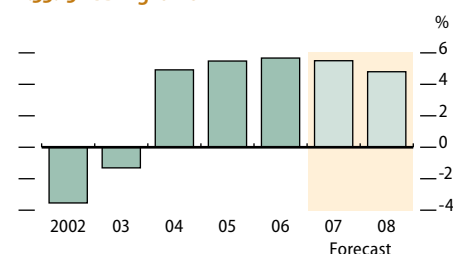
Achieving economic growth in the medium term will depend on the phosphate industry. Primary phosphate reserves are expected to last until 2009 or 2010, and a recent study suggested that it may be economically viable to mine residual phosphate reserves, in conjunction with the rehabilitation of mined lands, for up to 30 years. Phosphate production in 2007 and 2008 is projected to increase, on the assumption that a new management team will be able to raise sufficient operating capital and find enough workers. However, in the absence of new construction projects and with the planned contraction in the public sector, GDP is forecast to fall by 9.2% in FY2007 and fall by a further 4.5% in FY2008. Inflation is expected to be about 3.5% in both years. Further contraction is expected in the public sector as the Government adjusts to stagnant domestic revenues and targets a larger budget surplus in order to pay off debt.

The Government has announced its intention to move ahead with public sector reform, including that of inefficient public enterprises responsible for water and power supply, and of public financial management. The reestablishment of a domestic financial system and of credibility in international markets is critical to improving the business environment.

## Republic of Palau

Economic growth has averaged 5.4% since 2004, reaching an estimated 5.7% in FY2006 (ended 30 September 2006; Figure 2.33.15). Solid growth in recent years has been supported by externally funded infrastructure projects and increased tourist arrivals (Figure 2.33.16). The expansion of tourism has been assisted by new air services and hotel construction. In 2006, visitor arrivals totaled 86,400 (mainly from Japan and Taipei, China), the equivalent of over four times a resident population of 20,000 that includes about 7,000 guest workers employed mostly in unskilled work. Tourism contributes significantly to economic growth

2.33.15 GDP growth



Sources: Bureau of Budget and Planning, 2002–2003 Statistical Yearbook; International Monetary Fund, *Republic of Palau Selected Issues and Statistical Appendix*, March 2006.

[Click here for figure data](#)

through employment, and tourism receipts are estimated to amount to about 45% of GDP.

Inflation accelerated to 4.4% in calendar year 2006 from 3.9% in 2005. The current account surplus (including grants) fell to 2.5% of GDP, or \$3.9 million, in FY2006 because of the importation of capital equipment to redress power failures and goods associated with construction. Since the currency is the US dollar, there is no independent monetary policy. The fiscal deficit in FY2006 was estimated at 0.4% of GDP, narrowing from 3.9% in FY2005. Growth in current expenditures was contained to 3.6%, while capital spending soared by 74% and grants increased by 44%. Grants accounted for 56% of total revenues and grants. Under a 1994 Compact of Association with the US, Palau receives \$447 million in grants over the 15 years from 1994 to 2009. Also under the Compact, \$70 million has been set aside in a trust fund for use after the expected ending of Compact grants in 2009. This fund had increased to \$170 million by February 2007. Provision was made to fund major infrastructure projects and to continue some US federal programs at no cost to Palau, including health services.

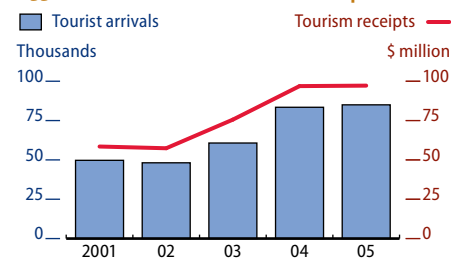
The Government is hopeful that it can renegotiate the Compact so that it provides for grants beyond 2009, but it has to achieve greater fiscal self-reliance in preparation for potential funding shortfalls. The official target is to cut annual recurrent expenditures from about \$60 million–\$65 million now to a more fiscally sustainable \$50 million–\$55 million. Reducing recurrent expenditures by this amount is problematical, though, given difficulties in controlling the wages bill and rising maintenance costs following an expansion of public infrastructure over 1994–2004. For instance, the annual maintenance cost of the Compact road in the new capital, Babeldaob, alone is estimated at \$2.0 million–\$2.5 million. The Government is facing additional operation and maintenance costs of the facilities at the capital. It will be also difficult to pursue savings in the capital expenditure budget since the infrastructure network is incomplete. The FY2007 budget estimates an expenditure level of \$57 million.

In the near term, tourism and infrastructure projects look likely to be drivers of economic expansion. Growth in small-scale agriculture will be stimulated by tourism and demand from construction. The economic impact of the closure in November 2006 of the locally owned Pacific Savings Bank Ltd. is uncertain. Small and medium enterprises without collateral could be most directly affected, as larger enterprises usually do business with other banks. However, there will be flow-on effects if small and medium enterprises are seriously damaged. The Government needs to restore confidence in the financial sector to minimize the impact, and it was reported to be planning to inject funds into a revitalized Pacific Savings Bank. GDP growth is forecast to slow to 5.5% in 2007 and 4.8% in 2008, assuming fiscal adjustment is limited as Compact renegotiation proceeds. Inflation is expected to be about 4.0% in both years.

## Samoa

GDP growth was estimated at 4.6% for FY2006 (ended 30 June 2006), down 1 percentage point relative to FY2005 (Figure 2.33.17). Among the

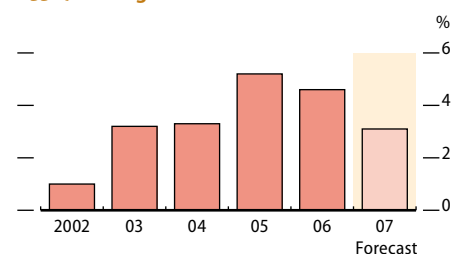
2.33.16 Tourism: Arrivals and receipts



Source: International Monetary Fund, Republic of Palau Selected Issues and Statistical Appendix, March 2006.

[Click here for figure data](#)

2.33.17 GDP growth



Sources: Ministry of Finance, 2005 National Accounts Report, June 2005; Ministry of Finance, Quarterly Economic Review Issue No. 34, February 2007.

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stronger sectors, construction expanded by 9.0%, commerce by 7.2%, public administration by 6.9%, and finance and business services by 5.7%.

Inflation accelerated through the second half of 2006, lifting the year-average rate to 3.8%. The trade deficit widened as a result of higher global prices for imported oil as well as reduced export earnings from fish, coconut cream, taro, and nonu fruit. Increases in remittances and tourism receipts helped narrow the current account deficit slightly to \$29.2 million in FY2006 (Figure 2.33.18). A deficit in the overall balance of payments was caused in part by the settlement of substantial external debts for Polynesian Airlines. As a result, foreign reserves declined to \$65.3 million at end-FY2006, equal to 3.9 months of import cover, down from 5.4 months a year earlier.

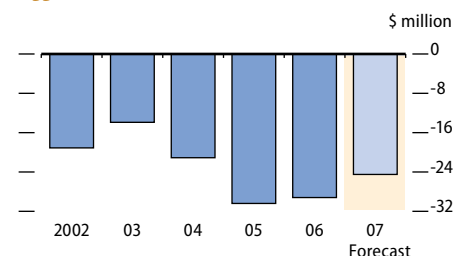
An overall budget deficit representing 0.4% of GDP was recorded in FY2006 (Figure 2.33.19), compared with a deficit target of 4.3% of GDP. The Government financed the deficit from its reserves, and reduced its external debts from the equivalent of 41.3% of GDP in June 2005 to 40.2% of GDP in June 2006.

GDP growth is expected to slow to 3.1% in FY2007, as agricultural expansion moderates after a recovery from hurricane damage in FY2006 and construction growth eases as a result of the completion of facilities for the South Pacific Games in August–September 2007 and of other buildings and infrastructure. Tourism is seen expanding, which will boost areas such as hotels, restaurants, and transport and communications. An inflation rate of 3.6% is projected for FY2007, reflecting a one-time impact of an October 2006 rise in the value-added goods and services tax. Imports will likely decline slightly from the FY2006 level, assuming world oil prices do not surge. Tourism earnings are projected to grow by 6%, and the export of automotive parts by Yazaki EDS Samoa Ltd., one of a few export-oriented manufacturers, is projected to increase by 8%. The current account deficit is forecast to narrow to \$24.5 million.

An overall fiscal deficit of 1.4% of GDP is targeted in FY2007, to be financed by external borrowings. Previous government domestic borrowing prompted concerns about crowding out the private sector, so the FY2007 budget expressly aims at reducing the state's financing demands on the banking system. The official external debt stock in September 2006 was reduced further to the equivalent of 36.6% of GDP. Still, the economy is vulnerable to external shocks, particularly with its persistent trade and current account deficits. A debt-sustainability analysis in 2005 by the International Monetary Fund showed that isolated shocks to the economy might not seriously affect debt ratios, but a combination of shocks could return the debt-to-GDP ratio broadly to the level before a mid-1990s macroeconomic stabilization program was implemented. Prior to that, that ratio was exceedingly high, at over 100%.

Reducing the economy's vulnerability to such shocks as possible cuts in aid flows and in remittances requires the nurturing of a business environment and growth in exports. Tourism is a promising sector. Moreover, infrastructure development for the fishing industry is expected to encourage a reversal of a decline in commercial fishing in recent years, although it will need to be complemented by management for sustainable harvesting. Samoa ranks 39th of 155 countries in the 2006 World Bank

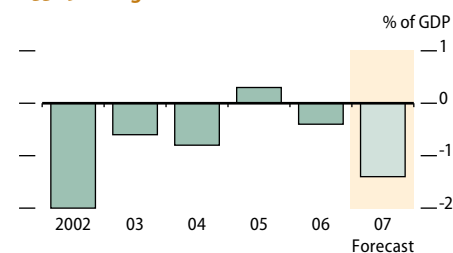
**2.33.18 Current account balance**



Sources: Ministry of Finance, *Statement to Support the 2006/07 Budget*, June 2006; Ministry of Finance, *Quarterly Economic Review*, February 2007; Central Bank of Samoa, *Monetary Policy Statement*, September 2006.

[Click here for figure data](#)

**2.33.19 Budget balance**



Sources: Ministry of Finance, *Statement to Support the 2006/07 Budget*, June 2006; Ministry of Finance, *Quarterly Economic Review*, February 2007; Central Bank of Samoa, *Monetary Policy Statement*, September 2006.

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*Doing Business* indicators, but there is room for improvement in the time taken to start a business, acquire licences, and enforce contracts.

## Solomon Islands

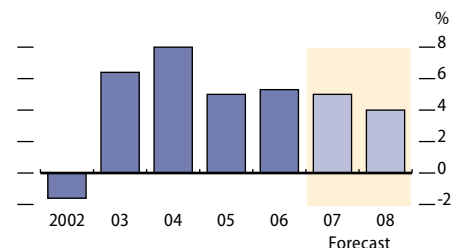
A short period of civil unrest following elections in April 2006 had a fairly small impact on the overall economy. Riots broke out in the capital, Honiara, after a new prime minister was named, resulting in serious damage to property. The Regional Assistance Mission to Solomon Islands (RAMSI), an initiative of the 16-country Pacific Islands Forum in 2003, was reinforced with police and army personnel, who restored order. The prime minister resigned following a vote of no confidence and a five-party Grand Coalition for Change Government took office in May. Subsequently, RAMSI's military component was scaled down and urban reconstruction began.

The economy grew by an estimated 5.3% in 2006 (Figure 2.33.20), with log production continuing at a high (and unsustainable) rate, fish production expanding, and palm oil making a contribution for the first time since 1999. Services sectors also expanded and there was new investment in the Gold Ridge gold mine. Inflation accelerated to 8.2% in 2006, with high oil prices and rapid credit expansion the main causes (Figure 2.33.21). The pegging of the Solomon Islands dollar to a weakening US dollar led the domestic currency to depreciate by 5–9% against its major trading-partner currencies. However, the relatively high inflation rate kept the real effective exchange rate stable.

Firm international prices for major commodity exports (logs, fish, and palm oil) stimulated export growth of 13.5% in 2006, but imports expanded by 26.9%, primarily as a result of greater fuel- and investment-related imports. The merchandise trade gap widened and the current account deficit worsened to 15.8% of GDP from 10.8% in 2005. Increases in aid inflows equivalent to over 25% of GDP and in foreign direct investment (mostly into the palm oil and gold industries) contributed to an improved overall balance of payments. Gross official reserves rose to \$103.6 million at end-2006 (Figure 2.33.22), providing 5 months cover of imports of goods and nonfactor services.

A budget surplus of 0.6% of GDP was recorded, and progress made in addressing the heavy public debt burden resulting from fiscal mismanagement in the 1990s. Loans with international financial institutions were serviced on time, efforts continued to reduce the stock of expenditure arrears, and in February 2006 an agreement was signed for the restructuring of SI\$183.7 million in government debt to the central bank. No new debt or government guarantees were issued, though the Government has indicated that it would consider taking over debts of provincial governments. In December 2006, the total public debt stock (inclusive of arrears) was equivalent to 70% of GDP, down from 80.0% at end-2005. External debt accounted for approximately 72% of the total public debt stock. The 2007 budget passed by the parliament in February 2007 estimates substantial rises in revenues and expenditures from levels budgeted in 2006. Revenues and grants are estimated at SI\$949 million, with recurrent spending of SI\$944 million, leaving a small surplus. Development spending is estimated to increase by 2.4%,

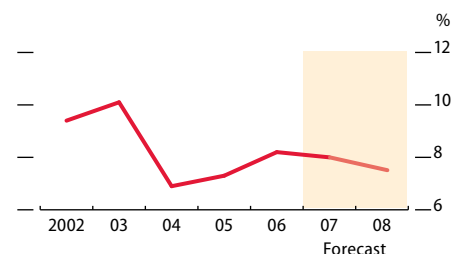
2.33.20 GDP growth



Sources: International Monetary Fund, 2006 Article IV Consultation, October 2006; staff estimates.

[Click here for figure data](#)

2.33.21 Inflation



Sources: Central Bank of Solomon Islands, Annual Report 2005, May 2006; staff estimates.

[Click here for figure data](#)

through a pickup in donor-funded project expenditures and a doubling of government-funded capital outlays. Administrative and technical capacity constraints will make it difficult to fully spend the development budget allocations.

Solomon Islands is one of the least developed Pacific island countries. It lacks adequate social infrastructure and services, and does not generate enough income-generating opportunities for a fast-growing population (2.8% annually), of whom about 50% are below 25 years and 85% live in rural areas. There is little formal employment outside Honiara; unemployment is rising, particularly among the young; malaria displays a high incidence; and HIV/AIDS has become a serious issue. If poverty is to be reduced, a substantial improvement in delivery of basic social services is required, tied in with economic growth that engages the rural population.

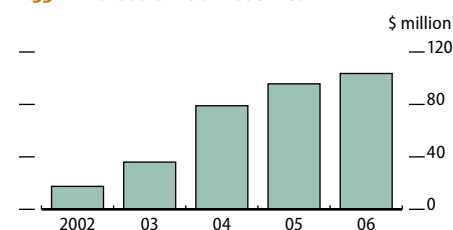
Three major barriers to sustained growth are identified in the latest budget. The first is poor domestic transport infrastructure and services provision to rural areas. The second is an inefficient regulatory and high-tax environment. The third is inadequate capacity for Solomon Islanders to start up a business, including poor business skills, and limited access to capital. In an effort to begin dismantling these barriers, the Government adopted a National Transport Plan in September 2006 and permitted competition in the monopolized telecommunications sector. The 2007 budget also has tax and tariff reforms, including the reduction of the top rate of import duties from 20% to 10%, and the ending of duty exemptions on log exports. A new Foreign Investment Act was approved in June 2006 and reforms of business laws are expected to make it easier to do business. Solomon Islanders will be encouraged to engage in businesses through provision of training and establishment of credit guarantees operated by the central bank.

The economic outlook for 2007 and 2008 is positive, on the assumptions that investor confidence is sustained by political stability and a continued RAMSI presence, and that the Government implements its public sector and economic reform agenda at a moderate pace. Economic growth is forecast at 5.0% in 2007, easing to 4.0% in 2008, because a slowdown in logging is expected, partly attributable to the ending of export duty exemptions. Nontimber activities are forecast to grow at higher rates, with agriculture and mining leading the way. Inflation is projected to decelerate to 8.0% and 7.5%, as domestic credit expansion eases and the pegging of the exchange rate to the US dollar is maintained. Export growth is forecast to weaken in 2007 with a decline in log exports. The current account deficit is expected to be about 16% of GDP in 2007 and 10% in 2008. Aid and foreign direct investment inflows should ensure that foreign reserve levels provide 5 months of import cover. The Government is expected to target small budget surpluses of about 1% of GDP to reduce the public debt burden.

## Tonga

Economic growth slowed to an estimated 1.9% in FY2006 (ended 30 June 2006), from 2.3% in FY2005. The commerce, restaurants, and hotels sector was the main driver. Agriculture, forestry, and fisheries contracted

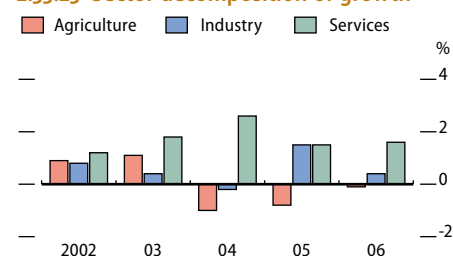
### 2.33.22 Gross official reserves



Sources: International Monetary Fund, 2006 Article IV Consultation, October 2006; Central Bank of Solomon Islands, *Monthly Economic Bulletin*, December 2006.

[Click here for figure data](#)

### 2.33.23 Sector decomposition of growth



Sources: Statistics Department, *National Accounts Statistics* 2005, June 2005; Ministry of Finance, *Budget Paper No. 1*, June 2007.

[Click here for figure data](#)

for a third successive year because weaker squash prices hurt production of this crop and the tuna catch was low (Figure 2.33.23). Construction growth decelerated after a boom year in FY2005 when major public projects were undertaken and when housing construction was strong. Prospects overall were severely damaged as a result of a pro-democracy demonstration in November 2006 that led to the burning and looting of many businesses in the capital, Nuku'alofa, and the loss of life. Though law and order was quickly restored with external assistance, political and social divisions have deepened and investor confidence has been undermined.

Inflation moderated from 10% in FY2005 to 7.2% in FY2006, reflecting slower rises in food prices, but remained at a regionally high level because of the demand stimulus from significant inflows of private remittances and rapid credit growth. Trade and current account deficits widened in FY2006 (the latter to 6.2% of GDP) as imports rose and exports fell, especially exports of squash. Official foreign reserves fell to T\$77.4 million at end-March 2006, equivalent to 4.2 months of import cover.

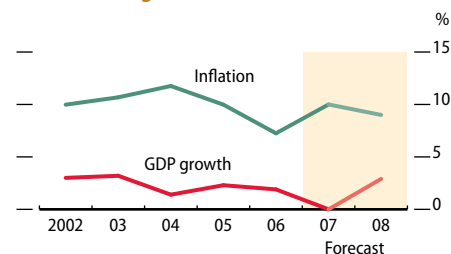
Given the fall in exports, a 21% jump in credit, partly to fund housing, raised concerns about a possible rundown in foreign reserves to less than the target of 3–4 months cover of goods imports. In January 2006, the National Reserve Bank of Tonga moved to protect foreign reserves by imposing credit ceilings on the banks, and in March it reintroduced central bank notes as a market-based policy instrument. Official reserves recovered to T\$85.7 million by end-2006, or 4.5 months of import cover.

The Government was already under fiscal pressure prior to the November riot from a 2005 agreement to raise civil service salaries by a huge 60–80%, and from payout packages resulting from a consequent 18.5% cut in the civil service in mid-2006. The FY2006 budget deficit was estimated to have deteriorated to 6.1% of GDP (inclusive of payouts), and required financing by the sale of state assets as well as foreign borrowings. Fiscal pressure later intensified because of the need to support economic recovery and reconstruction of the capital.

November's riots damaged many businesses that were uninsured against civil unrest, as well as infrastructure. Reconstruction costs will probably exceed \$50 million and reestablishing businesses and confidence in the sector will be a medium-term exercise. The impact on aggregate expansion will depend on the speed with which plans for urban reconstruction and business recovery are formulated and implemented, and on the private sector response. The economy is likely to show no change in output in FY2007 as public service reductions and the damage caused by the riot are offset by the start of urban reconstruction. Growth is expected to resume at 2.7% in FY2008 as construction continues to pick up and services strengthen (Figure 2.33.24). The inflation rate is forecast to accelerate to 10.0% in FY2007, reflecting public service wage rises feeding into the private sector and post-November 2006 supply shortages. A deceleration of inflation to 9.0% is expected in FY2008.

The Government has requested significant donor assistance and the fiscal outlook will depend largely on the appraisal of reconstruction needs. It is anticipated that the current account deficit will widen as urban reconstruction gets under way, but that the provision of donor funds for this purpose will support foreign reserves. Remittances will

**2.33.24 GDP growth and inflation**



Sources: Statistics Department, *Statistical Bulletin on Consumer Prices*, December 2006; Ministry of Finance, *Budget Paper No. 1*, June 2007.

[Click here for figure data](#)

take on a new importance in this regard and are expected to provide an informal social safety net during reconstruction. A new strategic development plan approved by the Cabinet prior to FY2007 budget formulation will continue to serve as the key document identifying development objectives and strategies, despite an inevitably greater emphasis on urban reconstruction. Core objectives include strengthening the weak governance environment and promoting private sector-led growth. The latter involves a move away from trying to pick winners and offering special incentives toward improving the business environment by providing a stable macroeconomic environment, investing in physical infrastructure, improving the legal and regulatory framework, and investing in education and health. The momentum for economic and public sector reforms elaborated in the plan needs to be maintained if medium-term growth prospects are to improve.

## Tuvalu

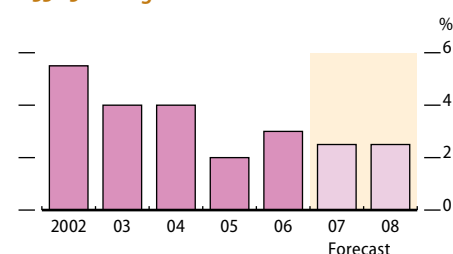
GDP growth was estimated at 3% in 2006, up 1 percentage point from 2005 (Figure 2.33.25). Public sector expenditures jumped by about 25% to A\$30.6 million in 2006, largely a result of increased donor assistance. Of particular importance were injections of aid for construction of the Funafuti power station and an upgrade of the Tuvalu Maritime Training Institute for seafarers. Remittances from seafarers working on foreign-owned vessels are a vital source of income and contributed about A\$4 million in 2006. Fishing license fees were less than expected because of lower catches and telecommunications license fees declined. Income from the country's ".tv" domain name was projected at A\$2.9 million in 2006, similar to 2005. Tuvalu uses the Australian dollar as legal tender and inflation tends to track the Australian rate. In 2006 Tuvalu recorded inflation of 3.8%.

Fiscal revenues, including grants, totalled A\$28.6 million last year (Figure 2.33.26), and expenditures A\$30.6 million. The deficit of A\$2 million was financed from the Government's Consolidated Investment Fund, which is augmented with earnings from the Tuvalu Trust Fund (TTF) provided that the trust fund's market value exceeds its inflation-adjusted value, as measured by the Australian consumer price index. The TTF, valued at about \$77 million in September 2006, plays an important role in maintaining financial sustainability. It contributed A\$11.4 million last year to the Consolidated Investment Fund. Government revenues are projected to rise to A\$34 million in 2007, including A\$20 million of grants. Expenditures are forecast to rise sharply by 27% to A\$39 million. The A\$5 million deficit will be financed from the Consolidated Investment Fund.

Donors are a key source of funding for the public sector. In 2007, Taipei, China and the European Union are expected to contribute A\$2.6 million and A\$2.2 million, respectively. A project to upgrade the Funafuti port facilities will also be supported by external assistance.

The TTF is expected to distribute A\$6.9 million to government resources this year, a third successive distribution after no distributions in 2002–2004, when returns on TTF assets were insufficient to both protect the real value of the fund and allow for a distribution. This

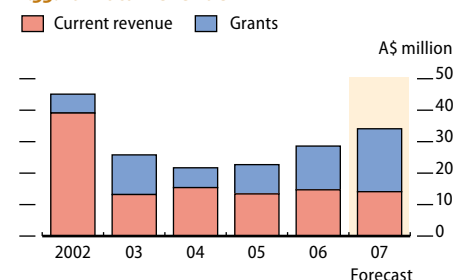
2.33.25 GDP growth



Sources: Ministry of Finance and Economic Planning, *Tuvalu National Accounts Report*, January 2004; staff estimates.

[Click here for figure data](#)

2.33.26 Total revenue



Sources: Ministry of Finance and Economic Planning, *Tuvalu National Accounts Report*, January 2004; staff estimates.

[Click here for figure data](#)



flow of funds to the Government depends on the performance of international capital markets.

Economic growth of 2–3% is projected for 2007 and 2008, driven largely by donor-funded public investment projects. Inflation is forecast at about 3% annually. Earnings from the TTF are expected to allow for a distribution in 2008, but income from telecommunications and fishing licenses is unlikely to increase significantly.

Seafaring provides an important employment opportunity for Tuvaluans, particularly those from outer islands. The equivalent of 15% of the adult male population was working on ships in early 2006. However, this source of employment has been at risk owing to instances of on-board discipline problems in 2006, as well as unreliable air services to transport the seafarers from Tuvalu. These issues need to be resolved if remittances are to be maintained.

The new Government elected in August 2006 is concerned about disparities in living standards between Funafuti and the outer islands. While more than half the population lives on the outer islands, they account for 76% of the households in the bottom fifth of the income scale, though there is little absolute destitution in Tuvalu. Efforts to improve living conditions in the outer islands will put pressure on the budget.

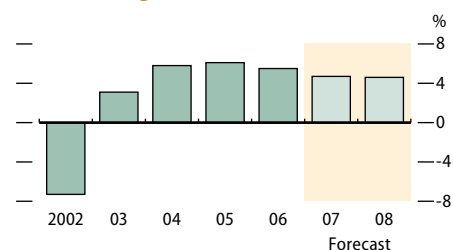
## Vanuatu

The economy grew by an estimated 5.5% in 2006, a fourth straight year of growth (Figure 2.33.27) but at a reduced pace compared with 2004 and 2005. Growth moderated in the services sector, where solid expansion still was recorded in tourism-driven transport, hotels, and restaurants, and the real estate subsectors, and in the small industry sector. Agriculture lifted production, recovering after a contraction in 2005. Vanuatu's economy is based primarily on small-scale agriculture, which provides a livelihood for about 65% of the population (primarily in the informal sector). Fishing, offshore financial services, and tourism are other mainstays. Tourist arrivals rose by about 6% in the first quarter of 2006.

The fiscal position in 2006 (a deficit estimated at 0.5% of GDP), rate of inflation (about 1.6%), and level of international reserves (7.5 months of import cover) were noteworthy outcomes given that the Government needed to fund an increase in public sector wages resulting from a late-2005 decision of the Government Remuneration Tribunal, despite there being no provision for the additional expenditure in the 2006 budget. This apparently was achieved through greater fiscal discipline, improved tax collection, and a reduction in unbudgeted spending. The downside is that cuts in recurrent and capital expenditures exacerbate a basic problem, namely, improving the strategic allocation of public resources to productive uses.

Even with what is a respectable level of growth by Pacific standards, Vanuatu is struggling to move ahead as its annual population growth is 2.6%, one of the highest rates in the subregion. GDP per capita is lower now than 20 years ago (Figure 2.33.28) and the population outside the towns has not seen a rise in the standard of living. Unlike many other Pacific nations, Vanuatu does not have easy access to migration and/or overseas work opportunities to reduce this population pressure.

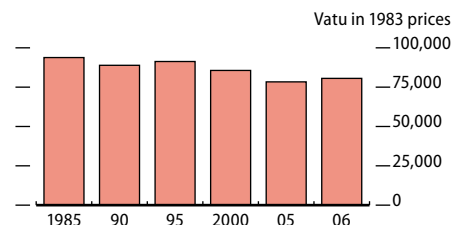
2.33.27 GDP growth



Sources: Vanuatu Statistics Office, *National Accounts of Vanuatu 2005*, November 2006; International Monetary Fund, 2006 Article IV Consultation, March 2007; Ministry of Finance and Economic Management, *Half-Year Economic & Fiscal Update*, 30 July 2006.

[Click here for figure data](#)

2.33.28 GDP per capita in 1983 prices



Sources: Vanuatu Statistics Office, *National Accounts of Vanuatu 2005*, November 2006; International Monetary Fund, 2006 Article IV Consultation, March 2007; Ministry of Finance and Economic Management, *Half-Year Economic & Fiscal Update*, 30 July 2006.

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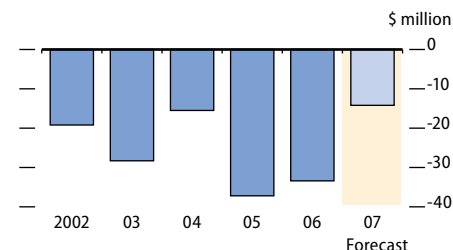
Another concern is a long-standing current account deficit (Figure 2.33.29), which reflects the economy's narrow base and susceptibility to global developments such as increases in prices of imported oil. External debt remained stable at around 31% of GDP in 2006 and is forecast to drop to 18% of GDP by end-2008, as loans are repaid (no new borrowing is planned).

Stronger economic growth is required to generate employment and ensure access to basic social services. Areas requiring attention include enhancing the performance of public enterprises and facilitating private sector development. In particular, the private sector is hampered by political instability and weak governance; the high costs of doing business (high input costs as well as high risks and transactions costs); weaknesses in the commercial legal framework; difficulties in mobilizing land for productive uses; and capacity constraints in the private and public sectors. The Government is tackling these issues through a Priorities and Action Agenda, but turning it into practical action is an ongoing challenge.

Development of rural infrastructure will be supported through a Millennium Challenge Corporation Compact of \$65.9 million, expected to be spent between 2007 and 2011. The compact will include funding for 11 transportation infrastructure activities designed to benefit poor rural agricultural producers and providers of tourism-related goods and services.

The Government forecasts growth of 4.6–4.7% in 2007 and 2008. Tourism is expected to benefit from an expansion of air services and the completion of tourism projects, construction will gain from Millennium Challenge Corporation spending, and agricultural production is forecast to pick up further. Small budget surpluses or near-balance positions are expected, and inflation is projected to accelerate to 2.5% (Figure 2.33.30). Domestic risks to this outlook include political instability, which could lead to ineffective public policy and harm investor confidence; lack of progress in implementing and enforcing antimoney-laundering laws, which could expose the country to financial sanctions; and vulnerability to natural disasters.

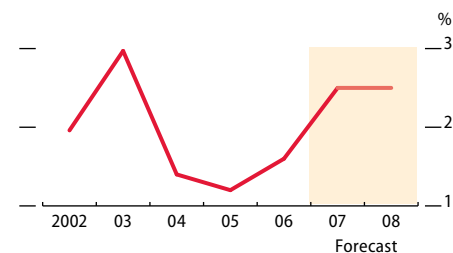
**2.33.29 Current account balance**



Sources: Reserve Bank of Vanuatu, available: <http://www.rbv.gov.vu/>, downloaded 29 June 2006; Ministry of Finance and Economic Management, *Half-Year Economic & Fiscal Update*, 30 July 2006.

[Click here for figure data](#)

**2.33.30 Inflation**



Sources: Vanuatu Statistics Office, available: <http://www.vanuatustatistics.gov.vu/>, downloaded 29 June 2006; International Monetary Fund, *2006 Article IV Consultation*, March 2007; Ministry of Finance and Economic Management, *Half-Year Economic & Fiscal Update*, 30 July 2006.

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# Part 3

**Growth amid change**



# Growth amid change

## Introduction

Most economies in developing Asia and the Pacific present two main differences between today and three decades ago. The first relates to size: they have grown significantly. The second relates to their look and form: they have changed.

Economies that sustain rapid growth do not simply replicate themselves on a larger scale. Countries become different as they grow, not only in terms of what they produce, but also how they produce. And the ways in which they change matter for growth. Growth occurs through diversification and the birth and expansion of new economic activities and assimilation of better methods of organization and production. Countries that do not change cannot sustain rapid growth.

At the dawn of the industrial revolution, today's industrial countries were largely agrarian. They followed a path of population migration from countryside to town, and resources moved out of agriculture and into industry and services: they changed. The celebrated "logistic model of growth" (Kuznets 1966, 1971; Chenery 1977) captures these features but suggests that transformation is almost automatic—ingrained in technological progress and in the way needs and tastes change with rising incomes.

This part of *Asian Development Outlook 2007* asks what has been the experience of growth and change in developing Asia over the last 35 years, and sifts for clues about how future growth can be sustained. Developing Asia's experience certainly confirms that change is deeply ingrained in growth and that change has been evolutionary rather than revolutionary. Countries that have grown have changed their form continuously, not by great leaps. And countries that have struggled tend to display structural inertia. Reversals have also occurred.

The newly industrialized economies (NIEs) of developing Asia—Hong Kong, China; Republic of Korea (hereafter Korea); Singapore; and Taipei, China—are approaching completion of the catch-up process, i.e., they are reaching rich-country per capita income levels. On past trends, their productivity levels and incomes will soon converge on levels seen in the countries of the Organisation for Economic Co-operation and Development (OECD). The NIEs now face the challenges that economic maturity brings.

Other countries, like Malaysia and Thailand, are closing the gap, but still have to navigate more changes if they are to sustain progress. In the People's Republic of China (PRC) and India, as well as in other countries like Cambodia and Pakistan, the pace of change is quickening and incomes are rising, but many potential challenges still lie ahead.

But some early starters in the catch-up process have suffered reversals. The Philippines has gone back down to a lower gear: low productivity levels and modest per capita income growth appear to be linked to a lack of structural dynamism. And Indonesia serves as a warning about complacency over rapid growth: the 1997–98 Asian crisis has left scars on the economy's productivity levels and economic structure that are yet to fully heal. The young countries of Central Asia also face enormous challenges, though their natural resource industries present opportunities, provided that rents are invested sensibly. Their proximity to large markets in the PRC and the Russian Federation may also help. But for small countries that are also often handicapped by geography, options are more limited. They will have to incubate their own models of economic growth and change, drawing largely on local resources and capabilities.

Looking ahead, twin challenges present themselves. Developing Asia needs to grow and create wealth to tackle poverty and other forms of human deprivation. But at the same time, developing Asia must create jobs for those who are at present unemployed or underemployed—on some estimates as many as 500 million workers. New workers who are about to enter the labor force will also need decent jobs. The thesis of this chapter is that arrangements that instigate and propagate changes in an economy's shape are instrumental for growth and the creation of jobs.

Before this chapter looks ahead, the next section, *Looking back*, distills some stylized facts about shifts of economic structure in developing Asia over the past 35 years. Change is measured in terms of: movements in the composition of output and employment; the speed and breakdown of labor productivity growth; the pace of technological transformation; and developing patterns of specialization and diversification. In most countries the profile of economic activity has moved from agriculture to industry and services. But there seems to be much greater complexity about the way in which patterns of industrial diversification and specialization evolve that may be linked to the sustainability of growth.

In the following section, *Looking ahead*, productivity growth in developing Asia is extrapolated from past experience. This exercise sizes up the extent to which productivity gaps with OECD might be closed in the next two decades. Dimensions of the future unemployment and underemployment challenge are also sketched.

*Walking on two legs* considers possible broad strategies for future growth and job creation. For most countries, both industrial and services development are likely to have an important role to play (Panagariya 2006). Complementarities between industry and services are stressed, as is the role of services as a provider of jobs. The idea that high-productivity services offer an opportunity to bypass industrialization is examined, as is the role of complexity and diversity in spawning growth.

In the last section, *Incubating change*, linkages to policy are considered. Some of the ingredients needed to lubricate change are old and constitute part of reasonably orthodox approaches. Others have a more catalytic character and take as their point of departure the realization that markets do a better job at allocation than they do in creating demands and providing incentives for experimentation and creation.



## Looking back

This section presents stylized facts about structural change in developing Asia over the past 35 years. It views the region's transformation through: movements in the composition of output and employment; the speed and breakdown of labor productivity growth; the pace of technological change; and developing patterns of specialization and diversification. These multiple changes are linked in subtle ways. Differences and changes in labor productivity provide incentives for resources to shift across sectors. Productivity growth, in turn, is linked to the underlying pace of technological progress and upgrading, but also to the mix of output and the creation of new activities, reflected in emerging patterns of specialization and diversification.

With regard to the data, those for industry and manufacturing are generally much better than for services or agriculture. Also, because of variable availability of data, country samples and time periods sometimes differ. This is seen perhaps most clearly for the Central Asian republics: since they were not independent states 35 years ago, information on their experiences is limited. Small economies in the Pacific and in other places are ill-served by data, too. Throughout, incomes are measured at market exchange rates in constant prices, using the World Development Indicators of the World Bank.

### Movements of output and employment shares

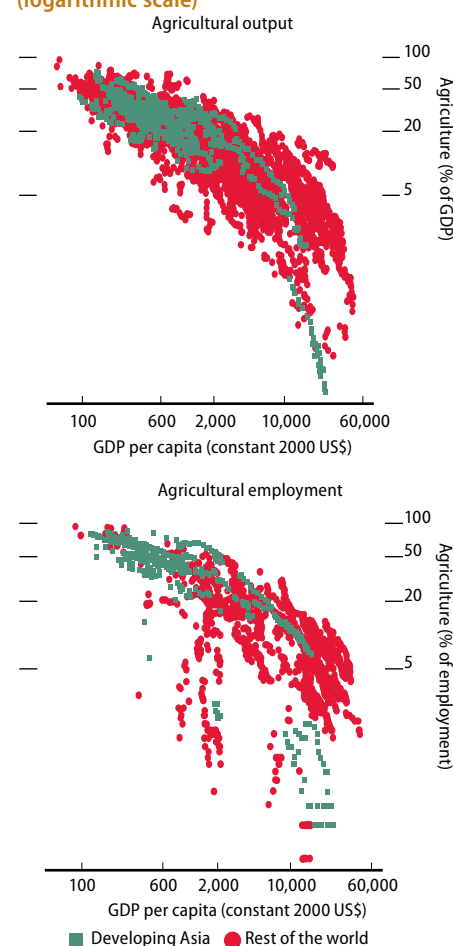
Figures 3.1.1, 3.1.2, and 3.1.3 summarize graphically movement of output and employment across agriculture, industry, and services in developing Asia over the period 1970–2004, as per capita incomes change. Developing Asia's experience is set against the background of broad international patterns over the same period.

These data reveal a number of interesting features.

Most immediately, evolving patterns of specialization in developing Asia generally conform to wider international patterns of structural differentiation and change over the same period. But developing Asia's patterns depart from wider global averages in two ways. First, high-income countries in developing Asia tend to have smaller agricultural output and employment shares than high-income countries elsewhere. This is largely a function of differences in geography and agro-climatic conditions. Second, and perhaps more interestingly, developing Asia tends to be more industrialized than other parts of the global economy for given levels of per capita income. This is particularly true at lower levels of per capita income. But developing Asia also has a number of countries that have low industrial shares for their income levels (low, middle, and high). This reflects the presence of countries where industrialization has stalled or been retarded; the microeconomies of the Pacific that have virtually no industry but mid-level incomes; and the highly advanced service economy of Hong Kong, China.

Looking at the “cross-section dynamics,” the data broadly confirm that agricultural output and employment shares tend to be smaller at higher per capita incomes, while the shares of industry and services tend to be larger. The rate at which agriculture shares taper off with larger income seems to accelerate. The rise in services shares is broadly monotonic and shows no systematic inclination to quicken at

**3.1.1 Agricultural output and employment shares vs per capita GDP, all countries (logarithmic scale)**



*Notes:* Both axes are logarithmic scales. The years of data for each country vary with availability of data. The earliest is 1965 for output shares and 1970 for employment shares; the latest for both is 2004.

*Sources:* Asian Development Bank, *Statistical Database System*, downloaded 14 September 2006; National Bureau of Statistics (various years), *China Statistical Yearbook*; Sundrum (1997) and Chadha and Sahu (2002), cited in Anant et al. (2006); World Bank, *World Development Indicators* online database, downloaded 4 August 2006. Data for Taipei, China were downloaded from <http://eng.stat.gov.tw/public/Data/782317221171.xls> and [http://eng.dgbas.gov.tw/public/data/dgbas03/bs2/yearbook\\_eng/y0251.pdf](http://eng.dgbas.gov.tw/public/data/dgbas03/bs2/yearbook_eng/y0251.pdf) on 2 October 2006.

[Click here for figure data](#)

higher income levels. The rate of increase of industrial output and employment shares slows at higher incomes, and in a number of countries industry shares are smaller at higher per capita income levels. Although broadly consistent with Kuznets' stylized description of structural change, there is no evidence in either the international data or in the data for developing Asia of a sequence in which industrial shares expand ahead of services. Broadly, changes in industry and services shares of output and employment appear to move in close step at low and middle levels of per capita income. But in countries where industrialization has lagged, many more workers move directly from agriculture to services.

The data also clearly show that there is much greater "inertia" in the movement of employment shares than in output shares. For given levels of income, agricultural employment shares tend to be much larger than output shares, and employment shares in industry and output tend to be lower than output shares, more so for industry than services. This pattern can also be detected in the broader international experience. Output shares moving ahead of employment shares is precisely what would be expected if differences in (labor) productivity growth are to create the incentives for workers to move out of agriculture and into industry and services. These observations also mean that looking at economic structure through the lens of output and through the lens of employment may paint quite different pictures.

Finally, by comparing the evolution of shares for different countries at matching income levels, it becomes clear that with the passage of time, the speed of structural change has accelerated. This point is obvious when the experiences of the fast-growing economies of East Asia are compared with those of rich industrialized countries. East Asia compressed into the space of little more than a generation changes that took well over a century for older "industrialized" countries. Late starters have the advantage that they can copy those ahead and advance at a quicker pace. More recent comparisons suggest that this acceleration has continued. For example, higher industry shares are now being seen at lower per capita incomes than before.

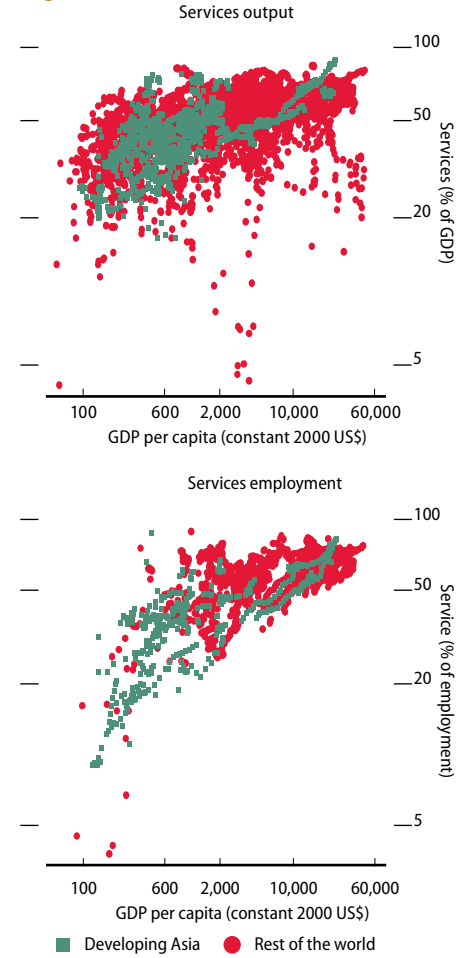
These stylized facts, generated from a cross-country panel, are not

**3.1.2 Industrial output and employment shares vs per capita GDP, all countries (logarithmic scale)**



Notes and sources: See Figure 3.1.1.  
[Click here for figure data](#)

**3.1.3 Services output and employment shares vs per capita GDP, all countries (logarithmic scale)**



Notes and sources: See Figure 3.1.1.  
[Click here for figure data](#)

necessarily a good guide to the evolution of economic structure in any particular country. The experience of developing Asia shows enormous variation both across countries and over time. As there are so many factors that could influence the pace and direction of structural change, explaining why some countries change quickly while others do not, and why they lean in a particular direction, requires in-depth study at a country level.

### Dimensions of labor productivity growth

Differences in labor productivity (as well as returns to capital) across sectors are important catalysts of structural change. Aggregate labor productivity movements for selected countries in developing Asia are shown in Figure 3.1.4 and are compared with labor productivity for OECD, which approximates the productivity frontier. Aggregate labor productivity movements reflect the confluence of many factors as well as all the background conditions (“social capabilities”) that influence them. As resources are reallocated across sectors, aggregate productivity changes occur. But changes in aggregate productivity will also depend on how productivity evolves at the sector level, i.e., on what products are produced and how they are produced.

Box 3.1.1 explains concepts of productivity convergence and catch-up. Two broad classes of country can be identified in Figure 3.1.4: those that are catching up or converging on the OECD frontier, and those that are making little headway in closing the gap. Among the catching-up countries themselves there are those that have progressed quickly and have substantially closed the gap and those where the gap is closing but is still wide. The NIEs have substantially closed the gap, though the Korea and Taipei,China still trail a little.

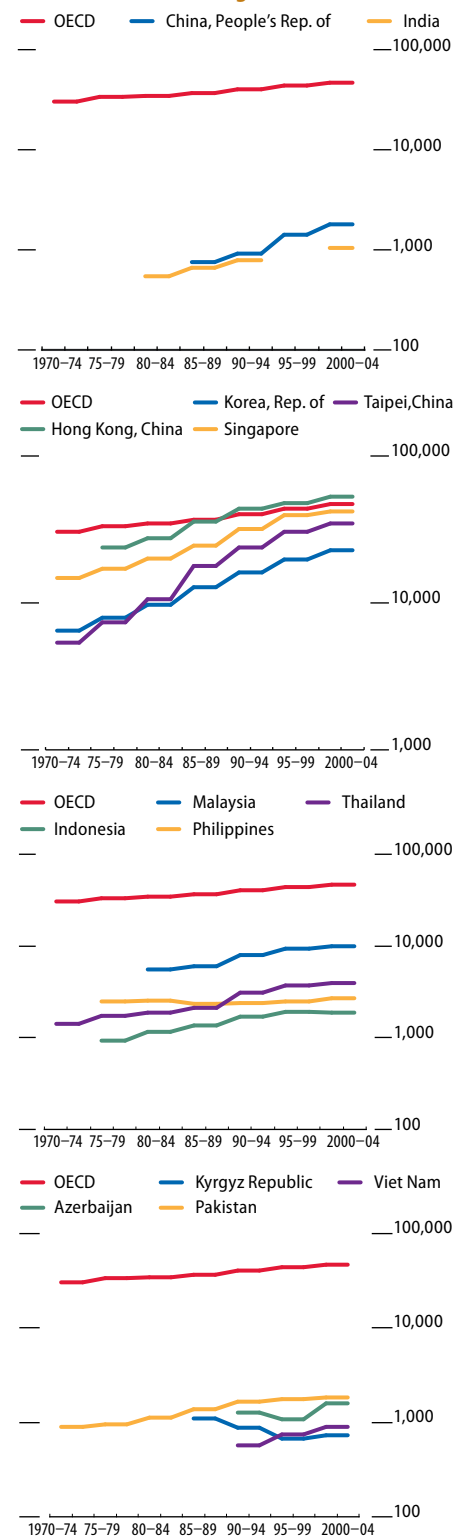
Relative and level measures can produce different pictures. Take Malaysia, the economy with the highest level of labor productivity outside OECD and the NIEs. Between 1980–1984 and 2000–2004 Malaysia’s relative productivity improved from 16% of the OECD average to 21%. Malaysia is indeed “catching up.” But over the same period, the *level* productivity gap with OECD widened, from \$28,823 in 1980–1984 to \$36,904 in 2000–2004. Once Malaysia’s relative productivity gets to about one third of the OECD average, the level gap will, though, start to close.

In a number of other countries too, including PRC, India, and Thailand, catch-up is occurring as level differences in productivity become wider. But again, if the current trajectories continue into the future, level gaps must eventually close.

But in some countries convergence is not occurring. Over the sample period, the Kyrgyz Republic and the Philippines fall into this category, and have lost ground in relative as well as level terms. In the postcrisis period, Indonesia, which had been converging, begins to fall further behind. Pakistan, too, has made little headway in closing labor productivity gaps. Unless these trends are reversed, level gaps in productivity levels will widen indefinitely. There is no evidence in these data that countries that start the period with lower initial levels of labor productivity catch up fastest.

Comparing aggregate labor productivity growth over time and across countries gives some broad clues as to how countries are faring, but for a

### 3.1.4 Total labor productivity (constant 2000 US\$, logarithmic scale)



Note: The 1980–84, 1985–89, 1990–94, and 2000–04 data for India refer only to 1983, 1988, 1994, and 2000 figures, respectively. The 2000–04 figures for PRC, Indonesia, Kyrgyz Republic, and Pakistan refer only to 2000–02. The 1985–89 figure for Indonesia pertains only to 1989. The 1970–74 figure for the Philippines refers only to 1978. The 1970–74 figure for Pakistan refers only to 1973–74.

Source: Staff estimates.

[Click here for figure data](#)

more refined understanding it is necessary to drill beneath the aggregate numbers to see what is happening at the level of individual sectors (and the manufacturing subsector). Figures 3.1.5, 3.1.6, and 3.1.7 present comparable data for labor productivity gaps in industry, manufacturing, and services.

Trends in industrial labor productivity correlate quite closely with the aggregate picture but also show up some important differences. In particular, industrial catch-up for the PRC is proceeding much faster than it is for India. Within the NIEs, Singapore's industry now matches OECD productivity levels. Industrial productivity gaps for the ASEAN-4 countries are generally much smaller than the aggregate productivity gaps, and for Malaysia and Thailand are converging with the frontier. Again in Indonesia and the Philippines, industrial productivity gaps have widened over the sample period. Earlier gains by Indonesia fall away at the start of the 1990s. For the remaining countries, the relative industrial productivity gap has narrowed in Azerbaijan, Pakistan, and Viet Nam. After a relapse and a widening of the gap, the Kyrgyz Republic closed the gap a little between 2000 and 2004.

For manufacturing, the story for the NIEs barely changes. They have caught up steadily with OECD and gaps are now small, with Singapore in fact showing higher labor productivity levels than the OECD average. In the case of the PRC and India, the labor productivity gap is less for India than for the PRC, the reverse of what was observed for industry, but the PRC is catching up with India. Though manufacturing labor productivity gaps between India and OECD have been cut, catch-up has decelerated. Among the ASEAN-4, the gap is least for Malaysia and largest for Indonesia. The gap for the Philippines widens over the sample period. In Indonesia, manufacturing labor productivity stagnates in the postcrisis years, and the gap begins to widen. In Pakistan, too, there is evidence of stagnating labor productivity. The gaps are wide for other countries, but are closing in relative terms.

The story is more complicated in services and the data are possibly less reliable, given the well-known difficulties of measuring services output, and hence labor productivity. In OECD, the data suggest that services labor productivity growth is slower than in industry and manufacturing. In most of developing Asia, services productivity is also lower than in industry or manufacturing. Perhaps this reflects a high incidence of underemployment or disguised unemployment in the services sector as well as underlying technological conditions.

Among the NIEs, Hong Kong, China now has levels of services labor productivity higher than OECD. Taipei, China is very close to the OECD frontier, but Korea seems to lag a long way behind and the gap is not closing quickly. The fragmentary data for the PRC and India suggest that services labor productivity is lower in the PRC than in India. Catch-up with OECD is glacial. In the ASEAN-4, Malaysia is the only country that appears to be catching up, but has seen stagnation over the last decade. Earlier gains by Thailand would appear to have been partially given up. And it is difficult to detect any evidence of convergence for Indonesia (from 1990 on) and the Philippines. Among the remaining countries, only Pakistan has made headway.

The links between aggregate labor productivity growth and the sector

### 3.1.1 Convergence and catch-up

Figures 3.1.4–3.1.7 show the trajectory of labor productivity in logarithmic scale. The vertical distance between two points in this space measures the ratio of productivity levels. The gap is closing when the ratio of levels (with OECD in the denominator) approaches 1 in value.

Productivity convergence in this relative sense does not necessarily mean that, in level terms, productivity gaps are closing. *Relative convergence* requires that labor productivity in the low-productivity country grows more quickly than productivity in OECD. *Level convergence* requires that the differences in their productivity levels close. If relative convergence continues, level convergence must eventually follow.

The conditions are linked as follows:

Relative convergence:

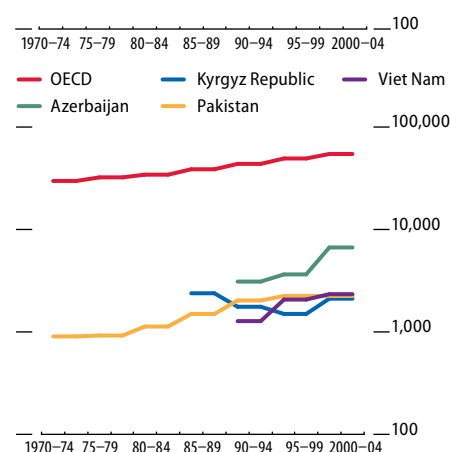
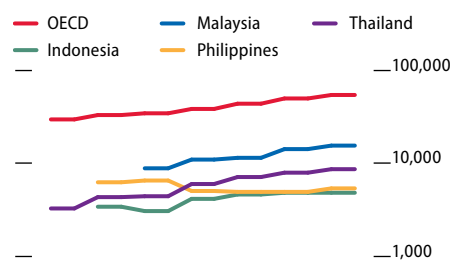
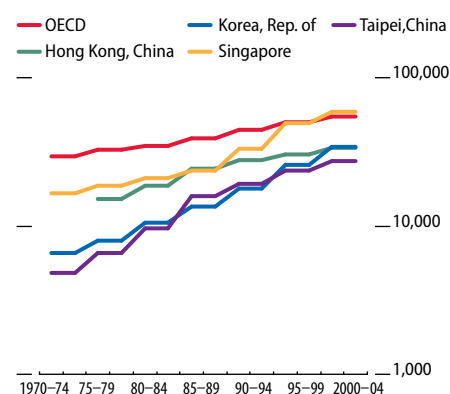
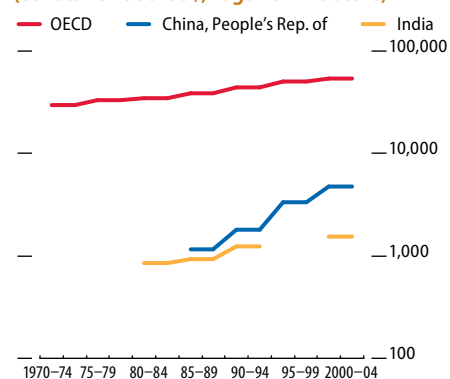
$$g_i - g_j > 0$$

Level convergence:

$$\left( \frac{Y_i}{Y_j} \right) \cdot g_i - g_j > 0$$

where  $g$  is growth of labor productivity,  $Y$  is the level of labor productivity,  $i$  is the catch-up country, and  $j$  is the frontier.

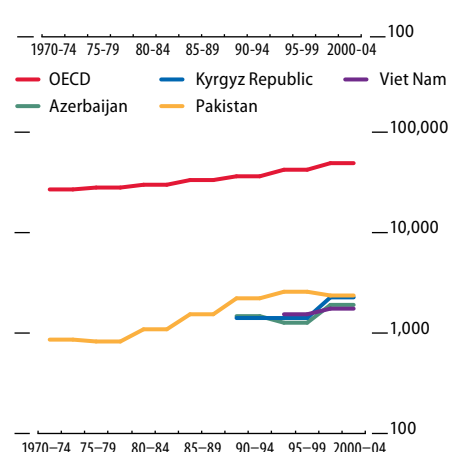
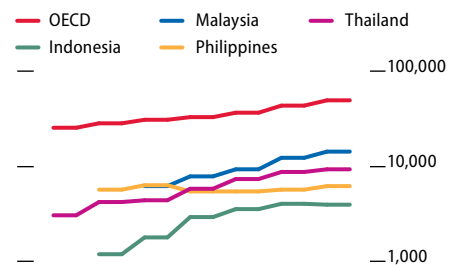
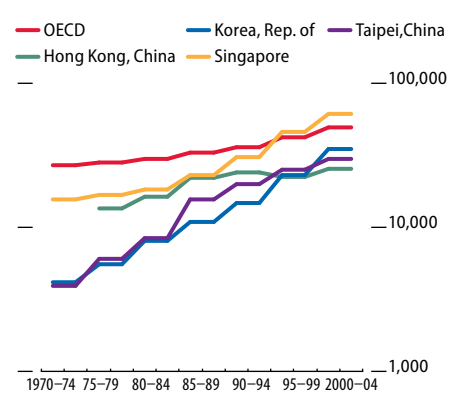
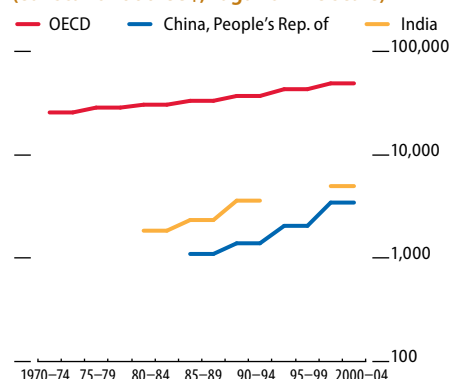
### 3.1.5 Industrial labor productivity (constant 2000 US\$, logarithmic scale)



Note: See Figure 3.1.4 for the years of data for each country.  
Source: Staff estimates.

[Click here for figure data](#)

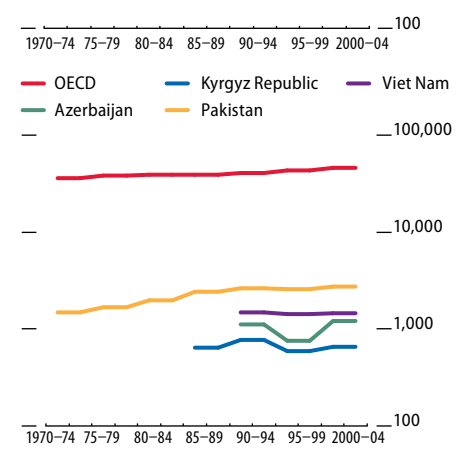
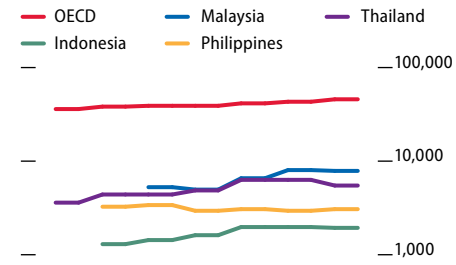
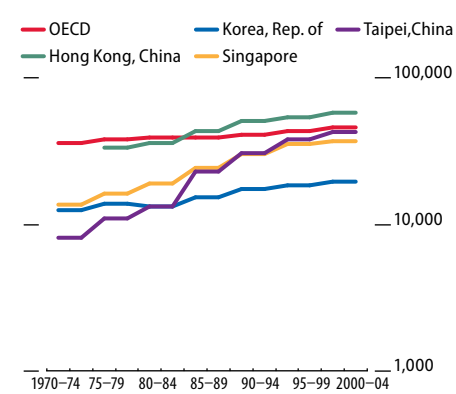
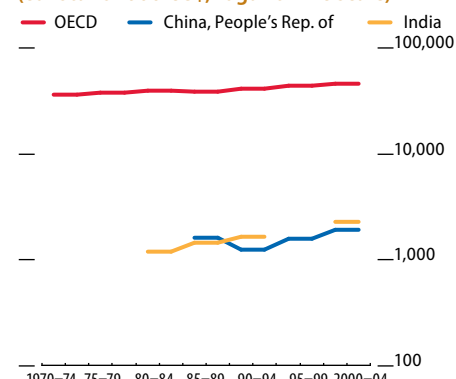
### 3.1.6 Manufacturing labor productivity (constant 2000 US\$, logarithmic scale)



Note: See Figure 3.1.4 for the years of data for each country.  
Source: Staff estimates.

[Click here for figure data](#)

### 3.1.7 Services labor productivity (constant 2000 US\$, logarithmic scale)



Note: See Figure 3.1.4 for the years of data for each country.  
Source: Staff estimates.

[Click here for figure data](#)



components shown in Figures 3.1.5 to 3.1.7 are shown in Figure 3.1.8. However, sector contributions to the total depend not just on by how much their own productivity grows but also on their share in total output. More complicated decompositions also take into account shifts in employment across sectors.

It is immediately clear that the contribution of agriculture to aggregate labor productivity growth has been uniformly small. This is due both to the comparatively low output share of agriculture and to small labor productivity gains. For the Kyrgyz Republic, the data measure contributions to a fall in aggregate labor productivity (see Figure 3.1.4). The services contribution (which is a negative number) actually represents an improvement in its productivity. After the dissolution of the former Soviet Union, employment in the industry and services sectors of the Kyrgyz Republic contracted and many workers moved back to the farm. In the PRC, Indonesia, Korea, Malaysia, Thailand, and Viet Nam, industrial productivity growth dominates aggregate advances over the respective sample periods. But in Hong Kong, China; India; Kyrgyz Republic (where it is the only positive component); Pakistan; Philippines; Singapore; and Taipei, China, services make the largest contribution. This is because services have a large share in output in these economies, dilating the impact of modest gains in labor services productivity.

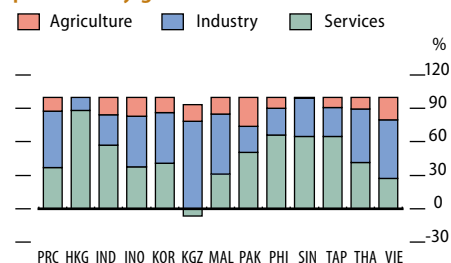
Labor productivity growth can be further broken down into within-sector and between-sector components. As workers move out of agriculture and into higher (labor) productivity activities in industry and services, aggregate productivity is lifted. This shift effect is commonly referred to as “Baumol’s structural bonus.” Box 3.1.2 explains how to measure the bonus, and Figure 3.1.9 shows the breakdown of productivity growth into the bonus and within-sector productivity growth.

As seen in the figure, for most countries the contribution of within-sector labor productivity growth to aggregate labor productivity growth dominates the bonus that occurs as employment is reallocated from agriculture to industry and services. Yet the latter is by no means insignificant, accounting for more than 20% of the aggregate gains in productivity in six countries (the Kyrgyz Republic effect is negative). In Thailand, the structural reallocation effect (i.e., the bonus) outweighs within-sector productivity gains. As there is still a large reservoir of workers in agriculture in many of Asia’s developing countries, and as Baumol’s structural bonus is still largely untapped, it represents a potentially large source of future productivity gains.

Baumol’s structural bonus is made up of the contributions of migration from agriculture to industry and from agriculture to services. This is shown in Figure 3.1.10. In developing Asia, the transfer of workers from agriculture to services has provided the largest gains. This is an important finding that helps explain the dynamics of employment in labor-surplus economies. In many countries of developing Asia, agriculture, not industry, has supplied abundant labor to services. Had the transfer of workers been from agriculture to industry, the structural bonus would have been larger.

In some countries, industry appears to contribute negatively to aggregate productivity growth through the reallocation effect. This reflects the movement of workers out of industry, most probably to

### 3.1.8 Sector contributions to total labor productivity growth

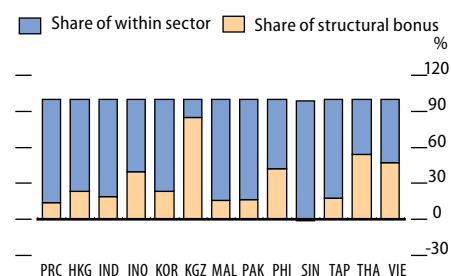


Note: Time period: PRC: 1987–2002; Hong Kong, China: 1978–2004; India: 1983–2000; Indonesia: 1976–2002; Korea: 1970–2004; Kyrgyz Republic: 1987–2002; Malaysia: 1980–2004; Pakistan: 1973–2002; Philippines: 1971–2004; Singapore: 1970–2003; Taipei, China: 1965–2004; Thailand: 1971–2004; Viet Nam: 1991–2004.

Source: Staff estimates.

[Click here for figure data](#)

### 3.1.9 Within-sector productivity growth and Baumol’s structural bonus

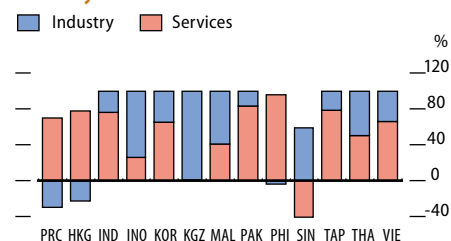


Note: See Figure 3.1.8.

Source: Staff estimates.

[Click here for figure data](#)

### 3.1.10 Baumol’s structural bonus: industry vs services



Note: See Figure 3.1.8.

Source: Staff estimates.

[Click here for figure data](#)

### 3.1.2 Baumol's Structural Bonus and the decomposition of productivity growth

Following Chenery et al. (1986), the economywide growth rate of labor productivity can be decomposed into two parts: one, the sum of the growth rates of labor productivity *within* sectors (weighted by the sector's share in output); two, the effect of labor reallocation *between* sectors of different productivity, calculated as the sum of the changes in the employment shares of the sectors (industry and services) receiving employment moving out of agriculture multiplied by the differential in labor productivity with respect to agriculture. That is:

$$\hat{q} = \sum k_i \hat{q}_i + (\lambda'_I - \lambda^0_I) \frac{(q_I - q_A)}{q} + (\lambda'_S - \lambda^0_S) \frac{(q_S - q_A)}{q}$$

where  $\lambda_i = L_i / L$ ,  $q_i = Q_i / L_i$ ,  $q = Q / L$ , and  $k_i = Q_i / Q$ .  $L$  is labor,  $Q$  is output,  $'$  denotes end-of-period values,  $^0$  start-of-period values,  $\hat{\phantom{x}}$  time rates of change, and the suffixes sectors ( $A$  = agriculture,  $I$  = industry,  $S$  = services).

The effect of the transfer of labor on productivity is what Baumol et al. (1985; 1989) call the “structural bonus.” Backward economies with a large pool of employment in low-productivity activities (normally agriculture) experience a bonus from structural change. This occurs because the transfer of labor from low- to high-productivity activities automatically increases the productivity *level* of the economy (i.e., a composition effect). This happens even if this transfer of resources is mainly a shift from agriculture to services (where productivity might not be significantly higher).

However, as the logistic pattern of structural change drives resources toward services, and given that productivity growth in this sector is usually slower than in industry, countries eventually experience a “structural burden.” That is, as the share of labor in services increases, the aggregate rate of growth of the economy decreases.

services. The shrinking employment share in Hong Kong, China reflects the maturation of the economy. For the PRC, it reflects a base period (1987) when that economy still had a large number of workers employed by inefficient industrial state-owned enterprises (SOEs), who subsequently lost their jobs as these SOEs were downscaled or closed. The negative contribution of services in Singapore is an artifact of a calculation that divides a positive number for the services bonus by a total structural bonus that is negative (see the equation for Figure 3.1.9 in Box 3.1.2). A negative reallocation effect occurs in Singapore because of a falling share of industrial employment.

### Technological upgrading

Shifts in labor productivity reflect, among other things, underlying changes in the technological makeup of output. Development—viewed through the prism of structural change—occurs through the creation and subsequent expansion of new activities typically characterized by higher productivity levels and, often, by increasing returns to scale. So how did the technological makeup of output change?

Table 3.1.1 shows a classification of 3-digit manufacturing subsectors

(United Nations Industrial Development Organization [UNIDO] Industrial Statistics [INDSTAT] International Standard Industry Classification [ISIC] Revision 2) according to the scope they offer for economies of scale and their level of technological sophistication. No comparable data are available for other sectors of the economy. (It should be noted, though, that the UNIDO INDSTAT data are spotty for some countries and years, and that some changes in the composition of manufacturing goods are abrupt, and difficult to explain. This is most likely a question of data quality, including shifts in sector classifications at the country level.)

The classification of the degree of economies of scale follows that of Pratten (1988), while the measure of technology level follows that of OECD (1997; see also Ng 2002). Pratten (1988) based his classification on detailed engineering and cost data. The level of technological sophistication captures direct and indirect dependence on research and development (R&D) inputs.

The classification into four manufacturing subsector groups in Table 3.1.1 is similar to that used by Antweiler and Trefler (2002) and by Kochhar et al. (2006). The first group consists of those activities that exhibit relatively low economies of scale and low technology levels; the second, of those that have low economies of scale and medium technology, or medium economies of scale and low technology; the third, of those that exhibit medium economies of scale and medium technology levels; and the fourth, of those that exhibit either high economies of scale and medium technology, medium economies of scale and high technology, or high economies of scale and high technology.

To construct an index that captures these facets of technology, scores were assigned to sectors in each of the four groups. Those in the first group were given a score of 1, the second 2, the third 3, and the fourth 4. A country index was then calculated by weighting scores by the share of each sector in total *output* (value added) in manufacturing. A minimum value of 1 is seen when all activities are in group 1, and a maximum value of 4 when all activities are in group 4. Figure 3.1.11 presents the results, graphing derived scores against per capita incomes.

The technology and scale scores for the NIEs rise strongly with per capita income, though that for Hong Kong, China is the lowest, in part because it has long since been a services-dominated economy. Singapore has the highest score, consistent with its ranking for labor productivity measured against the OECD average, and has, for decades, pursued policies to upgrade the technical sophistication of its manufacturing base. The pace of upgrading for Korea and Taipei, China has been slower than for Singapore. Only in the early 1990s did they reach levels that Singapore

### 3.1.1 Classification of manufacturing subsectors by economies of scale and technology

#### Group 1: Low economies of scale/Low technology

Wearing apparel	Low	Low
Footwear	Low	Low
Furniture	Low	Low
Textiles	Low	Low
Wood products	Low	Low
Leather products	Low	Low
Food products	Low	Low
Beverages	Low	Low
Tobacco	Low	Low

#### Group 2: Low economies of scale/Medium technology or medium economies of scale/Low technology

Other manufactured products	Low	Medium
Plastic products	Low	Medium
Rubber products	Low	Medium
Printing and publishing	Medium	Low
Paper products	Medium	Low

#### Group 3: Medium economies of scale/Medium technology

Fabricated metal products	Medium	Medium
Pottery and china	Medium	Medium
Glass products	Medium	Medium
Nonmetallic mineral products	Medium	Medium
Iron and steel	Medium	Medium

#### Group 4: Medium or strong economies of scale/Medium or strong technology (excluding medium economies of scale/medium technology)

Professional equipment	Medium	High
Electrical machinery	Medium	High
Nonelectrical machinery	Medium	High
Petroleum and coal products	High	Medium
Nonferrous metal	High	Medium
Petroleum refining	High	Medium
Transport equipment	High	High
Other chemicals	High	High
Industrial chemicals	High	High

Source: Ng (2002).

had passed in the late 1970s, but in more recent times this gap has narrowed.

The PRC and India's scores also display rising trends, but at a slower pace than those of the NIEs. Nevertheless, the scores of these two countries are very high given their per capita income. Comparable values for the NIEs were only attained at considerably higher levels of per capita income. The PRC has only recently achieved Korea's 1960s' per capita income level, yet its score is comparable to that of Korea in the 1980s and early 1990s. Much the same is true for India, and its incomes trail those in the PRC. The PRC's successful participation in international production networks (or global value chains) during the last decade has been instrumental in the country's recent technological upgrading (Box 3.1.3).

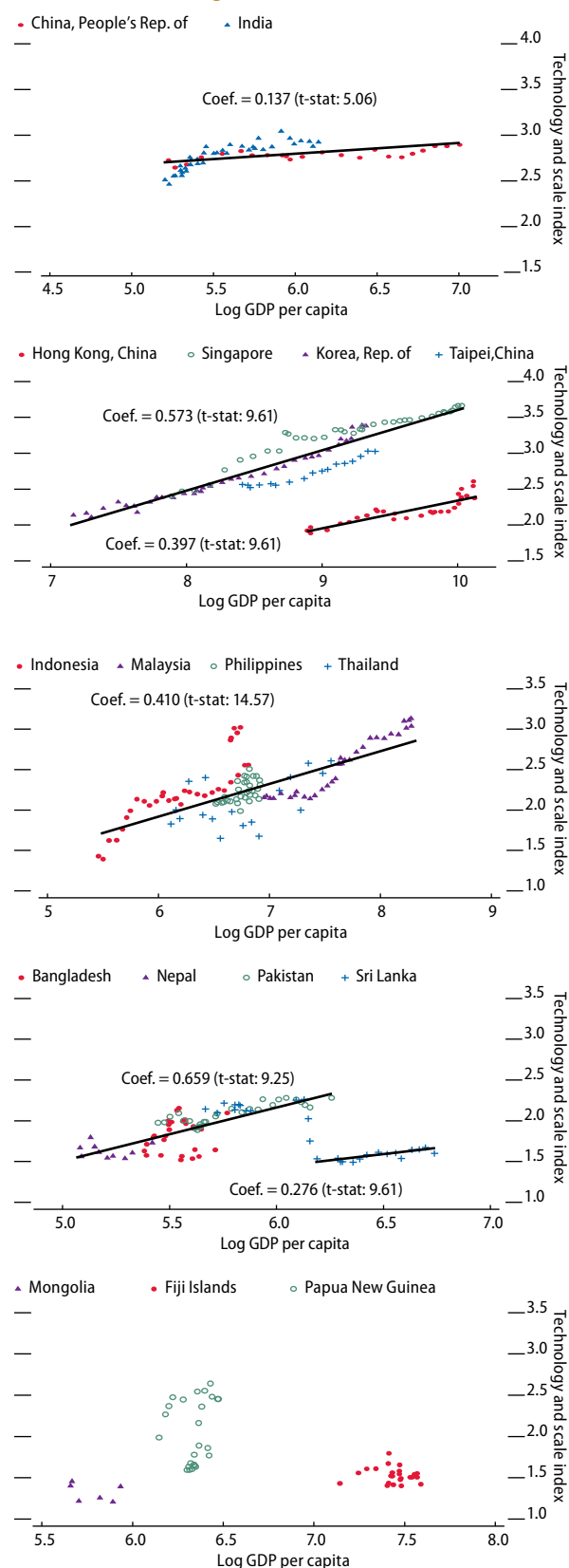
The technology and scale scores of the ASEAN-4 countries also rise with per capita income levels. But in the Philippines there is no discernable pattern as observations are tightly clustered around comparatively stagnant income levels. Indonesia's and Malaysia's scores move up more quickly than those of Thailand, but Malaysia still has higher scores than Indonesia. The technology and scale scores of the South Asian countries (other than India) and other countries included in Figure 3.1.11 show no steady increase.

Figure 3.1.12 shows the evolution of shares in the four groups of products for Korea, Malaysia, Philippines, and Taipei,China using the scale and technology classification of Table 3.1.1. For Korea, increasing sophistication (i.e., a greater share of manufacturing subsector group 4) is more readily apparent than for Taipei,China, where the share of manufacturing in GDP has been shrinking. Malaysia and the Philippines provide stark contrasts: Malaysia's upgrading has been prodigious; in the Philippines, the technological profile of manufacturing industry is static.

The same exercise was repeated using employment shares. Broadly the results are comparable, except for the PRC. For the PRC, the value of the technology and scale scores derived using employment data drift down. The reason for this is that the PRC's base share in high-technology groups is artificially inflated by the strong presence of SOEs in heavy industry in the 1980s. As moribund SOEs were closed, employment shares declined. Also, it would appear that within manufacturing in the PRC, growth in labor productivity has been much quicker in the high-technology sectors. Their output shares have risen, but their employment shares have declined.

Summing up, there is strong evidence that manufacturing in several economies (especially Korea; Malaysia; Singapore; Taipei,China; and to a lesser extent Thailand) in developing Asia has undergone important transformations and shifted output to more technology- and scale-intensive subsectors. In some other economies (the PRC and India, for example), the shift to more technology- and scale-intensive subsectors is taking place more

### 3.1.11 Technology and scale index of developing economies in Asia: Manufacturing value added



Source: Staff estimates.

[Click here for figure data](#)

### 3.1.3 Technological catch-up in the PRC's global value chains

Technological upgrading in the global value chains (GVCs) of the People's Republic of China (PRC) is notable for three things: it is considerable, it has occurred with great speed, and it has come through a wider variety of channels than seen until now in other Asian countries. Unlike the newly industrialized economies (and the Southeast Asian countries), the PRC boasts an enormous internal market that foreign firms are keen to enter and exploit.

As McDougall (2006) notes, the growth of electronics exports, the PRC's largest export segment, began after manufacturing plants from Taipei, China as well as their suppliers relocated across the straits in the 1990s. Assembly was located first, then the component-input industries, and most recently design work. Today, most of the PRC's electronics export industries are supported by local firms making plastic molding and machine tools for manufacturing. For example, Flextronics, a large multinational corporation (MNC) employs around 41,000 people in the PRC and has hired large numbers of PRC engineers to design the products they assemble.

Roberts (2006) reports that by 2006 there were around 450 integrated circuit design companies in the PRC, up from 400 in 2005, 20% of which employed "returnees" from the US. These companies are mostly homegrown, small firms and few have revenues of more than \$50 million. However, they testify to the growing influence of the PRC's design capability in the electronics industry, reminiscent of Taipei, China design developments in the early 1990s.

Virtually all leading US electronics makers are developing strategies to cope with "the PRC factor", which basically means taking advantage of the PRC's low labor, engineering, and design costs to compete with other MNCs in the US market—and to gain entry into the PRC domestic market. Engardio and Roberts (2004) examine the case of the US market for telecommunications networking gear. 3Com, from Massachusetts, aims to expand market share by selling products similar to the market leader's at very low cost via a new joint venture in the PRC. In networking, the PRC's engineering costs are currently around 25% of US levels.

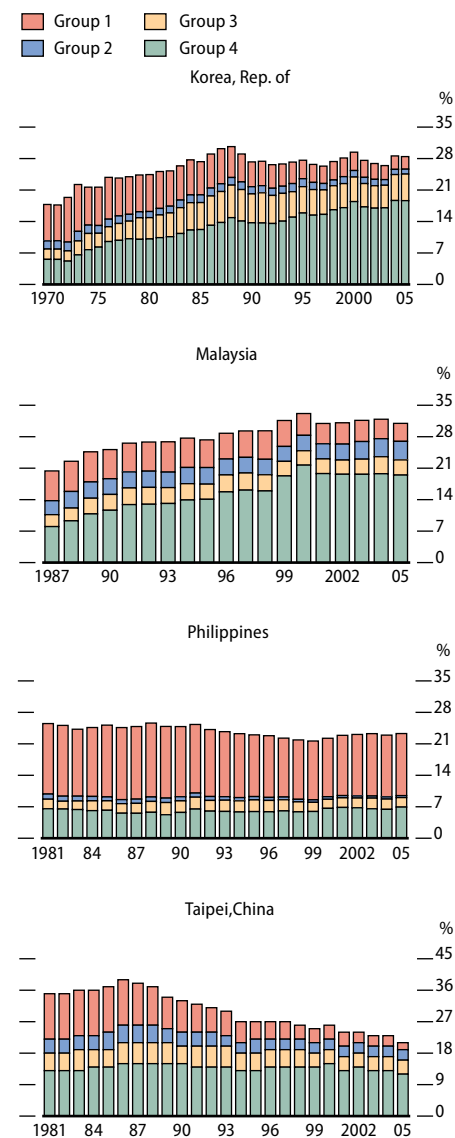
Local firms are also rapidly entering the market, imitating the operations of MNCs. For example, SMI, a PRC-owned chipmaker, now processes 12-inch silicon wafers, only around two generations (or 5 years) behind Intel Corporation, the US leader in the field.

The PRC's local firms are also supplying autoparts to MNCs within the PRC. The Wanxian Group in Hangzhou began as a tiny farm machinery shop in 1969. Today, it is a vast conglomerate that supplies global car manufacturers operating in the PRC. Since 1995 the firm has purchased 10 US auto part makers acquiring skills, technology, management, and access to overseas markets.

Sleigh and von Lewinski (2006) describe efforts by local firms to move into own-brand and services-led production. They stress the growth in the local market in the PRC, where retail sales have grown to more than \$827 billion in 2005. On the MNC front, R&D centers located in the PRC grew from just one in the early 1990s to more than 750 in 2005. The PRC's overall spending on R&D rose from 1% of GDP in the late 1990s to around 1.5% in 2005 and was forecast to reach 2.5% by 2020. Einhorn (2006) shows that foreign firms as diverse as Intel, Google, and Dow Chemicals are increasing their R&D in the country. Firms based in the PRC applied for around 130,000 patents in 2004, six times more than in 1995, making it number five globally.

As McGregor (2004) illustrates, the largest electronics producer in the PRC is in fact a European firm, Philips of Holland. Philips in the PRC generated an estimated \$2.5 billion in local revenues in 2004, plus \$4.5 billion in export sales. As with other electronics giants, its global manufacturing has been increasingly outsourced to the PRC (including 100% of its audio products).

### 3.1.12 Shares of manufacturing groups in GDP based on technology and scale



Note: Groups as defined in Table 3.1.1.

Source: Staff estimates.

[Click here for figure data](#)



slowly, but has started at a very low income base. In yet other countries, the evidence is lacking.

### Patterns of specialization and diversification

Having linked the movement of output and employment to productivity gains and changes in technology, this subsection asks how these have been reflected in evolving patterns of specialization. The theory of comparative advantage predicts that as countries open up to trade, they will specialize in those activities that use intensively those factors that are in abundant supply.

Figure 3.1.13 graphs an index of output specialization against per capita income. Lower values indicate greater diversification. At the UNIDO 3-digit level, country experiences appear to vary widely. Increasing diversification (not specialization) is apparent as incomes rise at low levels in Bangladesh, India, Indonesia, Nepal, Pakistan, and Thailand. There is no economy that becomes more specialized within comparable low income ranges. Increasing specialization is only detected at higher income levels in Korea; Malaysia; Singapore; and Taipei, China.

Compared to the PRC at similar income levels, India has a more specialized pattern of manufacturing output, and is marginally more technologically sophisticated (Figure 3.1.11). Kochhar et al. (2006) have also shown that India has a more skill-based and capital-intensive pattern of production than the PRC.

Some differences appear when specialization and diversification are viewed through the optic of employment rather than output. Employment measures for both the PRC and India indicate a trend toward diversification. In terms of employment, Thailand exhibits increasing specialization rather than diversification. While the trend toward specialization remains in Malaysia and Singapore, the index is static in Korea, meandering around a stable average.

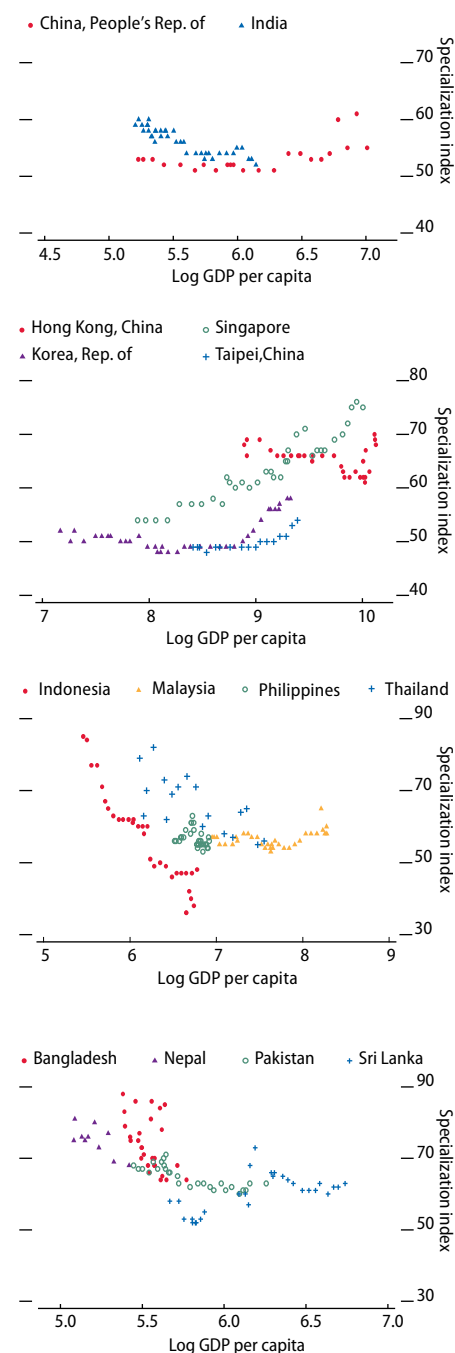
Imbs and Wacziarg (2003), present evidence that suggests that, at low levels of per capita income, economies tend to diversify and subsequently, as their income rises, they then specialize (i.e., show lower diversification). Graphically, this would be represented as a U-shape. Rodrik (2006) has interpreted Imbs and Wacziarg (2003)'s findings as suggesting that whatever is driving economic development, it is not comparative advantage. Individual country experiences in developing Asia do not directly fit the U-shaped pattern of specialization for value added (or employment) suggested by Imbs and Wacziarg (2003). But this is not surprising as data are being viewed over a comparatively short time frame. But if the data for all countries are combined (Figure 3.1.14), a distinctive U-shaped pattern emerges.

Viewed through a wide-angle lens, it is noticeable that the PRC and India are unusually diversified for their levels of per capita income. But significant diversification might be expected in giant countries. Indonesia, another large country, is also more diversified than "average".

However, outliers with higher than "expected" degrees of specialization are not small countries and include, for example, Bangladesh and Thailand.

It would appear that diversification at low levels of income and specialization at higher levels have been features of developing Asia's

**3.1.13 Specialization index of developing economies in Asia: Manufacturing value added**



Note: The degree of specialization was constructed using UNIDO 3-digit manufacturing data. If the shares of all sectors are equal, the degree of specialization is zero; and if only one sector exists, then the value of the indicator is 100. The degree of specialization  $h$  is defined as

$$h = 100 \times \left( 1 + \frac{\sum_i (s_i \ln s_i)}{h_{\max}} \right)$$

where  $h_{\max} = \ln$  (number of sectors) and where  $s_i(t)$  is the share of the  $i$ -th branch in total manufacturing value added in year  $t$  and  $0 \leq h \leq 100$ .

Source: Staff estimates.

[Click here for figure data](#)

experience of change. One way to represent these “dynamics” is through an evolutionary process of differentiation, selection, and amplification (Beinhocker 2006). Rodrik (2004) interprets this and Imbs and Wacziarg’s findings as suggesting that low-income countries start the development process by attempting mastery over a broader range of activities. But as Rodrik points out, not all countries have proven to be equally good at this. It should be noted that the incomes in Figure 3.1.14 are calculated at market exchange rates, not purchasing power parity prices, and this may explain why the turning point is observed at a much lower level of income than in Imbs and Wacziarg. Given that principles of comparative advantage do not chime readily with developing Asia’s experience, the structure of Asia’s exports is now examined more closely.

### Export complexity and diversification

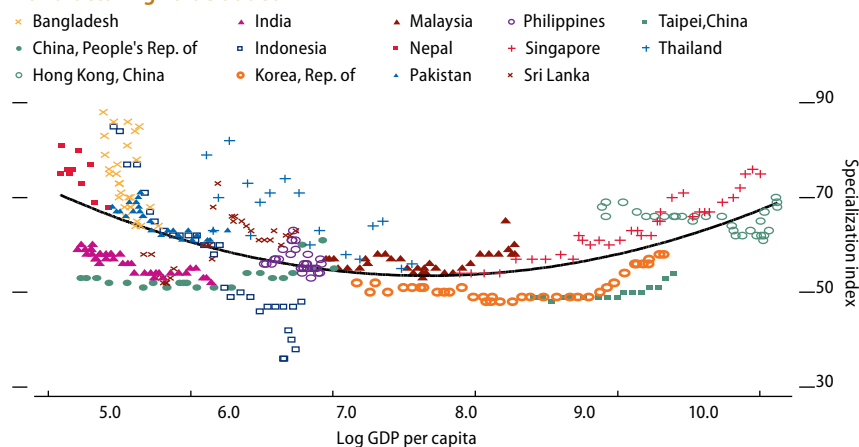
Linked to the idea that comparative advantage may not be a particularly good predictor of how output structures evolve, Hausmann et al. (2005a) have argued that specialization patterns are partly indeterminate and may be shaped by idiosyncratic and country-specific elements. Specifically, there would appear to be a strong relationship between the level of a country’s income and the sophistication or complexity of its “export package”. Does the experience of developing Asia fit with these ideas?

The sophistication or complexity of a country’s export basket is associated with the income or productivity characteristics of countries around the world that export similar goods. So if a country’s export basket has a high share of goods that rich countries specialize in, it attracts a high score. Conversely, export baskets overweight in goods that poor countries specialize in attract a low score. Measurement issues are explained in Box 3.1.4.

Figure 3.1.15 graphs the country scores. Unsurprisingly, the results show that the NIEs have the highest scores, followed by Malaysia, Thailand, PRC, Philippines, India, and Indonesia. Moreover, the scores of all these countries have increased over the years, indicating an increasing level of complexity or sophistication in their export basket. For Bangladesh the trend is flat, and for Mongolia, Pakistan, and countries in Central Asia the index trends down.

This index of the complexity or sophistication of the export basket depends on how the underlying components are changing: whether individual exports are becoming more or less sophisticated over time, and on how the composition of a country’s export basket shifts. Between 1986 and 2004, a clear pattern emerges of export diversification in all countries, but there are distinct differences across economies (Table 3.1.2).

**3.1.14 Combined specialization index of developing economies in Asia: Manufacturing value added**



Note: The estimated regression line is:

$$\text{Specialization} = 203.653 - 39.163 \text{ GDP per capita}(\log) + 2.554 (\text{GDP per capita}(\log))^2$$

t-stat: (17.78) (-12.39) (12.13)

R<sup>2</sup>: 0.30; No. of observations: 387

Source: Staff estimates.

[Click here for figure data](#)

### 3.1.4 Measuring export sophistication

The measure of export complexity or sophistication is developed in two steps. First, a commodity-specific index is constructed. This is a weighted average (where the weights represent the revealed comparative advantage of a country for a particular good) of the per capita GDPs of the countries exporting that commodity. So a high value of the index means that countries exporting that good have high income/productivity levels.

Second, an overall index is constructed as a weighted average of the commodity scores in the export basket, where the weights are the value shares of goods in the country’s total exports. A high value for the overall index means that a country is exporting goods that are predominantly exported by high income/productivity countries.

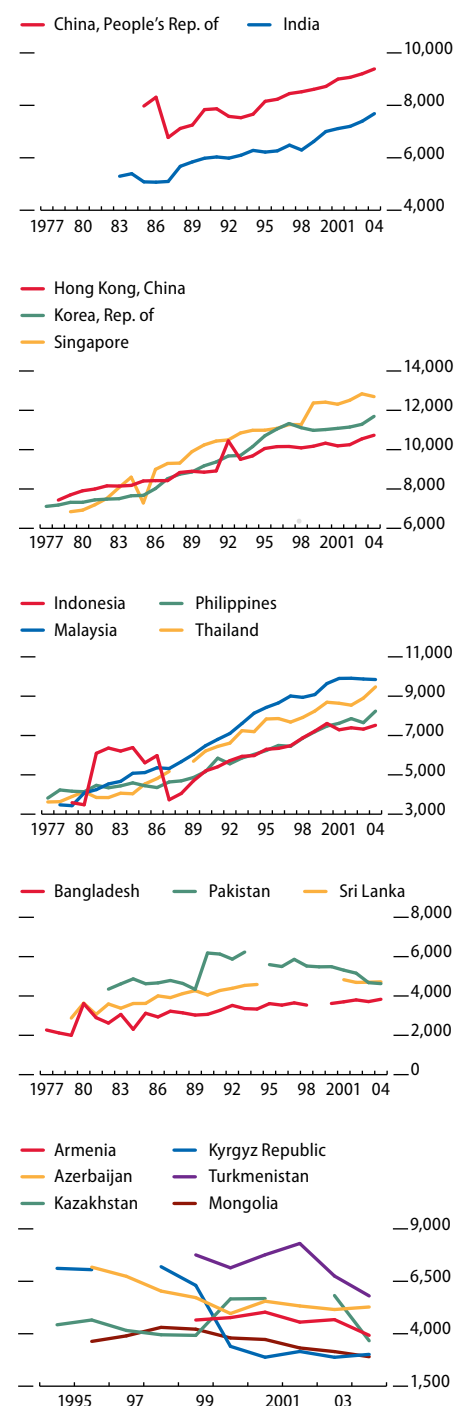
To construct these indexes, export data are used from the United Nations Commodity Trade Statistics Database (COMTRADE) at the 5-digit level (SITC Revision 2; 1,800 commodities) for the years 1977 to 2004. Per capita GDP is from the *World Development Indicators* database. Per capita GDP at constant 2000 US dollars is used. The average product weights for 2002–2004 are used to construct the overall index for all possible countries in developing Asia over the period 1977–2004.

## 3.1.2 Export diversification, 1986–2004

	1986	2004
<b>China, People's Rep. of</b>		
Share of top 10 exports (%)	59.9	8.9
Export commodity score of top 10 exports	6,862	6,727
Overall export complexity score	8,309	9,389
<b>India</b>		
Share of top 10 exports (%)	53.1	23.9
Export commodity score of top 10 exports	4,034	5,469
Overall export complexity score	5,069	7,684
<b>Newly industrialized economies</b>		
<b>Hong Kong, China</b>		
Share of top 10 exports (%)	27.7	16.9
Export commodity score of top 10 exports	7,260	9,680
Overall export complexity score	8,425	10,733
<b>Korea, Rep. of</b>		
Share of top 10 exports (%)	34.8	20.6
Export commodity score of top 10 exports	8,584	10,285
Overall export complexity score	8,022	11,694
<b>Singapore</b>		
Share of top 10 exports (%)	32.0	18.9
Export commodity score of top 10 exports	8,330	13,624
Overall export complexity score	8,997	12,696
<b>ASEAN-4</b>		
<b>Indonesia</b>		
Share of top 10 exports (%)	62.3	29.9
Export commodity score of top 10 exports	4,314	8,668
Overall export complexity score	5,979	7,521
<b>Malaysia</b>		
Share of top 10 exports (%)	64.7	26.9
Export commodity score of top 10 exports	4,770	6,819
Overall export complexity score	5,360	9,846
<b>Philippines</b>		
Share of top 10 exports (%)	49.5	32.1
Export commodity score of top 10 exports	3,428	7,445
Overall export complexity score	4,352	8,240
<b>Thailand</b>		
Share of top 10 exports (%)	56.1	17.2
Export commodity score of top 10 exports	4,629	7,806
Overall export complexity score	4,811	9,472
<b>Other South Asia</b>		
<b>Bangladesh</b>		
Share of top 10 exports (%)	73.6	59.2
Export commodity score of top 10 exports	2,499	3,791
Overall export complexity score	2,934	3,833
<b>Pakistan</b>		
Share of top 10 exports (%)	62.8	49.7
Export commodity score of top 10 exports	5,014	3,458
Overall export complexity score	4,664	4,628
<b>Sri Lanka</b>		
Share of top 10 exports (%)	42.7	34.7
Export commodity score of top 10 exports	3,032	4,462
Overall export complexity score	4,004	4,718
<b>The Pacific</b>		
<b>Fiji Islands</b>		
Share of top 10 exports (%)	76.8	58.3
Export commodity score of top 10 exports	6,268	3,704
Overall export complexity score	3,798	3,016

Note: Data are staff calculations from the United Nations Commodity Trade Statistics Database (COMTRADE) at the 5-digit level (SITC Revision 2; 1,800 commodities).

## 3.1.15 Overall Asian export complexity scores



Note: The vertical axis measures the complexity or sophistication of a country's exports. This measure is referred to as EXPY in Box 3.1.6 below.

Source: Staff estimates.

[Click here for figure data](#)

In the high-income economies, such as Hong Kong, China; Korea; and Singapore, the shift toward diversification as measured by the fall in the share of the top 10 exports in the total is modest. But the structure of exports in these countries was already quite diversified in the base period (1986). There is only modest diversification, too, in Bangladesh, Pakistan, Philippines, and Sri Lanka. But in these countries, the structure of exports is comparatively specialized. By comparison, PRC, Malaysia, Thailand, as well as India and Indonesia, show much greater diversification over the period, converging on the levels seen in higher-income countries. The Indonesian data in the early 1980s were probably influenced by oil-price shocks. To some degree, these patterns shadow the trend seen in the manufacturing output data (Figure 3.1.13 above).

### Summary

Developing Asia's experience of change is complex. The evidence presented in this section indicates that there have been multiple transformations, some more obviously linked to productivity growth and economic catch-up with rich countries than others.

Essentially, output and employment in developing Asia have moved as per capita incomes have risen in much the same way as in other parts of the world. But on balance, developing Asia is a bit more industrialized and industrialization has begun at lower income levels than in other regions. Output shifts are much more advanced than employment shifts. Viewed through the lens of output, Asia is a services and industrial economy; through the lens of employment, it is still an agrarian economy and, increasingly, a services economy. In some countries, employment has shifted from agriculture directly to services, bypassing industry.

Developing Asia's performance on productivity growth is mixed. Some countries have come close to bridging the gap with the OECD frontier, others have made considerable progress, and yet others are now showing promise. But there are also countries where productivity is stagnant and where the gaps with OECD—and with other countries in developing Asia—are getting wider. At a sector level, gaps are biggest in services and least in manufacturing. Advances in productivity have been largest in industry and least in agriculture. The reallocation of workers from agriculture to industry and services has indeed provided a “structural bonus,” but to date it has been modest.

The countries that have been most successful in closing productivity gaps are those where manufacturing industry displays evidence of increasing technological sophistication. Increasing diversity rather than specialization appears to be associated with growth in productivity at low- and middle-income levels. Those economies that have been most successful in closing the gap with the OECD frontier have (other than Hong Kong, China) progressively specialized within manufacturing. There is also evidence of greater complexity and diversity in the export baskets of those countries that are furthest advanced in catch-up.

Critically, the analysis of this section suggests that developing Asia has enormous potential for catch-up growth. Agriculture still has a large reservoir of workers, and a large untapped “structural bonus” remains in play, which can boost productivity growth. In the next section, these ideas are taken up in the context of the challenges ahead.

## Looking ahead

Developing Asia has an unrivalled record of growth and economic catch-up. It has, compared to other parts of the developing world, deftly navigated difficult changes and transformations. Yet this aggregate picture masks individual country examples of stunted growth, reversals, and weak performance. Such a record can also breed a sense of complacency among economic decision makers about the future. Even where countries are catching up, there is no guarantee that the process will continue indefinitely, and the gaps to be closed are daunting. Much more is still to be done in terms of the transfer of labor and other resources across sectors; technological upgrading; and building a competitive edge in new activities. Change will be needed to sustain and accelerate momentum, and complexity is likely to increase. These linked evolutions will not happen automatically. They require societies to develop and deploy effectively a broad range of capabilities.

This section approaches the challenge of catch-up by looking ahead to see where developing Asia could be in two decades. How much of the remaining productivity gap could be closed? But it also considers what the future might hold for job creation. Successful catch-up requires not just closing the gap on labor productivity, but also creating sufficient new jobs to absorb the new workers. Unless developing Asia can create jobs for its burgeoning labor force, growth could come unstuck. The social fabric could also be at risk.

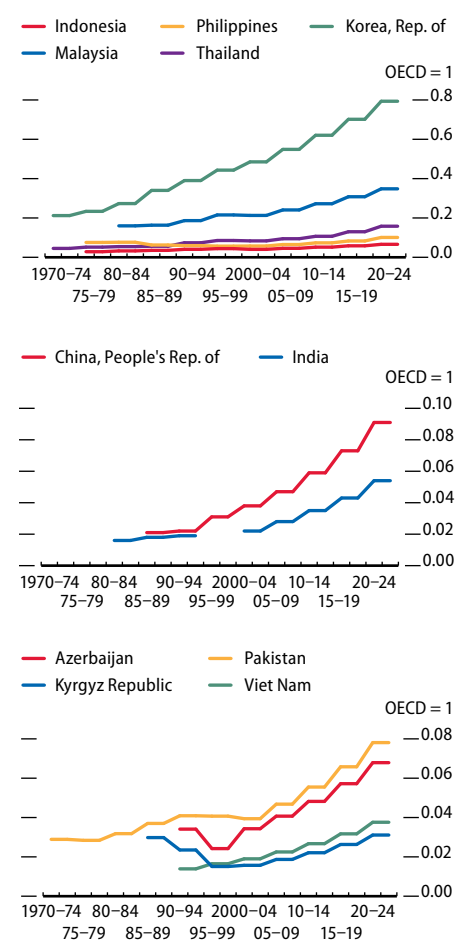
### Closing the productivity gap

Figure 3.1.16 shows the historical evolution of labor productivity to 2000–2004, and then extrapolates ratios out to 2020–2024. These are not forecasts, just a way of focusing attention of the magnitude of the productivity gaps that remain to be closed. In all panels, the ratio of a country's labor productivity to that in OECD is measured. OECD productivity is assumed to continue to grow as in the past, at a rate of about 1.5% a year. Economies in developing Asia are assumed to spurt, and to grow somewhere between 4% and 6%. This is an optimistic range. Korea, Malaysia, and Thailand are set to grow at 4%, the PRC and India at 6%, and all others at 5%. These rates are at the upper bounds of those that have been observed in the historical data and anticipate (slow) convergence within the region. No trajectories are shown for Hong Kong, China; Singapore; or Taipei, China because it can be reasonably assumed that they will complete the catch-up process before 2024, and indeed may overtake OECD productivity levels. Korea's trajectory is shown alongside ASEAN-4 countries.

On the basis of these assumptions, Korea's aggregate labor productivity may reach 80% of the OECD average within two decades. (For the period 2000–2004, it was just slightly less than half the OECD average.) By 2025, this would place productivity in Korea where Singapore was relative to OECD in 1990–1994, or in level terms where Singapore might be expected to reach sometime during 2005–2009. It is clear that even on optimistic assumptions the dynamics of catch-up evolve slowly. Each year the frontier itself moves away, "taxing" catch-up by 1.5 percentage points.

By 2025, these simple extrapolations place Malaysia's productivity at

3.1.16 Evolution of labor productivity in developing Asia relative to OECD



Note: See Figure 3.1.4 for years of data.

Source: Staff estimates.

[Click here for figure data](#)



about 35% of the OECD average, with a still-substantial gap to bridge. This compares with where Korea was in about 1985–1989 in relative terms, and would be in 2000–2004 in terms of productivity levels. On the same metric, by 2025 Thailand would reach where Malaysia was in relative terms in 1985–1989 and in level terms where Malaysia was in around the mid-1990s. This would seem to point to a gap of about 20 years between Malaysia and Korea, and a gap of about 30 years between Thailand and Malaysia. Of course, this calculation is somewhat artificial because it assumes fast convergence for all countries from 2004.

The calculations are revealing about the PRC and India and underline the fact that behind these countries' gigantic size and torrid growth, there is still a yawning gap with OECD, and indeed with other countries in developing Asia. Even at an accelerated growth rate of 6%, 1–2 percentage points higher than assumed for other countries, neither the PRC nor India would have 10% of OECD's labor productivity by 2025. By that year, in terms of level productivity these calculations place the PRC where Malaysia was around 1987, and India where Thailand was around 1997. These would be considerable achievements, but still serve as stark reminders of the gaps that remain. In 2000–2004, labor productivity in the PRC compares with where Thailand was at the end of the 1970s. For India the comparison—still with Thailand—is the 1960s.

The numbers tell a compelling story about how large the gaps are for other countries, too. Take Viet Nam, one of the fastest-growing economies in Southeast Asia. Even if the growth of its labor productivity outruns its historical advantage, by 2025 it will have attained a level of productivity that compares approximately with Indonesia in around 2005. And if Pakistan could engineer a productivity U-turn, and emulate the performance of the fast-growing economies of the region, by 2025 its productivity levels would compare with those of Thailand in around 2005.

These comparisons—based as they are on optimistic assumptions about future labor productivity growth—size up the challenge for developing Asia and place in context aspirations for growth. But a bigger challenge still is lurking: creating sufficient jobs for developing Asia's burgeoning labor force. If fast labor productivity growth comes at the expense of jobs, then growth might prove difficult to sustain as social cleavages widen. The challenge is to lift productivity *and* create jobs.

### **Prospects for jobs**

Historically, the NIEs followed a pattern of development in which fast economic growth was accompanied by rapid expansion of labor-intensive activities and the creation of jobs in the organized sector, particularly in manufacturing. By creating formal sector jobs, poverty was quickly reduced and economic gains were widely spread.

The patterns of development observed now in the PRC and India, and elsewhere, do not readily conform to this “model”. In both countries, open unemployment rates have risen and, at least in India, there are high levels of underemployment and informality. Estimates of open unemployment are given in Table 3.1.3.

Various elements are probably contributing to these trends on unemployment. Structural factors may play a role. In India for example, high-end services have contributed significantly to growth, but provide

## 3.1.3 Estimated unemployment

Subregion/economy	Rate (%)		Number (millions)	
	1996	Latest year	Latest year	
<b>East Asia</b>				
China, People's Rep. of	3.0	4.2	2005	8.400 2005
Hong Kong, China	2.8	5.6	2005	0.200 2005
Korea, Rep. of	2.0	3.7	2005	0.887 2005
Mongolia	6.7	3.3	2005	0.033 2005
Taipei, China	2.6	4.1	2005	0.428 2005
<b>Southeast Asia</b>				
Cambodia	0.9	1.8	2001	0.116 2001
Indonesia	4.9	10.3	2005	10.854 2005
Lao People's Dem. Rep. <sup>a</sup>	3.6	5.1	2003	0.136 2003
Malaysia	2.5	3.5	2005	0.367 2005
Philippines	7.4	10.3	2005	3.766 2005
Singapore	1.7	3.1	2005	0.101 2005
Thailand	1.1	1.4	2005	0.496 2005
Viet Nam <sup>b</sup>	3.5	2.1	2005	0.900 2005
<b>South Asia</b>				
Bangladesh	3.5	4.3	2003	2.000 2003
India <sup>c</sup>	6.0	7.3	2000	9.050 2000
Maldives <sup>a</sup>	0.8	2.0	2001	0.002 2001
Nepal		1.8	1999	0.180 1999
Pakistan	5.4	7.7	2005	3.600 2005
Sri Lanka	11.3	7.7	2005	0.623 2005

a 1995. b 1998. c 1994.

Source: ADB (2006).

few jobs. Manufacturing activities are also comparatively sophisticated, and presumably capital intensive, for India's level of per capita income. But many other factors are also likely to be playing a role, including labor market regulation, bad infrastructure that raises business costs, and the poor quality of India's education system.

In the PRC too, open unemployment is rising despite impressive growth. Again, institutional features of the economy may help explain this, but structural influences may also be present. The technological sophistication of manufacturing is far above what was observed in countries like Korea at comparable levels of income. The specialization that comparative advantage would seem to predict does not appear to be present (see the previous section, *Looking back*), and output structures, at least in manufacturing, are becoming increasingly diversified at low income levels.

Countries that are growing more slowly are also having a tough time creating *decent* jobs. Indonesia and the Philippines see a large exodus of workers abroad each year. Similarly, a lack of decent employment opportunities at home spurs high levels of emigration from Bangladesh, the countries of Central Asia, Nepal, Pakistan, Sri Lanka, and the Pacific island countries. Emigration and jobs overseas would appear to be an important "safety valve" for many young Asians, but deprives countries of expensive human capital.

Reliable estimates of underemployment are hard to come by, but Table 3.1.4 provides some information. "Underemployment" is, by its very nature, difficult to measure. Available estimates tend to focus on "time-based" underemployment, that is, on workers who

would willingly work more hours or more frequently. For example, a construction or farm worker wanting to work 45 hours a week but finding employment for only 20 hours is underemployed in a time-based sense. Some indication of the extent of this type of underemployment can be gleaned from labor force surveys. These calculations suggest that time-based underemployment is prevalent. For example, in 2003, 34% of those in work in Indonesia were involuntarily working less than 35 hours a week. Although this type of underemployment in the Philippines has been falling since 2000, it remains substantial, at 17% of total employment. In South Asia, too, a significant proportion of workers seems to be underemployed in the time-based sense. (Estimates of time-based underemployment for the PRC are not considered reliable.)

A simple way of looking at the impact of GDP growth on jobs is to calculate “employment elasticities”. If jobs grow at the same rate as output, the employment elasticity has a value of 1. But if growth is entirely attributable to improvements in labor productivity, the employment elasticity is 0. Values between 0 and 1 are compatible with job creation and improved labor productivity, but growth that is labor intensive (values closer to 1) necessarily curbs gains in labor productivity (values closer to 0).

Table 3.1.5 presents empirical estimates of employment elasticities for a sample of developing countries in Asia. As the estimates are all greater than 0 and less than 1, growth in this sample has been associated both with job creation and labor productivity gains (see *Looking back*). But the responsiveness of employment to economic growth has varied widely across countries and over time. Economic growth has had least traction on job creation in East Asia and most in Southeast Asia. Estimated elasticities for the PRC are consistently on the low side and suggest

### 3.1.4 Time-based underemployment rates (%)

Country	As share of labor force	As share of employed
Bangladesh	35.4	–
Cambodia	–	29.6
Indonesia	–	34.0
Nepal	27.4	–
Pakistan	21.9	–
Philippines	–	17.0
Thailand	3.8	4.0
Viet Nam	–	11.0, 56.0

– = data not available.

Notes: Years of data vary for each country, but are within 1999–2004.

Viet Nam data are urban and rural, respectively.

Source: Felipe and Hasan (2006).

### 3.1.5 Employment elasticities and GDP growth

Subregion/economy	Estimates in Felipe and Hasan (2006)				Estimates in Kapsos (2006)					
	Employment elasticities		Real GDP growth (%)		Employment elasticities			Annual GDP growth (%)		
	1980s	1990s	1980–1990	1990–2000	1991–1995	1995–1999	1999–2003	1991–1995	1995–1999	1999–2003
<b>East Asia</b>										
China, People's Rep. of	0.330	0.129	6.7	8.8	0.14	0.14	0.17	12.7	8.3	8.1
Korea, Rep. of	0.223	0.225	8.8	6.3	0.30	0.17	0.38	7.7	3.4	5.6
Taipei, China	0.242	0.139	8.3	6.5	–	–	–	–	–	–
<b>Southeast Asia</b>										
Indonesia	0.435	0.379	5.9	4.7	0.37	–0.08	0.43	7.6	–0.3	4.1
Malaysia	0.683	0.406	5.5	7.2	0.31	0.51	0.67	9.5	3.7	4.6
Philippines	0.535	0.731	1.6	3.3	0.99	0.69	0.76	2.8	3.4	4.4
Singapore	0.375	0.711	6.8	9.2	0.21	0.54	0.62	9.6	5.4	2.8
Thailand	0.315	0.193	7.3	5.3	0.09	0.14	0.38	8.6	–0.6	4.8
<b>South Asia</b>										
Bangladesh	0.550	0.495	5.0	4.9	0.38	0.48	0.06	4.6	5.0	5.3
India	0.384	0.312	6.1	5.8	0.40	0.43	0.36	6.3	6.3	5.3
Pakistan	0.406	0.553	7.5	3.9	0.49	0.96	0.63	4.5	3.0	3.9

– = data not available.

Sources: Tables 3.6 and 3.7 in Felipe and Hasan (2006) and Appendix Table A4.2.5 in Kapsos (2006).

that labor productivity gains have been an important part of its growth experience (see the previous subsection, *Closing the productivity gap*). In South Asia, the responsiveness of new jobs to growth generally lies in between the estimates for East Asia and Southeast Asia.

What do these employment elasticities suggest about developing Asia's capacity to create jobs? As the rate of labor force growth slows in most countries, estimated employment elasticities suggest that developing Asia should be able to create sufficient jobs for new workers, *provided that growth does not stall and that growth continues to create jobs as it has in the past*.

Table 3.1.6 illustrates this point by comparing upper- and lower-bound estimates of employment elasticities with projected labor force growth rates. These calculations suggest that if India can grow at 6%, it can create sufficient jobs for new workers. And even if labor intensity of growth is diluted, emulating say the experience of the PRC, India could still absorb all new workers in jobs if it could grow at 8%. But this is probably close to India's current potential growth rate, and leaves little room for slowdowns or, for that matter, crises.

In the PRC, slowing labor force growth should ease the challenge of job creation. If the historical relationship between income growth and job creation is a good guide, the PRC can create enough jobs for all its new workers if it grows by just 4% each year. This is well below the 10% growth that the PRC has enjoyed over the past decade and above the 8% target that the PRC authorities have set for the medium term. Again, even if labor productivity growth was to spurt (say, halving the employment elasticity), growth of 6% would still generate new jobs sufficient for labor force entrants.

3.1.6 Labor force growth, output growth, and employment						
Subregion/economy	Estimated employment elasticity	Estimated standard deviation	Projected annual labor force growth, 2005–2015	Base employment rate	Implied output growth to absorb new workers <sup>a</sup>	Forecast GDP growth, 2007
<b>East Asia</b>						
China, People's Rep. of	0.22	0.029	0.69	95.8	2.77–3.61	10.0
Hong Kong, China	0.29	0.022	0.87	94.4	2.79–3.25	5.4
Korea, Rep. of	0.32	0.012	0.40	96.3	1.21–1.30	4.5
Taipei, China	0.25	0.010	0.28	95.0	1.07–1.17	4.3
<b>South Asia</b>						
Bangladesh	0.50	0.034	2.27	95.7	4.29–4.93	6.5
India	0.31	0.013	1.80	95.7	5.54–6.02	8.0
Pakistan	0.41	0.049	2.66	92.3	5.79–7.37	6.8
Sri Lanka	0.37	0.082	0.80	92.3	1.77–2.78	6.1
<b>Southeast Asia</b>						
Cambodia	0.86	0.043	2.26	98.2	2.50–2.77	9.5
Indonesia	0.41	0.028	1.35	90.4	3.09–3.53	6.0
Malaysia	0.48	0.016	2.11	96.5	4.25–4.55	5.4
Philippines	0.84	0.085	2.18	92.6	2.36–2.89	5.4
Singapore	0.40	0.016	1.29	94.7	3.10–3.36	6.0
Thailand	0.35	0.039	0.78	98.6	2.01–2.50	4.0
Viet Nam	0.34	0.012	1.86	97.9	5.29–5.67	8.3

<sup>a</sup> Range is obtained by applying estimates at mean less one standard deviation and mean plus one standard deviation.  
Source: Staff estimates.

However, not all countries have such a favorable alignment of growth prospects, labor absorption capacity (i.e., aggregate employment elasticities), and expected flows of new workers into the labor force. In Bangladesh, Malaysia, and Pakistan, the labor force is set to expand quickly, and fast growth will be needed to create sufficient new jobs. This could also be a predicament in parts of Central Asia and the Pacific islands. In the Philippines, although the labor force is also set to expand quickly, economic growth has been highly labor intensive in the past. If labor productivity there were to pick up, unless it is accompanied by faster economic growth, this would pose difficulties for future job creation. In some countries, outmigration may continue to release pressures.

There is a crucial rider to these calculations: they tell us nothing about the *quality* of the jobs being created. As the definition of employment includes workers who are underemployed, it is entirely possible that only modest rates of open unemployment could coexist with extensive and chronic underemployment. Indeed, poverty data and migration

### 3.1.7 Unemployment scenarios for developing Asia

Subregion/ economy	Projected labor force, 2015 (000)	Optimistic scenario			Pessimistic scenario		
		\$2-a-day poverty with more equal distribution, benchmark growth at 2015 (000)	Number of under- employed (000)	Under- employment rate, 2015	\$2-a-day poverty with less equal distribution, low growth at 2015 (000)	Number of under- employed (000)	Under- employment rate, 2015
Central Asia							
Azerbaijan	4,536.37	451	122	2.69	949	256	5.65
Kazakhstan	7,819.62	2	1	0.01	280	79	1.01
Kyrgyz Republic	2,860.08	144	42	1.48	1,073	316	11.03
Tajikistan	3,408.32	669	188	5.53	864	243	7.14
Turkmenistan	2,779.56	0	0	0	634	179	6.43
Uzbekistan	15,084.12	7,654	2,156	14.29	14,937	4,208	27.89
East Asia							
China, People's Rep. of	842,387.62	97,770	40,738	4.84	236,935	98,723	11.72
Mongolia	1,702.05	1,081	318	18.68	1,415	416	24.45
South Asia							
Bangladesh	85,322.35	85,702	22,553	26.43	116,987	30,786	36.08
India	550,808.90	630,782	146,693	26.63	791,019	183,958	33.40
Nepal	14,642.32	15,495	3,522	24.05	20,567	4,674	31.92
Pakistan	75,443.71	108,141	18,645	24.71	135,967	23,443	31.07
Sri Lanka	10,133.34	1,460	521	5.15	3,193	1,140	11.25
Southeast Asia							
Cambodia	8,829.80	9,563	2,277	25.79	11,316	2,694	30.51
Indonesia	121,641.86	56,503	18,834	15.48	100,137	33,379	27.44
Lao People's Dem. Rep.	3,630.00	3,449	676	18.63	4,291	841	23.18
Malaysia	13,187.04	50	14	0.11	1,594	455	3.45
Philippines	42,450.87	25,829	6,457	15.21	36,777	9,194	21.66
Thailand	40,140.82	5,886	2,102	5.24	11,171	3,990	9.94
Viet Nam	53,026.42	17,494	4,859	9.16	25,749	7,153	13.49
Total			270,720.06			406,127.32	

Note: In the optimistic scenario, recent growth averages are assumed to continue into the future, but track down a little in the PRC. It is also assumed that the distribution of personal consumption converges on the historically observed distribution that would generate the smallest headcount poverty figure. In the pessimistic scenario, growth is clipped by 1 percentage point in each country, and the distribution of consumption reverts to the historically observed distribution that would generate the largest headcount poverty figure.

Source: Staff estimates based on ADB (2005a).



statistics strongly suggest that jobs may be of low quality, and that underemployment could pose a significant challenge for developing Asia well into the future.

One way to think about prospects for *underemployment* is to make the link to poverty incidence. Table 3.1.7 (above) illustrates two projections based on this approach. One paints an optimistic scenario for poverty reduction, which is based on fast growth that is broadly inclusive. The other is based on a less sanguine outlook for growth and income distribution (ADB 2005a).

The optimistic projection for poverty suggests that it may be possible to cut underemployment by 150 million workers between 2005 and 2015. In the pessimistic scenario, projected numbers barely change relative to 2005. The presence of such a large pool of unproductive workers would constitute a tragic underutilization of resources and would pose a clear danger to social stability. In countries like India, failure to tackle the underlying causes of underemployment could yet turn a potential “demographic dividend” into a “demographic curse”.

### Summary

The challenge for developing Asia is to catch up with OECD productivity levels and to create jobs. Although in a narrow arithmetic sense, faster labor-productivity growth means the creation of fewer jobs for a given rate of output growth, this entails a fallacy: output growth is unlikely to be independent either of productivity growth or, in the long run, of the capacity of an economy to create decent jobs for its workers.

Asia’s stellar economic growth disguises wide variation and distracts attention from the full extent of the gap that is still to be bridged. Many countries still have a long road to travel. For most, attaining OECD productivity levels is a distant ambition if only in the sense that, if the past is any guide, it will take the best part of this century to achieve it. For some countries, closing the productivity gap will require a complete turnaround in performance. For others, it will mean sustaining rapid growth for decades to come—itsself a difficult challenge. And if there are unpleasant shocks, gaps could easily widen, rather than narrow.

The prospects for job creation are tightly linked to those for productivity catch-up. But what is the likely location of productivity gains and job creation? Is it industry or services that is going to play the most important role in the decades ahead? These questions are examined in the next section.

## Walking on two legs

Even after countries begin to industrialize and workers move off the farm to find jobs in industry and services, agriculture continues to play an important role. Although agricultural productivity growth may not be able to match that in the other two sectors, modest gains provide a basis for industrialization by ensuring a steady supply of affordable agricultural produce to urban workers, as well as livelihoods for the large numbers of workers who remain. In some economies (such as Taipei, China and Korea) land reforms and policies that support rural livelihoods (e.g., the FELDA scheme in Malaysia) have played an important role both in supporting the broad expansion of agrarian and rural incomes, and in regulating the flow of workers out of agriculture. In turn, rising rural incomes have helped constitute a market base that allows industries to expand.

The transfer of agricultural land to industrial and commercial uses is also another important part of the overall process of change and growth. But as the experience of the PRC and India attests, this process can be politically and economically fraught if rights are unclear and institutions are weak or badly governed. Lifting agricultural productivity growth and ensuring an orderly and politically acceptable distribution of land are important challenges, and no state can afford to neglect them.

But from the perspective of economic catch-up and the creation of jobs, agriculture is not where developing Asia's future lies. That future lies elsewhere. Figure 3.1.17 shows the historical relationship between changes in agricultural output and employment shares and GDP growth. The historical pattern is striking. Growth is strongly and inversely correlated with agricultural output and employment shares in developing Asia and in the rest of the world. In only a handful of cases is positive growth associated with increasing agricultural shares in output and employment, and these are for countries with extensive and productive agricultural land frontiers, which is not a feature of most countries in developing Asia.

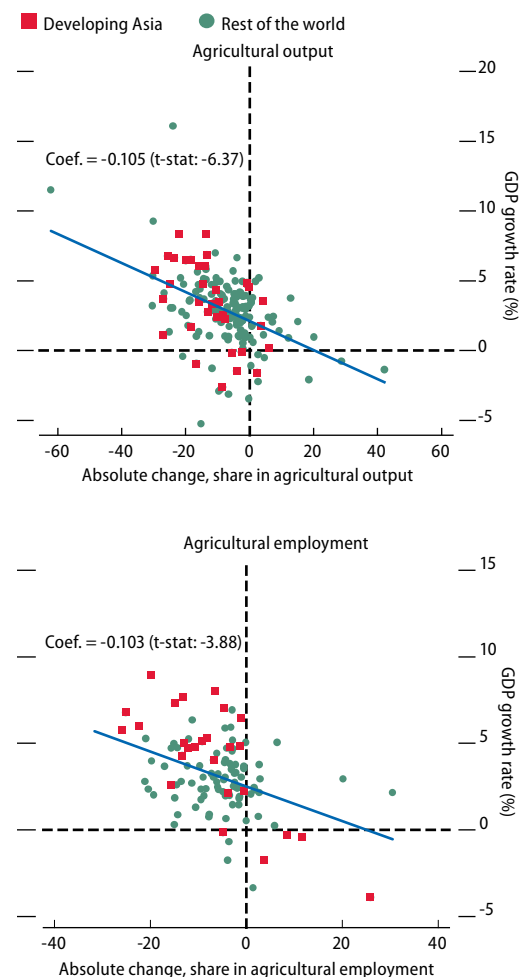
But how relevant are “old models” of industrialization and growth for understanding how developing Asia might evolve? Are service activities going to take on new significance and become the locomotive that moves developing Asia forward? Or do industry and manufacturing incubate dynamism in a way that is unique? These are some of the questions considered in this section.

### Growth and structural transformation

The starting point is to consider the ways in which the evolution of economic structure has in the past been linked to economic growth. Is growth uniquely associated with the expansion of industrial or manufacturing output shares? Figure 3.1.18 shows the relationship between economic growth and changes in the shares of industrial output and employment over the past 35 years for a broad sample of countries in the international economy.

The data in the figure appear to provide compelling evidence that industry “matters.” Those countries that have increased their industry shares most have, on average, grown more quickly. Likewise, those

3.1.17 Change in agricultural output and employment shares vs output growth



Notes: The initial and final years for each country vary with availability of data. For output, period covered is anywhere between 1970 and 2004. For employment, period covered is anywhere between 1980 and 2004. Changes in shares are measured in percentage points. For example, a change of -10 percentage points could mean that the share of agriculture in total output over the period fell from 25% to 15%. Positive change in the share indicates that the share at the end of the period was higher.

Source: Staff estimates.

[Click here for figure data](#)

countries where employment shares in industry have risen most have enjoyed faster GDP growth. In developing Asia, many countries have sustained growth and expanded their industrial output shares, including Cambodia, PRC, India, Indonesia, Korea, Lao PDR, Malaysia, Sri Lanka, Thailand, and Viet Nam. But others that grew had declining industrial output shares. In general, growth was slower in these economies, which include several Central Asian economies (e.g., Armenia, Kazakhstan, and Uzbekistan) and Hong Kong, China. In the case of Hong Kong, China, a hallmark of its development has been the shift to highly productive services. In Central Asia, declining industrial output shares reflect the retirement of moribund activities that were a creation of the earlier Soviet planning model.

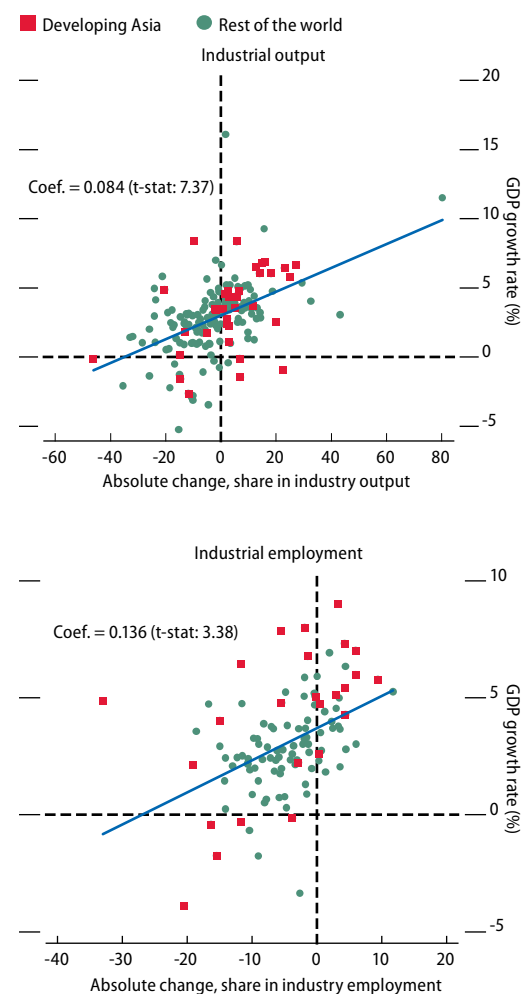
Data for manufacturing output shares tell a similar story (employment data are unavailable). Figure 3.1.19 documents the positive correlation between the change in manufacturing output shares and overall output growth. Countries in the first quadrant with the highest increases in the manufacturing share and in the output growth rate are Cambodia, Indonesia, Korea, Lao PDR, Malaysia, and Thailand.

In the PRC, the manufacturing share in total output has been traditionally much higher than anywhere else in developing Asia, although it declined with respect to the average of the 1980s. It still accounts for over one third of total output, only matched in developing Asia by Malaysia, Tajikistan, and Thailand. The share of manufacturing employment, on the other hand, has declined from about 15% in the 1980s to 11% now, a result of the restructuring of heavy industries that were owned by the state. The share of India's manufacturing output is significantly lower than the PRC's, and over the sample period hovered around 15–16%, while the share of manufacturing employment has been at around 11%. In recent years (2005–2006), the tempo of activity in Indian manufacturing has picked up. Box 3.1.5 illustrates how the size of manufacturing industries might be measured and gauged in an international perspective.

It would seem that industry, and manufacturing in particular, has had an important role to play in growth in developing Asia. The countries that have grown most quickly also tend to be “overrepresented” in manufacturing. It is also the case that countries that have developed complex export baskets, which tend to have a high share of manufactured exports, have also grown quickly (Box 3.1.6). But it is also important to ask what the relationship between growth and service shares looks like. In the section *Looking back*, it was shown that resources move out of agriculture into both industry and services. Figure 3.1.20 shows the links between growth and changes in services shares in output and employment.

The relationship between services share in output and growth is negative, but not significant. Larger shares of services are, in a broad international panel, associated with slower growth. But this is not surprising, since the panel includes rich countries. These move at the pace of the frontier, where services are a big part of the economy. In developing Asia, a pattern of slowing growth is readily evident as incomes in the NIEs escalate toward the OECD frontier. There is basically no systematic relationship between growth of output and

**3.1.18 Change in industrial output and employment shares vs output growth**

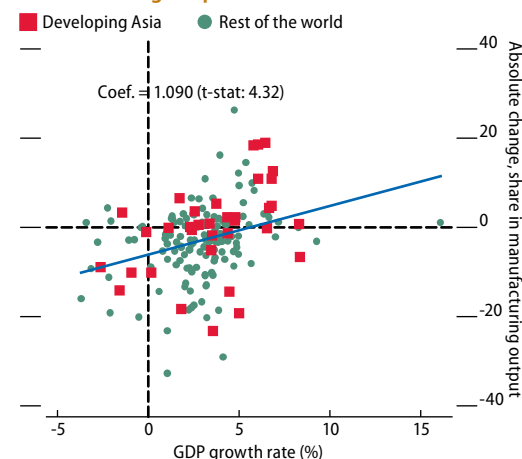


Note: See note to Figure 3.1.17.

Source: Staff estimates.

[Click here for figure data](#)

**3.1.19 Output growth vs change in manufacturing output share**



Source: Staff estimates.

[Click here for figure data](#)

### 3.1.5 Benchmarking manufacturing shares in developing Asia

To gauge if the manufacturing share in total output is “high” or “low” compared to broader international averages, a regression was estimated of the countries’ sector shares in 2000 on per capita income, per capita income squared, population, and trade openness (exports plus imports over GDP).

The following results were obtained.

Regression:

$$\ln M_i = -4.628 + 0.71 \ln y - 0.039 (\ln y)^2 + 0.289 \ln Tr + 0.180 \ln P$$

t-stat: (-4.05)\*\*\* (2.97)\*\*\* (-2.55)\*\* (2.76)\*\*\* (5.92)\*\*\*

where:  $M_i$  manufacturing output share,  $y$  = per capita GDP,  $P$  = population, and  $Tr$  = trade ratio. \*\*\* is significant at 1% and \*\* is significant at 5%.

This equation implies that the relationship between per capita income and the manufacturing share is hump-shaped. The implied sector elasticities with respect to per capita income vary from about 0.37 for the poor countries to about -0.11 for the rich countries. The turning point (i.e., per capita GDP at which the manufacturing share peaks) was estimated at about \$9,998 (in 2000 US\$), corresponding to a manufacturing share of about 25.3% (fixing the population at 100 million and the average openness share at 78%).

The box table shows observed and predicted manufacturing shares for developing Asian countries. Countries can be broadly divided into three groups:

- (i) those whose shares are very well predicted, that is, what broad international experience suggests they would be given per capita income, population, and trade openness;
- (ii) those whose share is smaller; and
- (iii) those that have much larger shares than their attributes would suggest.

The Philippines falls into the first category, but yet is unusual because all other countries in East and Southeast Asia fall into the third category and have much larger shares in manufacturing than international norms would suggest. In South Asia, outside India, shares are generally close to what the larger international sample would predict.

But in India, the actual share of manufacturing in output is much smaller than the fitted value. The PRC’s share is, not surprisingly, much larger. In Central Asia, actual manufacturing shares are low, a legacy of the Soviet planning system and the subsequent closure of moribund heavy industries. The Pacific shows no particular pattern.

#### Predicted vs actual manufacturing output shares

	Predicted	Actual
China, People’s Rep. of	27.31	34.50
India	19.55	15.85
<b>Newly industrialized economies</b>		
Hong Kong, China	21.72	5.39
Korea, Rep. of	22.04	29.42
Singapore	21.68	28.73
Taipei, China	20.82	23.76
<b>ASEAN-4</b>		
Indonesia	21.90	27.75
Malaysia	25.51	32.60
Philippines	21.53	22.23
Thailand	23.93	33.59
<b>Other Southeast Asia</b>		
Cambodia	11.84	16.86
Lao PDR	8.95	17.00
Viet Nam	17.96	18.56
<b>Other South Asia</b>		
Bangladesh	13.54	15.23
Bhutan	7.75	8.06
Nepal	10.18	9.44
Pakistan	14.31	14.81
Sri Lanka	15.37	16.83
<b>Central Asia and Mongolia</b>		
Armenia	9.83	24.07
Azerbaijan	11.99	5.64
Kazakhstan	16.48	17.66
Kyrgyz Rep.	9.29	19.46
Mongolia	9.92	6.13
Tajikistan	9.86	33.66
Turkmenistan	13.67	10.85
Uzbekistan	12.20	9.44
<b>The Pacific</b>		
Fiji Islands	10.98	14.62
Kiribati	5.05	0.90
Papua New Guinea	13.00	8.36
Samoa	7.16	14.82
Tonga	5.99	5.16

Source: Staff estimates.

### 3.1.6 The structure of exports and growth

Building on the stylized facts presented in the section *Looking back*, it is of interest to see whether there is a systematic relationship between the composition of the export basket and GDP growth. Sophisticated and complex export packages as defined in the earlier analysis (see Box 3.1.4) are likely to have a large share of manufactures in them. Following Hausmann et al. (2005a), output growth was regressed on the logarithm of initial GDP per capita, Hausmann's measure of export sophistication ("EXPY"), and the change in industry's share in total output. The regressions include observations for countries in developing Asia only.

Results are shown in the box table. Ordinary least squares (OLS) and instrumental variable (IV) estimates are shown. Instruments used were the logarithm of population and the logarithm of land area. Two types of equation were estimated, cross-sectional and 5-year panels. Except for the cross-sectional regressions with the instrumental variable estimator, estimates are generally statistically significant and suggest that export composition does materially affect growth. This is true whether or not there is a control for industrialization.

Taking the midpoint of the range of estimated coefficient values and the logarithm of EXPY, the results imply that a 10% increase in the measure of export sophistication at the beginning of the period raised subsequent growth by about a half percentage point, an estimate that is close to that of Hausmann et al. (2005a). From this, it would seem that export structure matters for growth in developing Asia.

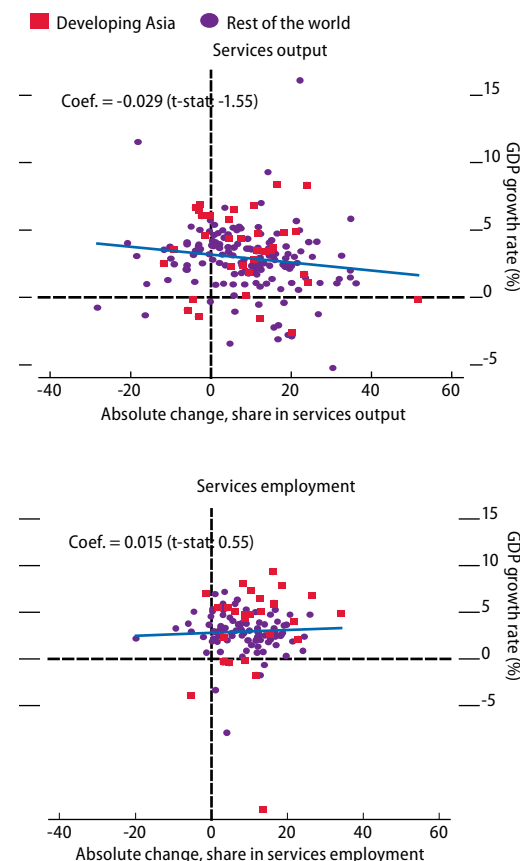
In the section *Looking back*, it was shown that export sophistication is associated with greater diversification of the export basket, yet high-income economies in developing Asia show increasing specialization within manufacturing. These observations warrant further attention, but possibly reflect fast growth in countries that have diversified successfully and where specialization may occur at higher income levels.

#### Growth and export performance

	Cross-section		Five-year panel	
	OLS	IV	OLS	IV
Initial GDP per capita (log)	-0.011 (1.87)*	-0.001 (0.04)	-0.007 (1.86)*	-0.009 (1.79)*
Initial EXPY (log)	0.054 (2.66)**	-0.024 (0.24)	0.040 (3.54)***	0.049 (2.80)***
Observations	23	23	67	60
R-squared	0.34	nil	0.16	0.16
Controlling for the change in industry output shares				
Initial GDP per capita (log)	-0.011 (1.89)*	-0.001 (0.07)	-0.005 (2.48)**	-0.015 (2.90)***
Initial EXPY (log)	0.056 (2.85)**	-0.020 (0.16)	0.032 (5.01)***	0.067 (4.01)***
Change in industry output shares	0.001 (0.50)	-0.001 (0.21)	0.007 (5.43)***	0.005 (4.14)***
Observations	23	23	61	57
R-squared	0.35	nil	0.30	0.31

Notes: 1. Instruments are the logarithms of population and land area. 2. Absolute value of t statistics in parentheses. 3. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%. 4. Panel results correspond to an unbalanced panel. Time periods vary, depending on data availability. The earliest is 1977–2004. 5. The dependent variable is output growth.

### 3.1.20 Change in services output and employment shares vs output growth



Note: See note to Figure 3.1.17.

Source: Staff estimates.

[Click here for figure data](#)



services share in employment. Most observations are clustered in the first quadrant because most countries have growth and most countries have seen their share of services employment rise.

How does developing Asia's services share stack up when measured

### 3.1.7 Benchmarking services

In order to estimate the relative size of developing Asia's services sector, cross-sectional estimates of the output and employment shares were obtained for the year 2000. They were derived from regressions on the sector shares on income per capita, its square, and population. The elasticities obtained are positive at low income levels and decline toward zero at high levels. The estimates indicate that services shares increase with income per capita, and then tend to stabilize at about 63–65% at high levels of per capita income.

The box table provides the predicted and actual output and employment shares. These patterns to some extent mirror those for manufacturing. Compared to international norms, India is overrepresented in services output and the PRC is underrepresented. Except for the Philippines and Hong Kong, China, the economies of East and Southeast Asia have services output shares that are lower than would be predicted by their income and population characteristics. Korea's services share is the lowest among the NIEs and is significantly lower than the predicted share. Services output shares in South Asia tend to be higher than would be suggested by their characteristics.

A comparison of employment shares with international norms provides some intriguing results. Although as expected, the PRC has a lower share of services employment than international norms, so, too, does India. India's heralded services economy is an output phenomenon, not an employment one.

The contrast between services sector productivity in Korea and Taipei, China is also striking, with Korea having services sector employment shares that are close to predicted and that are far above output shares; the reverse is true for Taipei, China. The Philippines is a services economy whether viewed through the lens of output or employment. While Indonesia's output shares are lower than the predicted norm, its employment share is larger, suggesting that a significant number of workers may be in low-productivity service activities. Finally, Thailand's actual share of services employment is very low compared to what might be expected, both by its output share and by broader international norms. This probably reflects a high level of productivity in Thailand's tourism sector.

The estimated regression equations are:

Output:

$$\ln S_i = 2.416 + 0.338 \ln y - 0.015 (\ln y)^2 - 0.010 \ln P$$

$$t\text{-stat: } (4.00)^{***} (2.34)^{**} (-1.57) (-0.82)$$

where:

$S_i$  = services output as % of GDP

$y$  = GDP per capita

$P$  = population

Employment:

$$\ln S_i = 0.420 + 0.828 \ln y - 0.040 (\ln y)^2 - 0.029 \ln P$$

$$t\text{-stat } (0.61) (5.25)^{***} (-4.19)^{***} (-2.66)^{***}$$

where:

$S_i$  = services output as % of GDP (services employment as % of total employment)

$y$  = GDP per capita

$P$  = population

“\*\*\*” and “\*\*” mean significant at 1% and 5%, respectively.

#### Predicted versus actual output and employment shares, services

Developing Asia	Output		Employment	
	Predicted	Actual	Predicted	Actual
China, People's Rep. of	46.17	39.25	36.91	27.50
India	41.44	48.78	29.51	22.20
<b>Newly industrialized economies</b>				
Hong Kong, China	65.05	85.70	69.48	79.40
Korea, Rep. of	61.05	54.39	63.04	61.26
Singapore	65.15	62.83	70.37	65.53
Taipei, China	62.58	68.93	65.73	54.97
<b>ASEAN-4</b>				
Indonesia	45.91	38.47	37.04	41.20
Malaysia	56.67	40.47	56.72	49.45
Philippines	47.84	51.97	40.62	46.55
Thailand	52.27	48.99	48.44	33.53
<b>Other Southeast Asia</b>				
Cambodia	40.20	39.11	28.51	17.74
Viet Nam	41.67	38.73	30.43	22.30
<b>Other South Asia</b>				
Bangladesh	40.68	49.20	28.78	24.50
Maldives	55.62	-	57.42	60.55
Pakistan	43.39	51.21	33.02	33.53
<b>Central Asia</b>				
Armenia	46.15	39.04	38.70	38.87
Azerbaijan	46.08	37.52	38.29	48.10
Kyrgyz	40.38	32.21	28.99	36.46
Mongolia	43.12	48.95	33.57	37.24
Uzbekistan	44.46	42.51	35.22	45.30
<b>The Pacific</b>				
Papua New Guinea	46.17	28.00	38.58	23.02

- = data not available.

Source: Staff estimates.

against international norms? Box 3.1.7 reports the results of an exercise to answer this question.

Cutting output growth into the contributions that have been made by agriculture, industry, and services throws up some interesting results, which are shown in Table 3.1.8. The table identifies the periods for which the calculations have been undertaken.

These data are broadly consistent with what has already been discovered. Across developing Asia, both industry and services have made important contributions to output growth. Although agricultural contributions are lower, they are not insignificant in lower-income countries. Other things held equal, the contribution of services tends to be larger in higher-income countries. But services also play an important role in countries where industrialization has been slow to start or has got stuck. This seems to be the case in South Asia (as a subregion), and in the Philippines. In the Pacific islands, services activity has also played this residual role.

To complete the picture, Figure 3.1.21 identifies which sectors have been important from the perspective of creating jobs. Even in countries where services have not been particularly important from the perspective of output growth, services have figured prominently in the creation of jobs. In Malaysia, for example, both industry and services have created jobs, but the services sector has created more of them. Likewise in Korea, despite industry's fast output growth, the majority of jobs is in services, and the employment share in industry is falling. This contrasts with India, where output growth of services has been prodigious, but its record in creating jobs has been poor.

### Growth episodes and sector shares

Clearly, industrialization and growth of output are closely associated (as shown earlier). But has industrialization been a prerequisite for output growth? To look at this question, an event analysis is undertaken in which episodes of growth are compared with preceding and concurrent evolutions in the pattern of output.

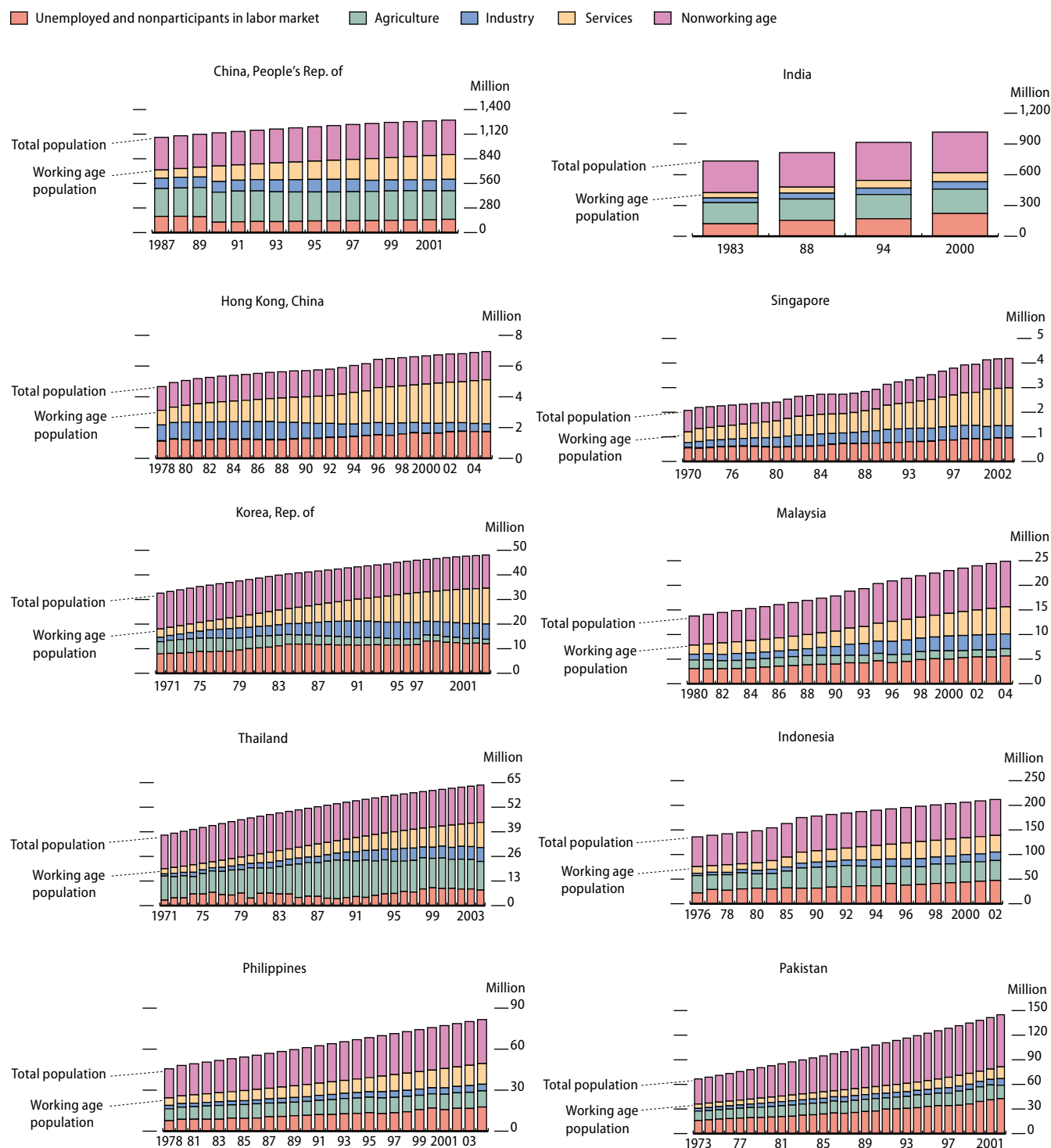
The methodology followed is similar to that of Hausmann et al. (2005b). First, growth is defined in terms of a moving average that is

3.1.8 Sector contributions to total output growth (%)				
	Agriculture	Industry	Services	Period
China, People's Rep. of	9.39	<b>49.70</b>	40.91	1970–2004
India	14.73	27.92	<b>57.35</b>	1970–2004
<b>Newly industrialized economies</b>				
Hong Kong, China	-0.01	-12.56	<b>112.56</b>	2000–2004
Korea, Rep. of	2.02	46.26	<b>51.72</b>	1970–2004
Singapore	-0.07	33.97	<b>66.10</b>	1995–2004
Taipei, China	0.67	28.92	<b>70.41</b>	1970–2004
<b>ASEAN-4</b>				
Indonesia	12.05	<b>46.68</b>	41.27	1970–2004
Malaysia	5.97	<b>51.34</b>	42.70	1970–2004
Philippines	11.54	29.74	<b>58.72</b>	1970–2004
Thailand	5.95	<b>47.40</b>	46.65	1970–2004
<b>Other Southeast Asia</b>				
Cambodia	19.04	<b>47.12</b>	33.84	1993–2004
Lao PDR	<b>39.00</b>	37.05	23.95	1989–2004
Viet Nam	14.97	<b>46.75</b>	38.28	1985–2004
<b>Other South Asia</b>				
Bangladesh	17.51	33.06	<b>49.43</b>	1980–2004
Bhutan	24.88	<b>48.18</b>	26.93	1980–2003
Nepal	34.58	25.39	<b>40.03</b>	1973–2004
Pakistan	19.21	25.59	<b>55.20</b>	1970–2004
Sri Lanka	11.53	26.88	<b>61.58</b>	1970–2004
<b>Central Asia</b>				
Armenia	-6.84	<b>72.98</b>	33.86	1990–2004
Azerbaijan	11.84	<b>84.21</b>	3.95	1992–2004
Kazakhstan	-45.06	-11.86	<b>156.92</b>	1992–2004
Kyrgyz Republic	-20.81	<b>104.36</b>	16.44	1990–2004
Mongolia	6.75	32.66	<b>60.58</b>	1981–2004
Tajikistan	11.84	<b>84.21</b>	3.95	1985–2003
Turkmenistan	-39.10	<b>185.90</b>	-46.79	1987–2001
Uzbekistan	<b>72.06</b>	3.68	24.26	1987–2004
<b>The Pacific</b>				
Fiji Islands	9.57	23.09	<b>67.34</b>	1970–2002
Samoa	-11.39	21.15	<b>90.24</b>	1994–2004
Timor-Leste	15.58	-2.37	<b>86.79</b>	1999–2004
Vanuatu	10.00	4.40	<b>85.60</b>	1979–2001

Note: Figures in bold denote the sector with the largest contribution to overall output growth.

Source: Staff estimates.

## 3.1.21 Employment and population



Note: Nonworking age refers to population below 15 and above 64.

Sources: Staff estimates based on employment data from International Labour Organization, *LABORSTA Labour Statistics Database*, downloaded 9 August 2006 and Anant et al. 2006; population data from World Bank, *World Development Indicators* online database, downloaded 13 December 2006.

[Click here for figure data](#)

calculated as the annual (exponential) growth rate over a 7-year period (i.e., from  $t+1$  to  $t+7$ ; from  $t+2$  to  $t+8$ , etc.). Using these moving averages, growth episodes are identified. Definitions of “rapid growth,” “growth acceleration,” and “sustained growth” are given in Box 3.1.8.

Table 3.1.9 identifies all cases in developing Asia of “rapid growth” and “growth accelerations” since the mid-1960s (depending on data availability). The number of episodes of rapid growth in the region has been high, a total of 302, with an average growth rate of 7.3%. The countries with the highest number of rapid growth episodes are the PRC and Singapore, with 28 each. The other NIEs and the ASEAN-4 countries (except the Philippines) have more than 20 such episodes. The number of growth accelerations is obviously much smaller, but nevertheless high, a total of 34, with the average acceleration being 6.55 percentage points. Accelerations often correspond with “take-offs” in economic growth (e.g., Other Southeast Asian countries), growth recoveries (e.g., Malaysia after its 1985–86 recession), or natural resource discoveries (e.g., Azerbaijan).

Although the fastest accelerations are seen in Azerbaijan and Tajikistan, of more than 20 percentage points, some of the very high accelerations in the Central Asian republics are really “bounces” after contractions (and the one-time events surrounding the breakup of the ex-Soviet Union). This is also the case for some Pacific islands (e.g., Kiribati,

### 3.1.8 Growth definitions

The following definitions are broadly modeled on those used by Hausmann et al. (2005b).

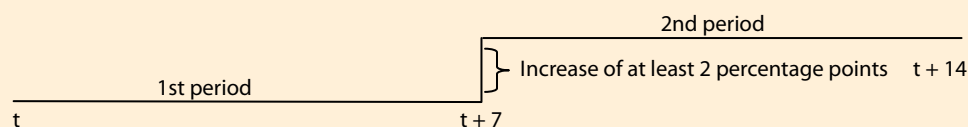
Annual growth is calculated as the exponential growth rate estimated for every rolling 7-year period. For example, a country that has level GDP data for 20 years ( $t=0,19$ ) will have 13 annual growth estimates, covering  $t$  to  $t+7$ ,  $t+2$  to  $t+8$ ,...  $t+12$  to  $t+19$ .

The exponential growth rate is calculated as:  $g = \ln(p_n/p_0)/7$

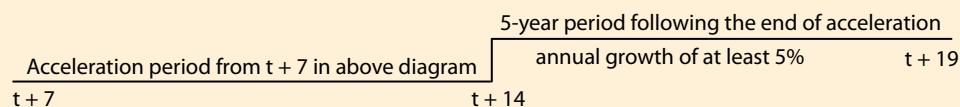
where:  $p_{t+n}$  is output at the end of the 7-year period  
 $p_0$  is output at the start of the 7-year period

Rapid growth is three consecutive average annual growth rates (as defined above) of at least 5%. For example, the sequence 5%, 6%, and 5.5% during three consecutive 7-year periods constitutes a rapid growth episode; while the sequence 4%, 15%, 9% does not.

Growth acceleration is the difference of at least 2 percentage points in the annual growth rates between two 7-year periods, where the first period is from  $t$  to  $t+7$  and the second period is from  $t+7$  to  $t+14$  (see diagram below).



Sustained growth is seen if growth satisfies two conditions: (i) a growth acceleration (as defined above); and (ii) annual growth of at least 5% during the 5-year period following the end of the acceleration.



## 3.1.9 Episodes of rapid growth and growth acceleration in developing Asia

	Period covered	Number of rapid growth episodes	Average growth during rapid growth episode (%)	Number of growth accelerations (years)	Year	Growth before acceleration (%)	Growth after acceleration (%)	Growth acceleration (percentage points)
China, People's Rep. of	1965–2004	28	8.84	2	1981	6.36	10.87	4.51
					1991	8.50	10.73	2.23
India	1965–2004	15	5.57	1	1982	3.55	5.84	2.29
<b>Newly industrialized economies</b>								
Hong Kong, China	1965–2004	21	7.52	1	1975	7.47	9.76	2.29
Korea, Rep. of	1965–2004	24	7.72	1	1984	6.44	8.75	2.31
Singapore	1965–2004	28	7.76	1	1987	6.08	9.17	3.09
Taipei, China	1970–2004	22	9.33	1	1984	8.16	12.01	3.85
<b>ASEAN-4</b>								
Indonesia	1965–2004	24	7.00	1	1988	5.24	7.85	2.61
Malaysia	1965–2004	22	7.32	1	1987	4.50	8.95	4.45
Philippines	1965–2004	8	5.62	1	1987	0.15	3.11	2.96
Thailand	1965–2004	24	7.31	1	1986	5.30	9.68	4.38
<b>Other Southeast Asia</b>								
Cambodia	1993–2004	3	6.82					
Lao PDR	1984–2004	9	6.13	1	1991	4.26	6.33	2.07
Viet Nam	1984–2004	11	7.20	1	1991	4.63	8.03	3.40
<b>South Asia</b>								
Bangladesh	1965–2004			1	1975	-0.09	3.80	3.89
Bhutan	1980–2004	13	6.59	0				
Maldives	1995–2004	1	6.96					
Nepal	1965–2004			1	1983	2.34	5.29	2.95
Pakistan	1965–2004	12	6.18	1	1977	3.53	6.66	3.13
Sri Lanka	1965–2004	8	5.19	0				
<b>Central Asia and Mongolia</b>								
Armenia	1990–2004	3	7.46	1	1997	-7.83	8.13	15.96
Azerbaijan	1990–2004	1	9.56	1	1997	-11.43	9.56	20.99
Kazakhstan	1990–2004			1	1997	-6.66	7.19	13.85
Kyrgyz Rep.	1986–2006			1	1995	-8.53	4.65	13.18
Mongolia	1981–2004	1	5.56	1	1994	-1.99	5.56	7.55
Tajikistan	1985–2004			1	1996	-16.52	6.67	23.19
Turkmenistan	1987–2001			1	1994	-4.71	4.46	9.17
Uzbekistan	1987–2004			1	1996	-2.48	4.14	6.62
<b>The Pacific</b>								
Fiji Islands	1965–2004	4	6.11	1	1988	-0.82	3.68	4.50
Kiribati	1970–2004	1	5.46	3	1980	-9.06	0.61	9.67
					1985	-9.33	1.89	11.22
					1992	1.89	6.34	4.45
Marshall Islands	1982–2004	2	7.03	1	1997	-2.33	1.40	3.73
Micronesia	1986–2004			0				
Papua New Guinea	1965–2004	5	5.91	2	1985	0.87	3.99	3.12
					1990	1.33	6.36	5.03
Samoa	1978–2004			1	1994	-0.47	4.48	4.95
Solomon Islands	1967–2004	12	6.98	1	1975	-1.02	9.51	10.53
Tonga	1981–2004			0				
Vanuatu	1979–2004			1	1990	0.81	5.32	4.51
<b>Total</b>		302		34				
<b>Average</b>			7.30					6.55

Source: Staff estimates.



Solomon Islands). Apart from these two “special cases,” PRC, Malaysia, and Thailand had growth accelerations of over 4 percentage points.

The average growth acceleration for those countries whose growth before the acceleration was positive (so eliminating Bangladesh, Central Asia, and the Pacific countries with contraction before the acceleration) is 4.28 percentage points. Most countries in developing Asia have experienced at least one instance of growth acceleration in the last few decades (Kiribati with three, and PRC and Papua New Guinea with two each). Bhutan, Micronesia, Sri Lanka, and Tonga did not have any.

Of the 24 growth accelerations for which the exercise could be undertaken, 13 were of nonsustained growth, and 11 had sustained growth. Of these 11, six (the NIEs and the PRC twice) also had rapid growth during the 7-year period preceding the growth acceleration. Information on these is shown in Table 3.1.10

3.1.10 Sustainability of growth accelerations				
Annual growth rate in the 5-year period following the end of the growth acceleration	Average growth rate in the 7-year period preceding the start of the growth acceleration			
	$g \leq 0$		$0 < g < 5$	$g \geq 5$
	Nonsustained growth $g \leq 0$	Papua New Guinea (1990), Vanuatu		
	Nonsustained growth $0 < g < 5$	Bangladesh, Fiji Islands, Kiribati (1980, 1985)	India, Kiribati (1992), Malaysia, Papua New Guinea (1985), Philippines	Indonesia, Thailand
	Sustained growth $g \geq 5$	Solomon Islands	Lao PDR, Nepal, Pakistan, Viet Nam	PRC (1981, 1991); Hong Kong, China; Korea; Singapore; Taipei, China

*Note:* The table contains information about 24 episodes of growth acceleration. The other 10 cases could not be classified according to the annual growth rate after the acceleration for lack of data (eight Central Asian republics including Mongolia; Marshall islands; and Samoa).

*Source:* Staff estimates.

Have changes in the structure of output been uniquely identified with these episodes of rapid growth, accelerating growth, or sustained growth? Clues may be provided by comparing *levels* and *changes* in the shares of output before and around these episodes. The first row of Table 3.1.11 records shares of industry, manufacturing, and services around the time of the growth episodes, and the second row, the shares immediately before the episode. The third row presents *t*-statistics, where the null is that the shares in both periods are equal.

The results of Table 3.1.11 show that episodes of rapid growth are preceded by rising industry, manufacturing, and services shares in aggregate output. The share of industry rises by 1.3 percentage points, that of services by about 1 percentage point, and that of manufacturing by 0.5 percentage points. Though modest, these differences are statistically significant. But there is no readily detectable link between growth accelerations and changes in output shares. However, sustained growth is associated with an increase in the share of services, and not with changes in either industry or manufacturing shares.

It is difficult to draw strong conclusions from these findings. As both industry and services shares rise during episodes of rapid growth, this implies that agriculture shares fall prior to rapid growth episodes

## 3.1.11 Sector shares, rapid growth, growth accelerations, and sustained growth

	Industry			Manufacturing			Services		
	Rapid growth	Growth accelerations	Sustained growth episodes	Rapid growth	Growth accelerations	Sustained growth episodes	Rapid growth	Growth accelerations	Sustained growth episodes
$\bar{S}_t^m$ (around)	34.57	29.29	33.20	21.72	17.45	24.34	43.21	43.18	37.26
$\bar{S}_s^m$ (before)	33.27	29.25	32.94	21.23	18.65	24.44	42.26	42.61	35.82
t-stat	7.93	-0.02	0.61	3.91	-1.46	-0.12	7.02	0.43	2.39
Degrees of freedom	246	26	6	252	24	7	246	26	6
Is difference statistically significant?	YES	NO	NO	YES	NO	NO	YES	NO	YES

Note:  $S_t^m$  = share of sector value-added at time  $t$ .

$$\text{Average share around episode: } \bar{S}_t^m = \frac{S_{t-1}^m + S_t^m + S_{t+1}^m}{3}$$

$$\text{Average share before episode: } \bar{S}_s^m = \frac{S_{t-1}^m + S_{t-2}^m + S_{t-3}^m + S_{t-4}^m + S_{t-5}^m}{5}$$

$$\text{Test: } d = \bar{S}_t^m - \bar{S}_s^m; H_0: d = 0 \Leftrightarrow \bar{S}_t^m = \bar{S}_s^m$$

The paired t-test has N-1 degrees of freedom.

Source: Staff estimates.

(confirming the relationship shown in Figure 3.1.1 above). The relationship between services and sustained growth probably reflects the fact that the share of services in output expanded over a wide range of per capita incomes in the NIEs during a period in which they also grew quickly.

Another way to dissect the data is to split observations into episodes: rapid growth and nonrapid growth; episodes of growth accelerations and no growth accelerations; and episodes of sustained growth and growth that was not sustained. These episodes can then be cross-tabulated with changes in the shares of industry, manufacturing, and services output. So, for example, the number of episodes of rapid growth with increasing industry shares can be compared with the number of rapid episodes where there was no increase in industry shares. Likewise, episodes in which growth was not rapid can also be split into those cases associated with expansion of industry shares and with nonexpansion of industry shares.

Table 3.1.12 provides a breakdown for episodes of rapid and nonrapid growth. In each cell, two numbers are presented. The top number is the number of counts for events identified in the corresponding row and column. So, for example, there were 73 cases of rapid growth where there was no preceding increase in industry's share in output. But there were also 174 cases of rapid growth where industry's share did rise. The numbers in italics at the bottom of each cell refer to the number of observations that would be predicted if rapid growth and changes in industry shares were (statistically) independent of each other. So, randomly, there would be 96.5 expected occurrences of rapid growth and no increase in industry's share.

## 3.1.12 Rapid growth and changes in sector shares

	Industry			Manufacturing			Services		
	No increase in share	Increase in share	Total number of cases	No increase in share	Increase in share	Total number of cases	No increase in share	Increase in share	Total number of cases
Nonrapid growth	100 76.5	96 119.5	196	96 82.7	101 114.3	197	44 52.2	152 143.8	196
Rapid growth	73 96.5	174 150.5	247	93 106.3	160 146.7	253	74 65.8	173 181.2	247
Total number of cases	173	270	443	189	261	450	118	325	443
Chi-square test statistic	$\chi^2 = 21.15$			$\chi^2 = 6.51$			$\chi^2 = 3.15$		

Note: The test for independence between rows and columns is a chi-square with one degree of freedom. The critical value is 3.841.

Source: Staff estimates.

By comparing the number of actual with expected observations it is possible to test whether changes in sector shares and growth are independent or not. In the case of rapid growth events, the chi-square rejects the null hypothesis of independence for industry and manufacturing output shares. Moreover, by comparing the cell counts with their expected values, it can be confirmed that rejection occurs because there is a positive association between an increase in industry's (manufacturing's) share and rapid growth. In the case of services, however, the null hypothesis cannot be rejected, suggesting that there is no systematic relationship between increases in the share of services and subsequent episodes of rapid growth.

Similar tests conducted on growth accelerations and episodes of sustained growth (for which sample sizes are much smaller) failed to reject the null of non-association for changes in industry, manufacturing, and services shares.

Finally, a probit regression was estimated. In this equation, the dependent variable is a dummy variable that takes the value of one at the time of rapid growth and zero otherwise. Dependent variables were changes in manufacturing (or industry) and services shares. The results indicate that a rise in the manufacturing share increased the probability of rapid growth by 3.7%. (The coefficient of services is negative but insignificant.)

The data show that expansion of industrial and manufacturing output shares is also positively associated with growth. The complexity and sophistication of a country's export basket, which is likely to be positively influenced by a heavy weight for manufacturing goods, is a statistically significant predictor of subsequent growth. This analysis leans to the conclusion that rapid output growth is more closely tied to expanding industry and manufacturing shares than to services shares. However, growth accelerations and sustained growth are not systematically correlated with changes in output shares at all.

The role of services would appear to have been more complicated. Services shares have risen in both slow- and fast-growing economies. Successful episodes of industrialization are likely to have been supported by the parallel development of efficient services infrastructure (see below). For slow-growing countries, services may have played an important role in mopping up surplus labor released from agriculture.

What roles might be played by industry and services in moving ahead?

### Industry

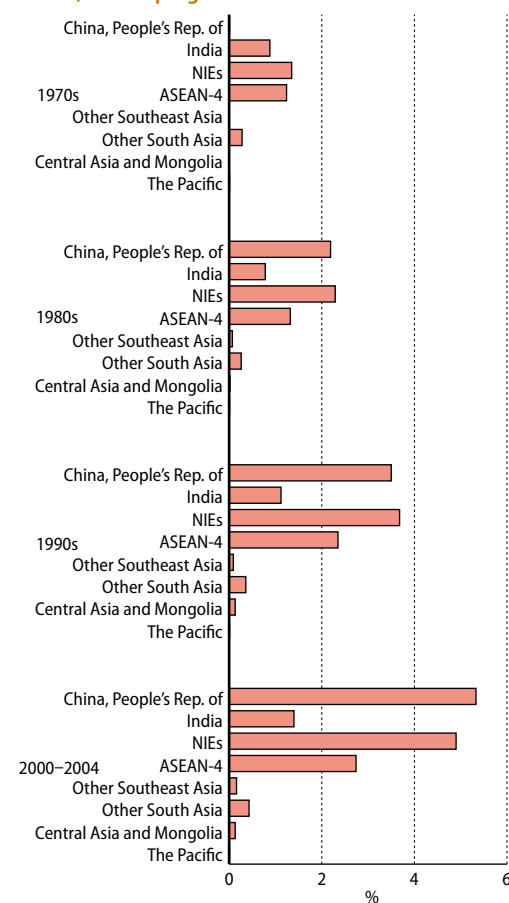
Developing Asia's success in industrialization—in particular the development of a vibrant manufacturing sector that competes on a global scale—is unrivalled. Figure 3.1.22 illustrates vividly how developing Asia's manufacturing industry has ascended in global markets from the 1970s when its share was still miniscule. The PRC, NIEs, and ASEAN-4 in particular have seen significant growth. Other Southeast Asian economies are now just beginning to register on the global scene. Fears that the PRC would close opportunities for other countries have proven unfounded. Instead, its emergence has helped forge new patterns of production and specialization with East and Southeast Asia that build on complementarities, and a refined division of tasks (see the chapter, *Trade and structural change in East and Southeast Asia*, in Part 1). Engaging in these complex production networks requires that countries continue to look outward but build internal capabilities that will enable repositioning and rebalancing as circumstances change. Different paths are possible. Some countries may focus on the production of intermediate goods, as in Singapore, or on the development and branding of final goods, which is more akin to what Korea has done.

But not all countries have fared equally well. In South Asia, India's emergence in global manufacturing has been sedate, and it has lost ground to the NIEs and ASEAN-4 and long since been overtaken by the PRC. More generally, growth of industry and manufacturing in South Asia has been listless when measured on a global scale. Within ASEAN, the Philippines has also become bogged down, and Indonesia has lost much of its momentum following the Asian crisis.

The development of a vibrant industrial and manufacturing base is likely to be an essential ingredient in development strategies for some time to come. As before, success will pivot on acquiring those capabilities needed for continuous upgrading. Indeed, the premium on the self-adapting capabilities may increase if the life cycle of some activities is shortened, either as a result of more intensive competition in international markets, or an acceleration of technological progress. Protectionism presents a potent risk as scale economies, diversity, and technological upgrading depend critically on big markets.

Drawing on past experience, a stylized trajectory for industrialization is still likely to involve: first, establishing a narrow base in a labor-intensive manufacturing industry, such as garments or footwear; then, diversifying into new and gradually more sophisticated activities; before eventually specializing in areas where a competitive advantage has been built and consolidated. What precisely a country will produce at any particular point in time, and how it will migrate to new activities and change its basket of manufactured goods and exports, seem to depend on country-specific and idiosyncratic factors (Hausmann et al. 2005a). There is striking evidence that participating in export markets that are expanding quickly on a global scale and in which the rich industrialized countries are also participating can sustain growth (see e.g., *Trade and*

3.1.22 Share of global manufacturing value added, developing Asia



Source: World Bank, *World Development Indicators* online database, downloaded 4 August 2006.

[Click here for figure data](#)

### 3.1.9 Stunted industrialization in India and the Philippines

#### India

For its size and income levels, India's manufacturing base is small by international norms. While India adopted ambitious industrialization plans after independence, and the country indeed went through a period of rapid industrialization, the process stalled. Although the signs have recently been encouraging, it is yet to be seen whether recent gains in industrial output can be sustained.

A number of explanations for the comparatively low share of industry in India's aggregate output have been advanced. One explanation focuses on heavy regulatory burdens imposed by elaborate administrative and regulatory machinery. The "reservation system" was introduced in 1967, reserving 47 items for production by the small-scale sector. This number increased in time and reached its peak in 1984, affecting a total of 873 items.

The rationale for the protection of small enterprises was their large contribution to manufacturing output and employment. However, the logic of this policy has come progressively under serious questioning. The relatively high number of items, it has been argued, has hobbled exploitation of economies of scale that are crucial for growth of industry and manufacturing. Since 1984, the number has been progressively reduced and as of January 2007 it affects 239 items.

Extensive labor laws, in particular the Industrial Disputes Act, make it very difficult to lay off workers in large firms, even when losses are incurred or demand declines, or to employ short-term contract labor. This discourages new hires by employers, biases technology toward capital intensity, and inhibits entry and exit of firms. Even if some firms can "get round" these regulations, they are likely to deter investment by others. Large-scale and foreign firms, which may also have to deal with strict codes in their own countries, may be placed at a disadvantage.

While there is ample evidence that is consistent with the idea that heavy regulation has retarded Indian industrialization and growth (for example, Besley and Burgess 2004, Kochhar et al. 2006), some commentators have suggested that regulations may matter less in practice than on paper (Bardhan 2006, Roy 2004, Deshpande 2004). Nevertheless, detailed micro evidence such the World Bank's *Doing Business* survey suggests that firms in India face holdups, as well as other blockages that add to costs.

But no one would claim that regulation alone is to blame. There are other handicaps. India suffers from financing constraints for small firms. As small firms often incubate jobs, this harms employment growth. India is also beset by acute infrastructure deficiencies. Roads, power, ports, and irrigation are undersupplied and in poor condition. This raises costs, reduces reliability of supply, and lengthens the time it takes to get goods from the factory door to the market, whether in India, or abroad. *Asian Development Outlook 2006* highlighted how trade costs place Indian industry at a severe disadvantage compared to East and Southeast Asia.

Many of the factors that hobble industry do not seem to constrain services to the same extent. In India, services activity is not nearly so heavily regulated as industry and is outside the net of the reservation system. Neither is services activity as heavily dependent on infrastructure as industry. Indeed, some services can be sent to customers at a touch of a button without the need for good roads or ports (though power of course is needed).

#### Philippines

The Philippines, like India, has a disappointing track record on industry. Although the share of industry in aggregate output is roughly what would be predicted by its size and per capita income, industry shares are far below those in other economies of East and Southeast Asia (outside Hong Kong, China), where industry and manufacturing seem to have played such an important role in economic modernization. The Philippines has trailed far behind. What explains this?

In the 1950s, a sophisticated manufacturing sector emerged in the Philippines, supported by protection and a well-developed human capital base (Hill 2003). The problems for manufacturing began subsequently. A combination of factors appear to have played a part, including a period of costly and badly directed interventions, a tendency to focus on protecting rents rather than improving efficiency, poor physical infrastructure, and, to a lesser extent than in India, some problems with labor market regulation. High levels of corruption, disputed property rights, and difficulties with contract enforcement have also played their part (ADB 2005b). These facets of everyday economic life seem to reflect deeply embedded institutional difficulties, including a high concentration of wealth and a political system based on patron-client relations (World Bank 2005, p.3).

*structural change in East and Southeast Asia*, in Part 1, and Hausmann et al. 2005a). But policy has an important role to play in at least two ways: removing blockages to doing business and investment, and incubating



conditions in which the private sector can experiment and learn what it can do profitably. Box 3.1.9 above sets out some blockages that have hindered industrialization in India and the Philippines in the past. Prospects will depend on easing these constraints not necessarily all at one time, but in a manageable sequence in which the largest obstacles are identified and tackled first (Hausmann et al. 2005a).

Of course, experiences and opportunities differ widely. In Central Asia, reversals in industrialization are rooted in severe distortions created by pre-independence, Soviet central planning. What presents as “deindustrialization” in the statistics, reflects the correction of earlier distortions (Fardmanesh and Tan 2005). The flow of workers from feeble state-owned industries into agriculture and newer activities, particularly natural resource exploitation, was needed to stop economic and financial hemorrhaging. This restructuring process has been painful and protracted and is still ongoing in most Central Asian economies. Resources and services linked to natural resource industries have been a bright spot. But Central Asia has struggled to create jobs (Box 3.1.10).

The Pacific islands’ circumstances are special. Most are microeconomies that face the twin handicaps of remoteness and small size. Only Fiji Islands, Papua New Guinea and, possibly, Timor-Leste, have population bases that can reasonably support anything more than a narrow set of economic activities. But tourism and niche sectors, such as mineral water or high-end garments, can help in some places, like Fiji Islands. Careful development and husbanding of natural resources,

### 3.1.10 Structural corrections and jobs in Central Asia

In the post-Soviet era, industry has contracted and has not been a source of new jobs in Central Asia. Industrial activity and related service activities have become increasingly focused on natural resource subsectors, which are typically characterized by low labor intensity.

Manufacturing activity has been virtually stagnant. Industry’s poor record on formal employment also reflects a heavy regulatory burden that has led to greater informality. Many new enterprises do not register formally, and some existing enterprises cross over from the formal to the informal economy.

This leads to underreporting of formal employment. Indeed, this phenomenon fits in with survey findings that new private enterprises find the business environment more difficult than state or privatized firms, particularly with regard to regulations, institutions, property rights, and taxation.

Circumstances in agriculture and services have moved more quickly. Land reforms have accelerated the restructuring of collective farms and a shift toward private and household farms. In most places, the ascendancy of private and household farming, as well as greater freedom in farm decision making, have been accompanied by a

shift to new agricultural activities that focus on higher valued-added production. In services, new activities have mushroomed, particularly in retail trade, catering to consumers’ pent-up demand. Services have become an important employer.

The combined impact of these structural changes on net job creation during the transition has been negative, according to the World Bank (2005), especially in the formal sector. Many workers still hold low-productivity jobs in unstructured and unprofitable enterprises in the informal sector, as well as in subsistence agriculture.

Labor demand, which plummeted with the breakup of the Soviet Union, remains anemic. Workers who cannot find jobs have responded by moving into agriculture and into services, with part of the labor force slipping into informal activity.

The challenge for policy makers in Central Asia is to create productive employment in the formal economy by accelerating industrial restructuring of state and privatized enterprises, forging stronger linkages between sectors (for example, private agro-industries and agro-services), and improving the business environment for new enterprises.

including marine resources, may create a basis for improved livelihoods, especially in those islands that are too remote to build a significant tourist industry. If population growth rates do not fall, outmigration is also likely to remain an important safety valve. Perhaps the major blockage in the Pacific are ineffective and often parasitical public sectors. Redirecting resources, including remittance income, in a way that would help build a more self-reliant private sector would be a major step forward, and would help create the jobs that young people need. Tapping into the resourcefulness and experience of citizens living overseas might also help revitalize economies.

Other small countries, like Mongolia and Nepal, wrestle with their own challenges. For these countries too, large-scale industrialization is not a realistic option. But minerals, agriculture, and agroprocessing present Mongolia with some options. Nepal's unique attractions as a tourist destination, as well as its proximity to India's large market, also create opportunities.

But what is the future role of services? Do countries like India and the Philippines have to worry about industry? Can they not bypass industry and anchor their future growth on services?

### Services

Certainly, one of the main features of developing Asia's past has been the rise of services, whether measured in terms of output or employment. This is true across the board, irrespective of initial starting points. Possibly, the rising share of services in output is exaggerated by relative price changes that favor services as incomes grow—Kravis et al. (1983) observed that when measured in constant prices, output shares of services do not increase—but there can be no doubt about the vital role of services as a provider of jobs.

For quite some time, the expansion of services in most of developing Asia has been centered on low-productivity activities. For example, at low income levels, "old services" (Katouzian 1970), such as domestic service (for example, servants and cooks), employ large numbers. But as incomes rise, these types of services gradually fade and services activity becomes more diversified. In the process, workers find different, more productive, and better remunerated jobs. But labor productivity gaps between the services sector in developing Asia and OECD suggest that changes in the services mix still have a long way to go. The potential of these changes to fire growth should not be underestimated.

There are vital complementarities between industrialization and services growth. If services fail to grow in the right way this in itself can constrain industrialization. A wide range of services grows rapidly as industry and manufacturing expand. These include activities like banking, finance, transportation, and wholesale and retail trade. Industry benefits from these and other services through at least three channels (Eswaran and Kotwal 2002). First, the appearance and growth of modern services permits even greater task specialization within industry and an unbundling (or "splintering," per Bhagwati 1984) of noncore activities (like market research and accounting services) that used to be carried out in-house. By focusing on core competencies, industrial and manufacturing productivity is increased.

Second, the appearance and expansion of a vibrant services sector lower the costs of industrial production, both by creating greater variety and competition and by allowing exploitation of economies of scale in provision of services. Indeed, Wirtz (2000) anticipates a future in which there will be very few “true” production or manufacturing jobs left.

Third, as industry advances, it creates a demand for intangible and knowledge services and requires access to a pool of scientific, technical, and managerial workers. This stimulates the development of specialized services in education and other areas, such as engineering design and management consultancy.

But this picture of a mutually supportive expansion of industry and services is not being seen in all countries. In economies that do not successfully industrialize, labor force data suggest that low-productivity services are acting almost as a residual sector, or the reservoir that absorbs surplus labor (see the chapter, *Education and structural change in four Asian countries*, in Part 3). For example in the Philippines, the number of domestic servants in 2004 was about 1,036,000, or about 11.6% of total female nonagricultural employment, up from 602,000, or 10.3% of the labor force in 1991. Trends like these, and similar ones in India are symptomatic of deeper structural problems for the creation of more-productive jobs.

But ironically, both India and the Philippines also offer successful examples of the development of higher-productivity service activities, including those in the business process outsourcing (BPO) sector. Some commentators have claimed that this success is the flip-side of failed industrialization. Box 3.1.11 describes the kinds of business process activities that are being outsourced in global markets.

To understand what the BPO sector (including IT outsourcing) offers from a broad development perspective an important starting point is to actually measure it. Box 3.1.12 presents some facts about the IT and BPO sectors of India and the Philippines.

Given past success, what potential does India’s BPO sector hold for the future? Can India leapfrog industrialization? If, as some believe, task fragmentation has barely got under way, and global market potential is as large as some conjecture, market size seems unlikely to offer any constraints. But constraints seem much more likely to surface on the supply side. Most immediately, the number of employable workers with appropriate skills (professional and linguistic) is limited, as many firms are now finding out (Rai 2006; *New York Times*, 16 February 2006), and salaries for highly skilled graduates are shooting up. Media reports also suggest that, outside the metropolitan areas of India, service export firms are finding it difficult to find the workers they need.

Indeed, there is a risk that India cannot meet the growing demand for BPO specialists because of the low quality of education of many of its universities. Only 10–20% of new graduates seem to have the requisite training for international business activity (Schaaf 2005). But it is not just a question of fixing the tertiary education system, the real problems lie much deeper—namely, in a woefully inadequate primary schooling system that fails to equip students with the basic skill set that they need so as to benefit from a socially relevant education. Clearly, reforming India’s school system will take time.

### 3.1.11 Types of business process outsourcing services

The most common services provided by firms in business process outsourcing are as follows:

**Call centers.** Offer inbound and outbound voice operation services for sales, customer service, technical support, and others.

**Back office.** Services related to finance and accounting (e.g., bookkeeping, accounts maintenance, claims processing, and asset management) and human resource administration (e.g., payroll processing, benefits administration, and human-resources data management).

**Data transcription.** Provision of transcription services for interpreting oral dictation of, among others, health professionals, dictations during legal proceedings, and other data-encoding services.

**Animation.** Process of giving the illusion of movement to cinematographic drawings, models, or inanimate objects in two or three dimensions (2D, 3D).

**Software development.** Covers analysis and design, prototyping, programming and testing, customization, reengineering and conversion, installation and maintenance, education and training of systems software, “middleware”, and applications software.

**Engineering development.** Includes engineering design for civil works, building and building components, shipbuilding, and electronics.

**Digital content.** Creation of products that are available in digital form, such as music, information, and images that are available for download or distribution on electronic media.

Sources: DTI (2006); Locsin (2006); The Computer Language Company Inc. (2006).

### 3.1.12 Information technology and business process outsourcing sectors of India and the Philippines

Today, India has about 46% of the global market for business process outsourcing (BPO) services (Kaka et al. 2006) and the sector employs about 700,000 people in the information technology (IT) and BPO segments (out of a total labor force of about 460 million). The outsourcing BPO sector produced revenues of around \$17 billion for India in 2005 (and \$36 billion adding IT-based services, software and hardware not exported, representing over a fifth of India's total exports of goods and services and about 4.5% of GDP). McKinsey and NASSCOM forecast that by 2010, IT/BPO exports will reach \$60 billion, or 40% of all Indian exports (*The Economist*, 3 June 2006).

India has profited from being a pioneer in the industry. In the early 1990s, companies such as Wipro, Infosys, TCS, and HCL emerged to provide low-cost business solutions for US-based companies, which were then constrained by the IT resource shortage occurring during the early period of the Internet boom (Schaaf 2005). The sector clearly is important from an output and foreign exchange perspective, but employs less than 0.25% of the Indian labor force.

The emergence of the sector in India appears to have had elements that were both spontaneous and idiosyncratic, and others that reflected conscious policy actions. Pack and Sagi (2006) observe that the software sector in India developed out of a group of highly educated English-speaking students who were trained in elite Indian institutes of technology, and the entrepreneurial abilities of a group of residents who partnered with the Indian expatriate community in Silicon Valley.

The departure of IBM from India in 1977 gave impetus to the development of a local software sector, and subsequently the "year 2000" problem and the euro zone's move to a single currency provided substantial business in adapting existing computer systems.

The Indian software segment benefited from all these idiosyncratic events. Having gained experience and a reputation for reliability, the industry has been able to build momentum. Others observe that the sector benefited

from the formation of the Software Technology Parks of India in 1990, streamlined procedures, extension services, and fiscal advantages (NeoIT 2004).

In 2005, the Philippine BPO sector generated \$2.4 billion in total revenues, about 2.4% of total GDP (from about 0.075% in 2000) and employed a total of 163,000 workers (out of a total labor force of about 36 million). As of the first quarter of 2006, at least 600 firms were considered part of the BPO industry.

The biggest activity is the call center industry, worth \$1.8 billion in revenues in 2005 (75% of the total), which grew from four centers in 2000 to 114 as of the first quarter of 2006. In 2005, call centers employed 112,000 workers, equivalent to nearly 70% of total employment in the BPO sector.

After call centers, the next biggest BPO subsectors in terms of total revenues and employment (2005) are software development and back-office operations. Software development generated \$204 million and provided direct employment to 12,000 workers; back-office operations accounted for 14% of total BPO employment.

Government support for the BPO industry is quite evident. Coinciding with the surge of the BPO industry, in 2001 the Government formed the Information Technology and E-Commerce Council to serve as the highest policy-making body. It provides policy directions on information and communications technology. In 2005, the Government launched the Philippine Cyberservices Corridor stretching over 600 miles, which is said to be capable of providing a variety of BPO services.

The Government is also allocating P26 billion for cyber corridor projects. In May 2006, it announced that it had earmarked about half of the P500 million "Training for Work Scholarship Program" for the IT industry to provide educational grants for training BPO applicants. The program issues training certificates to "near-hires," i.e., applicants whose qualifications fall just slightly below a hiring company's skill requirements.

Source: Magtibay-Ramos et al. (2007).

Other reasons, too, suggest limits to the difference that the BPO sector can make to India's development. The benefits of the BPO sector are certainly welcome: well-paid jobs, vital fiscal revenues, and balance-of-payments support are enormously helpful. Through these indirect channels as well, the BPO sector may provide some of the resources needed for infrastructure and other necessary investments. They also help broaden a middle-class income base that allows activities serving these markets to germinate and grow.

Yet in a country where the majority of the population still depends on agriculture for their livelihoods, high-productivity service activities are

unlikely to make much of an impression. The workers who benefit from BPO jobs are part of a small, educated elite, who have few immediate connections to India's urban and rural poor. To address the needs of the masses, India needs, on the one hand, more productive agriculture, and, on the other, job creation both in labor-intensive industry and in lower-productivity services.

A similar story emerges from a closer look at the Philippines BPO sector. They bring tangible and welcome benefits, but their positive features need to be kept in perspective. It is highly unlikely that the advent of BPO services signals a paradigm shift that will put the Philippine economy on a higher trajectory.

By 2010, it is estimated that the Philippines BPO sector could create between 500,000–600,000 jobs (Magtibay-Ramos et al. 2007). As the sector pays comparatively well, and wages are largely consumed, possibly another 300,000 jobs in retail trade and in other areas could be created by BPO activities. As the sector is largely geared to exports, it also generates significant foreign exchange earnings.

Drilling deeper, and looking at the structure of the sector, 70% of the workers in BPO activities are employed in call centers, which is the least knowledge-intensive part of the industry. Just 13% of total revenues are IT-related, contrasting with India's 70%. While these features hint at untapped opportunities for progression into higher-end, more productive segments of the BPO industry, realizing them will depend critically on a supply of workers with quite different skills from those currently employed in call centers. A significant finding of the 2006 Workforce Development Summit held in March 2006, in Manila is that there are mismatches between labor supply and industrial demand. Most applicants for jobs do not have the skills required for the positions available. Communication skills, proficiency in English, computer literacy, and analytical skills are lacking. These gaps can be closed, but this will take time. (See also the chapter *Education and structural change in four Asian countries*.)

Given fast labor-force growth, and an industry sector with a shrinking share of output, low investment rates, and a poor record in job creation, expectations about the broader impact of BPO services on development in the Philippines need to be kept realistic. Addressing constraints that hobble industry and manufacturing is likely to have larger and wider benefits.

## Summary

"Walking on two legs," with both industry and services moving forward, has been an important element of sustained growth in the past, and there is no reason to believe that the future will be materially different. As economies grow, industry and services mutually support one another. Where industry struggles, services appear to have played an important role in absorbing workers released from agriculture, but these services jobs have largely been in low-productivity areas.

The reasons for retarded industrialization vary from place to place, and over time. India and the Philippines illustrate some of the factors that may be involved. Poor physical infrastructure appears to be one element in common. Regulatory and institutional failures are another.



But blockages like these are not immovable, and India's recent progress in industry and manufacturing is, hopefully, durable. Barriers and the strategies for breaking them down will depend on country context.

Asia has long been a services economy, and services are likely to continue to play an important role in the future. The largest productivity gap is in services and, if it could be closed more quickly, this would give a fillip to growth. But this is likely to require a profound change in the mix of services output and employment and a shift toward higher-productivity activities.

Enclaves of high-productivity services have been germinating in the IT and BPO sectors, and these bring tangible and valuable benefits. However, it seems unlikely that these activities can support the creation of jobs in highly populous countries that, viewed through an employment lens, are still predominantly agrarian. There are few trickle-down effects. Besides, there are acute constraints in the supply of workers with the right kinds of skills.

In the concluding section, some general principles to guide policies are set out.

## Incubating change and growth

This chapter began with the observation that growth occurs through change. The evidence presented in subsequent sections has validated this perspective. What economies look like is not a consequence of autonomous and self-regulating processes of growth. Rather, growth materializes from the “granular” details of what countries produce and how they produce. The quest to identify “leading sectors” is perhaps pointless. Activities across an economy interact with and adapt to each other in complex ways.

Opportunities for productivity growth and catch-up can occur virtually anywhere. However, historically, and certainly in developing Asia, the most fertile areas have been in industry and manufacturing. All countries in developing Asia that are closing the productivity gap with OECD have three achievements in common: they have raised the share of industrial output; diversified their manufacturing base; and upgraded, both in terms of technology and the complexity of the export basket they produce. But services, too, have played a critical role. In countries that are moving ahead, services and industry have supported one another. Where industrialization has struggled, services have been an important buffer by providing low-productivity jobs for workers released from agriculture.

It is perilous to predict the future, and it may not be like the past. Nevertheless, to the extent that growth occurs through imitation and catch-up, the potential for future growth is still enormous. Baumol’s “structural bonus” is in large measure still to come: there are hundreds of millions of agricultural workers who will move to more productive activities in industry and services. Raising agricultural productivity will ease this transition.

Services also provide opportunities for growth, but claims by some commentators that countries can safely bypass industry and leap straight into highly productive tradable services appear exaggerated. Yes, there appear almost limitless opportunities for task fragmentation and growth of trade in services tasks on a global scale. And there is no question that these new activities provide tangible benefits. But in countries like India and the Philippines, binding supply constraints now seem to be surfacing and the connectivity between high-productivity, tradable services, and the remainder of the economy seems too weak to generate trickle-down growth and the jobs that benefit the poor. There is also much in the experience of India that appears fortuitous and idiosyncratic and that may not be easy to imitate elsewhere. For those with limited education and skills, it is the creation of low- and medium-productivity jobs in industry and in services that will make the difference.

So what do countries need to do to develop the systems that can instigate and adapt to the changes that are ultimately required to grow and create jobs? While advice and approaches must be sensitive to country context, some organizing principles suggest themselves. These may guide design and practice, but do not constitute an agenda or blanket solutions.

First, mechanisms to mobilize savings and translate them into high rates of investment are needed. High investment spending is required to build, create variety in, and upgrade the activities, products, and services that mold an economy’s look. As experimentation and trial and error are

important parts of these processes, growth will inevitably entail waste as well as creation, and both will expend resources.

Second, high levels of investment are needed to provide the physical infrastructure that supports business and improvements in the quality of life. Good infrastructure allows firms to grow and to operate on a scale that allows efficiencies to be reaped. Developing Asia's experience suggests that industry prospers where physical infrastructure supports its expansion; but where infrastructure services are lacking, industry struggles and can get left behind. Infrastructure connects and expands markets and provides services vital for building an educated and healthy labor force. Services may do better in an environment where infrastructure is sparse, but services on their own are unlikely to support sustained rapid growth.

Third, a versatile labor force equipped with relevant skills is also part of the recipe. Institutions that can mediate tensions and provide insurance against risks are an important part of the fabric of countries that sustain growth and that have resilience to shocks. Among other things, markets need to be complemented by affordable social protection programs and opportunities for new learning. Taxing rents to pay for these services is one way of balancing growth and equity.

Fourth, as it is business that creates wealth, impediments to business shrink (potential) wealth. A large library of micro evidence and data is now available, to identify what adds to business costs and what gets in the way of business expansion. A predictable and stable policy environment, secure property rights (including intellectual property rights), consistency in contract enforcement, regulation that balances public and private interests, a level playing field, and efficient administrative processes are all part of the "social technologies" (Nelson 2005) that lubricate business. But in many countries, too much grit remains in the cogs to get the machinery working smoothly.

Fifth, imitation is an important part of success. The celebrated "flying geese" model of development is based on leader-follower principles. But to be a successful follower, countries have to be receptive to ideas, to new arrangements and designs, and to new ways of organizing and producing. For example, the presence of multinational companies in East and Southeast Asia has provided an important catalyst for change that can be seen in patterns of production and trade. Openness to trade does more than prize open a little more consumer surplus—it also provides access to complex technologies and products, adds to diversity, and can be a stimulus for the creation of new activities through multinational and other forms of investment.

Embedded within these broad principles are many possible operational approaches. Yet the idea that change and structure are instrumental to growth raises the question of whether it is possible to agitate the pace and direction of development at a more refined (or granular) level. After all, "markets" do not exist independently of an economy: they are built or developed as other elements of the institutional fabric evolve. There may be little scope for "big pushes" (Easterly 2005), but many small nudges may still have a very useful role.

Rodrik (2004) observes that the sort of diversification that has presented itself in the data for developing Asia, and that appears to be

important for growth, cannot occur if markets alone are left to incubate new activities. Markets do not create adequate demand for innovation for two main reasons: there can be no information about activities that do not yet exist; and markets cannot profitably supply the upstream and downstream “infrastructure” ahead of the birth of the new activities that will ultimately provide revenue streams.

The solution to these failures, the argument runs, lies in strategic private-public sector collaboration and support to *new* activities, products, or services (but not to established activities or to broader sectors). In this relationship, the government is not the leader and the private sector is not the follower—both are partners in gathering information and finding solutions that work. The operational processes that promote learning and that nurture innovation and change might contain many different elements, and will have to be learned and modified as circumstances change. But success will rest on designs that reward performance, minimize risks of moral hazard, build on capabilities, balance public sector autonomy with private sector self-interest, and abandon failed experiments.

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# Education and structural change in four Asian countries

## Introduction

Education is widely acknowledged to facilitate improvements in health outcomes, family planning, gender equality, and political empowerment. And since employers usually reward education well, access to decent education is also critical for ensuring equality of opportunity.

Rather than revisiting these issues (World Bank 2006 surveys them well), this chapter of *Asian Development Outlook 2007 (ADO 2007)* examines the role of education as a contributor to change in the structure of the macroeconomy. Education can facilitate economic transformation in at least two ways. First, education can be an important input into production, raising worker productivity in any given activity. Thus, higher levels of education should make it easier for an economy to engage in new activities. Second, it can act as a catalyst to change—empowering entrepreneurs to develop or adopt new technologies, or to introduce new economic activities.

This chapter looks at the first of these two roles of education in facilitating change. It uses large microeconomic datasets (see *Bibliography and References*) designed to capture the aggregate employment structure from four countries—India, Indonesia, Philippines, and Thailand. It documents what workers of different education levels do for a living, what they are paid for doing it, and how these have changed over the past decade or so. One object of the enquiry is to establish whether the numbers of workers recently trained in each country's schools and colleges are adequate to meet the demands of a changing economy. Another objective is to see whether rising education levels in these countries can be linked to the changing structure of employment, trade liberalization, and technological changes. A third is to see whether the more educated countries transformed their employment structures faster.

The results show that the four countries are creating educated workers faster than they are creating jobs in the sectors that historically hired them. This may be a positive development if countries have managed with too little educated labor in the past. But, as an empirical fact, it is leading to rising education levels across the board, including in some sectors and jobs that do not pay a premium for education, that cannot be required to compete with foreign workers, or that have not seen big changes in technology. As a consequence of this (and of historical conditions), in every job examined, education levels rank the same way across the four countries: Filipino workers are always the most educated, followed by Indonesians, Thais, and then Indians. These results suggest that in many

situations, education is being acquired for reasons independent of the “requirements” of the jobs currently available.

Generalizing a little across the four countries, the economywide wage returns to basic education (the percentage increase in wages associated with completing an extra year of schooling) have fallen in every country at almost every level of the primary and secondary school system. This is, of course, consistent with the increase in enrollment and graduation rates over time. In contrast, and despite a growing supply of college-educated workers, the returns to tertiary education are rising. This implies a polarizing wage distribution. Worryingly, with the returns to basic education falling, the power of existing basic education systems to combat wage inequality has been reduced.

The results suggest that these shifts in returns are rooted in the emerging pattern of employment—a point reinforced by the analysis in the chapter *Growth amid change*, in Part 3 of *ADO 2007*. While the output of the much vaunted “knowledge economy” steams ahead (particularly in India), the employment shares of these nontraditional services are growing slowly, if at all, and from a low base. Thus the bulk of newly educated workers continue to find employment in traditional services, agriculture, construction, and where possible, manufacturing. Such workers are increasingly unemployed as well, and with greater frequency at higher education levels.

Unfortunately, the returns to basic education in agriculture (which outside the Philippines employs the majority of workers) and industry are generally only modest. In fact the returns to education in industry have fallen in all four countries, in some cases to very low levels. *Growth amid change* argues that industrialization is a prerequisite for growth that cannot be bypassed. The results from the current chapter suggest that industrial expansion is not being held back by a limited supply of basic education. On a more positive note, the returns to education in the aggregate services sector remain high.

Generalization, however, is fraught with difficulty, as some trends vary by country. The supply of secondary-educated workers is increasing very slowly in India, but racing ahead in the other three countries. Industry’s employment share has grown recently in India and Thailand, but fallen in Indonesia and the Philippines. Manufacturing labor productivity has been stagnant since the 1970s in the Philippines (see Part 3), but only stalled in the aftermath of the Asian crisis in Indonesia. In India and Thailand, industrial labor productivity has been rising. With so many important differences, it is not obvious that returns are falling for the same reason in each country. Rigorously explaining trends and drawing general lessons is therefore very difficult. Furthermore, India and Thailand, where more jobs are being created that pay a high premium for education, will secure greater benefits from additional educated workers than will the Philippines.

Regardless of what may (or may not) be driving them, the trends themselves have implications. Falling returns to education indicate that if a lack of educated workers constrained productivity initially, then this constraint has loosened. And it has loosened most obviously in agriculture, industry, and lower-status services. Also, the results show quite clearly that as the supply of basic education expanded, jobs did

not grow organically to absorb the educated. Moreover, employment structures have clearly transformed fastest in the less-educated countries - India and Thailand. Of course the reasons for this could be legion, and cannot be ascertained with a sample of only four countries. But whatever the reasons, there is little evidence from these four examples that higher basic education levels bring structural change in their wake.

The leap from these results to policy is a long one. For one thing, education is obviously intended to do much more than raise wages and facilitate new economic activities. The results of this chapter also show that the wage premiums are sensitive to a wide variety of conditions that can change rapidly for reasons independent of the school system, so long-term state and individual education investment decisions should not be based entirely on current economic conditions. Nevertheless, a realistic sense of what the current employment structure is, and how it has been changing, are important for grounding education policy planning empirically.

Conclusive empirical research in education economics is always difficult, principally because crucial variables are always unmeasured, and some may be unmeasurable. The data used in this chapter do not capture school quality or skills. Datasets measuring skills and school quality exist, but were not designed to capture employment structure, and so cannot be used in a study of structural change. Therefore, while better education probably has a major role to play in facilitating change, the issue cannot be analyzed using the data available.

Given that increasing the quantity of educated workers is not a priority for facilitating transformation, but that improving the quality of education might be, it is vital that governments and development agencies working in the field focus on systematically measuring education quality to work out whether interventions have the desired results. Similarly, labor force surveys need to collect data on school attributes so that the labor market outcomes of differently educated workers can be more fully analyzed.

## Education and economic growth

Models of education and growth can be divided roughly into two (Aghion and Howitt 1998). The first type of model considers education to be an input into production, much like equipment or labor (e.g., Mankiw, Romer, and Weil 1992). In this view, economies with greater numbers of educated workers should produce more output. Subject to certain technical assumptions, economies that accumulated more education should have grown faster and obtained higher income levels, other things being equal. Treating education as an input, and by introducing various market failures that could lead to underinvestment in education, numerous growth theorists have attempted to explain divergences in the growth paths of economies in terms of the growth of their education stock. Such market failures derive from spillovers of productivity between workers (Lucas 1988) and the difficulties with financing education given that it cannot be used as collateral for borrowing (Ljungqvist 1993; Galor and Zeira 1993; Azariadis and Drazen 1990).

None of these education-as-input models pay much attention to *why* education influences productivity, *what* workers might produce, *who*

should be educated, or *what types* of education to invest in. The central issues are the amount of human capital and output, not their composition or application. They are therefore fairly blunt in their policy implications. Most of them imply that subsidizing education can stimulate growth.

The second type of model considers education to be integral to an economy's capacity for technological innovation and adaptation. Thus, an economy that is far from some global technological frontier but that has a reasonable supply of educated scientists and managers will be able to catch up more quickly in technological terms, generating higher growth en route.

Nelson and Phelps (1966) are explicit that what matters for growth is not a high level of universal education, but having crucial personnel with the necessary education. According to these writers, to be crucial to transformation, a worker must be engaged in a nonroutine task, face new technological choices, and be in an organizational position to innovate. Presumably this implies the ability to redirect capital to new activities. In this view, productivity increases because education enables well-placed personnel to introduce new technologies, activities, and outputs.

Romer (1990) takes a more inclusive view of the role of education in transformation. In his model, the more education that is applied to research and development (R&D), the faster new activities are generated, and the higher the rate of growth. As educated labor could be attracted to pursuits other than R&D, countries with higher levels of universal education can engage in more R&D and grow faster. Romer's work on R&D is widely thought to describe conditions in advanced economies relatively well, while Nelson and Phelps' model of technology adoption and adaptation is a more apt description of developing economies' experiences.

Turning from models to data, there is substantial microeconomic evidence in favor of the view that the value of education in development depends on the scope for technology adoption. Studies of technology adoption are littered with evidence that more-educated workers have adopted new profitable technologies more readily. One particularly arresting and relevant example concerns the Green Revolution period in India. Foster and Rosenzweig (1996) observed that: more-educated households turned to high-yielding crop varieties (HYVs) more rapidly; those states that adopted HYVs experienced faster agricultural growth; returns to primary education expanded significantly during this time; and these returns increased faster in areas that grew faster. These results, and others like them (see also evidence presented in Rosenzweig 1995), point to a two-way causal relationship between education and growth, conditional on the availability of new and better technology.

As argued above, most of the education-as-input models predict that, other things being equal, output growth rates should correlate positively with the human capital *growth rate*. In contrast, Nelson and Phelps, and Romer predict that higher initial *levels* of education capital would drive subsequent output growth. So what do the data suggest? Notwithstanding some serious econometric problems with cross-country growth regressions, it is worth reviewing the evidence—limited and hotly debated as it is.

First, surprisingly, growth rates of education attainment are often



found to be *negatively* correlated with growth in GDP per worker. This regularity was reported by Pritchett (1996), Benhabib and Spiegel (1994), and Islam (1995). Given that models linking education to productivity growth are motivated by microeconomic evidence that employers are willing to pay more for educated workers, and that this willingness has been shown to reflect the greater cognitive skills of the educated (Glewwe 2002) this result appears paradoxical. For if education renders individual workers more productive, then surely across-the-board increases in education should render the aggregate labor force more productive as well? As these expected aggregate productivity improvements did not materialize, then “Where has all the education gone?” asks Pritchett. This extraordinarily important and startling paradox has sparked intense debate on how to measure education-growth relationships.

Nelson and Phelps, and Romer’s views appear to survive empirical scrutiny. Several studies have found positive relationships between initial education levels and subsequent output growth. Benhabib and Spiegel (1994) show that even after correcting for income levels and education levels, those countries that were further from the world technological frontier, grew faster. Moreover, this rate of arguably technology-driven convergence is more rapid in countries with higher education levels. Bils and Klenow (2000) calibrate a growth model to see if it can explain the education–growth linkage. Critically, they find that most of the causality from education to growth must be explained by education’s influence on technology.

Nevertheless, econometric problems preclude a neat conclusion of this debate. For example, Krueger and Lindahl (2001) have argued that the lack of a measurable relationship between education expansion and growth may simply reflect a failure to measure human capital stocks accurately. Hanushek and Woessmann (2007) review studies with more refined data, and conclude that both the level and growth rate of education attainment matter for growth. Moreover, they develop a dataset drawn by pooling the results of several international standardized tests of skills, and using it, find that growth is robustly related to the quality of education.

One important caveat on these results, entered quite convincingly by Bils and Klenow, is that the association between education and growth could be explained by reverse causality, as richer countries—or those anticipating more investment, higher returns to education, and faster growth—invest in more schooling. To date though, no microeconomic evidence on this question of reverse causality has been drawn from the developing world.

A rather different view of the role of education in growth comes from Lewis (2004), who argues that “public debate on education is confused” (p. 243), essentially because the role of education in development is misunderstood. He defines education as “the means through which societies acquire political philosophies based on individual rights.” Any impact of such education on growth is likely to be long term. On the other hand, trainability, Lewis feels, or the capacity to learn to use new production technologies, is what matters for rapid labor productivity growth. In short, therefore, he argues, education is not a constraint on the ability of current workforces to be trained in operations with much higher productivity levels.

## A brief overview of education outcomes and policy in four countries

Of the four countries studied in this chapter, India is the least educated. Thais are slightly less educated than Indonesians, and Filipinos are the most highly educated (Figure 3.2.1). Three of the four countries have aggressively pursued increases in education levels, especially at the secondary level, during the period under consideration. Around 9% of Thai secondary education is privately provided. The corresponding figure is 20% for the Philippines, down from 32% in the mid-1990s, and roughly 40% for India and Indonesia (Table 3.2.1).

3.2.1 Private school enrollment as percentage of total

	Secondary				Tertiary		
	India	Indonesia	Philippines	Thailand	Indonesia	Philippines	Thailand
1994	-	42.4	32.0	6.9	-	-	-
1995	-	-	30.8	6.2	-	-	-
1996	-	-	29.5	6.0	-	-	-
1997	-	-	-	-	-	-	-
1998	-	-	28.0	-	-	-	-
1999	-	-	26.3	-	-	73.1	-
2000	42.4	-	-	-	-	-	19.5
2001	42.6	42.7	22.7	6.7	62.8	68.7	18.9
2002	42.0	42.7	21.5	-	62.7	67.2	18.8
2003	41.9	42.9	20.5	8.2	61.1	66.4	-
2004	-	42.9	19.7	8.8	65.2	65.7	18.5
2005	-	-	-	12.9	-	-	16.9

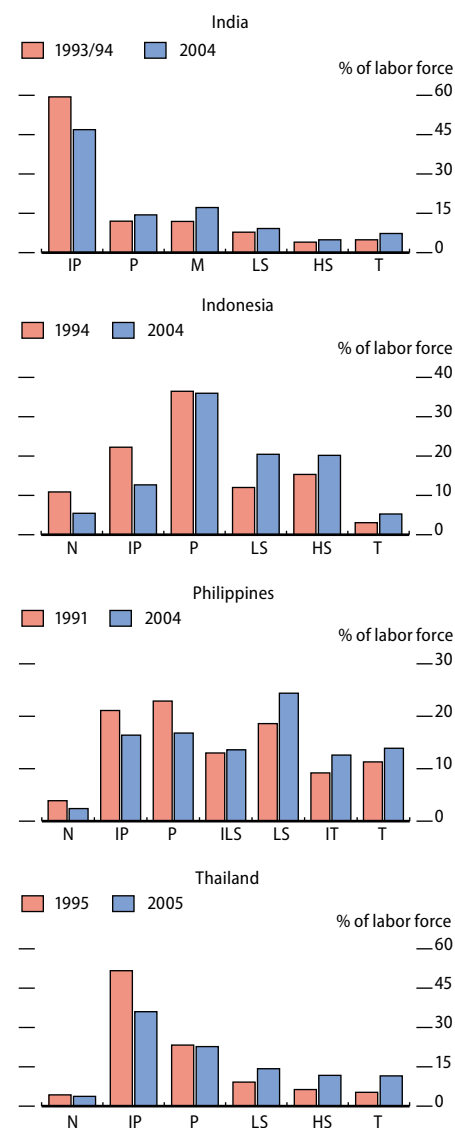
- = data not available.

Source: World Bank, available: <http://genderstats.worldbank.org/edstats/query/default.htm>, downloaded 17 January 2007.

Indonesia's Government undertook a sharp increase in primary school building in the mid-1970s, backed by oil revenues. This included the abolition of fees for grades 1–3 in 1976 and grades 4–6 in 1978. This led to a substantial increase in enrollment rates (Duflo 2001). Notwithstanding these gains in primary attendance, lower and upper secondary enrollment rates actually contracted during the fifth Five-Year Plan (1989–1994), reflecting perceptions of low returns to secondary education and high out-of-pocket costs (Booth 1999). Lower secondary education was therefore declared compulsory in the mid-1990s, though 10 years on, schools are still being created to accommodate the increased attendance (Sugiyarto, Oey-Gardiner, and Triaswati 2006). Around 40% of secondary education in Indonesia therefore remains privately provided. For tertiary education, the figure rises to 65% (Table 3.2.1).

Similarly, the constitution of the Philippines (1987) committed the state to providing quality affordable education at all levels to all people, and Republic Act 6655 (1988) followed this up with a concrete policy of free secondary education. These changes do not appear to have led to an acceleration in graduation rates, which were already high. However, private secondary school attendance has fallen (Table 3.2.1). The 1974 Bilingual (English-Tagalog Program) Education Policy and its renewal in 1987 permitted the use of the “local vernaculars....as auxiliary to the media of instruction, but only when necessary to facilitate understanding

3.2.1 Education profile of the labor force



N = none; IP = incomplete primary; P = primary; ILS = incomplete lower secondary; LS = lower secondary; HS = higher secondary; IT = incomplete tertiary; T = tertiary.

Note: Labor force refers to employed and unemployed persons 15 years old and above.

Sources: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004; Indonesia SAKERNAS 1994, 2004; Philippine Labor Force Survey, 1991, 2004, October rounds; Thailand Labor Force Survey, 1995, 2005, October rounds.

[Click here for figure data](#)

of concepts being taught in English and Filipino” (Quisumbing 1989, p.311). The policy has resulted in a sharp decline in English proficiency across cohorts.

Education policy in the Philippines since the late 1970s has been driven by an explicit government policy to promote international migration as a solution to the local job creation problem, and a source of income (recorded transfers from migrants are as high as 10% of GDP) (Felipe and Lanzona 2006). Private vocational colleges, many of which operate as little more than “diploma mills,” often connected to overseas employment agencies, have mushroomed. In combination with a trend toward opening state colleges (there were 19 in 1987, but 111 in 2006), this private-education expansion has led to a sharp rise in tertiary education, 66% of which is privately provided, and a polarization in quality. Moreover, the cost of the expansion into secondary and tertiary education, exacerbated by population pressure, has added to huge strains on education budgets and has drawn resources away from basic education (Maglen and Manasan 1998). Nevertheless, in the context of high unemployment, successive generations of Filipinos have continued to acquire increasing levels of education.

Thailand has historically had a difficult time expanding access to education, especially in rural areas. In the early 1990s, as low-skill industry boomed and as companies attempted to move up the value chain, limited availability of (especially) secondary graduates was viewed as a serious problem, and returns to education in the industry sector were high (Booth 1999; and Table 3.2.7 below). The Government responded. The 1997 constitution created a right to 12 years of free, quality basic education. The Education Act (1999) then extended mandatory schooling levels from 6 to 9 years. Together with rising income levels, which may have driven demand for secondary education, as well as tightening urban-rural linkages, such legislation led to significant expansions in secondary graduation rates in the 1990s and early 2000s. Education in Thailand remains mostly a public undertaking (Table 3.2.1).

Education policy in India has followed a different route. While by law education is free and compulsory up to the age of 14, in reality, only 53% of the labor force had completed primary school in 2004. The chief cause appears to be the abysmal quality of the primary education system (PROBE 1999, Pratham 2005). Primary enrollment rates have been extraordinarily low, particularly in rural areas, and among socially marginalized communities in both rural and urban settings. A sharp quality divide has emerged between public and private education, and a boom in urban working class incomes during the last decade has led to even tighter bottlenecks in admission to private education. Attempts to circumvent the quality problems in mainstream basic education through the promotion of vocational training also seem to have failed (Anant et al. 2006).

Meanwhile, India has cultivated a specialty in high-quality tertiary education. Graduates from elite, publicly supported science and technology institutes command impressive salaries, and aspirations to enter these institutions are high. Good private schools and colleges are also—increasingly—oversubscribed, as evidenced by the soaring “donations” for admissions through the 1990s. Given overwhelming evidence that

the small number of high-quality tertiary institutions is becoming a bottleneck, the Government is under increasing pressure to liberalize tertiary education—particularly rules governing foreign participation. Instead, it has responded with an ambitious plan to double the number of places at central government universities in order to accommodate further expansions in affirmative action for disadvantaged groups (Hasan and Mehta 2006). Notwithstanding the importance of tertiary institutions for Indian output, enrollment rates are currently around 14%, and only around 7% of the Indian labor force is college educated.

## Changes in employment structure and education intensity

Figure 3.2.2 shows the education profiles of workers in agriculture, industry, and services. They very clearly show that agriculture hires the least-educated workers, and services the most-educated. Industry employs the modestly schooled.

With these trends in mind, it is useful to examine how the rise in education levels relates to changes in the structure of employment. Table 3.2.2 depicts the first, most aggregate pass at this for each of the four countries. The labor force is split into those working in the three major sectors of the economy and the unemployed. (Later on in this section a more disaggregated approach is taken, but with little change in the results.) Each country's employment profile was observed at two points in time between 10 and 13 years apart.

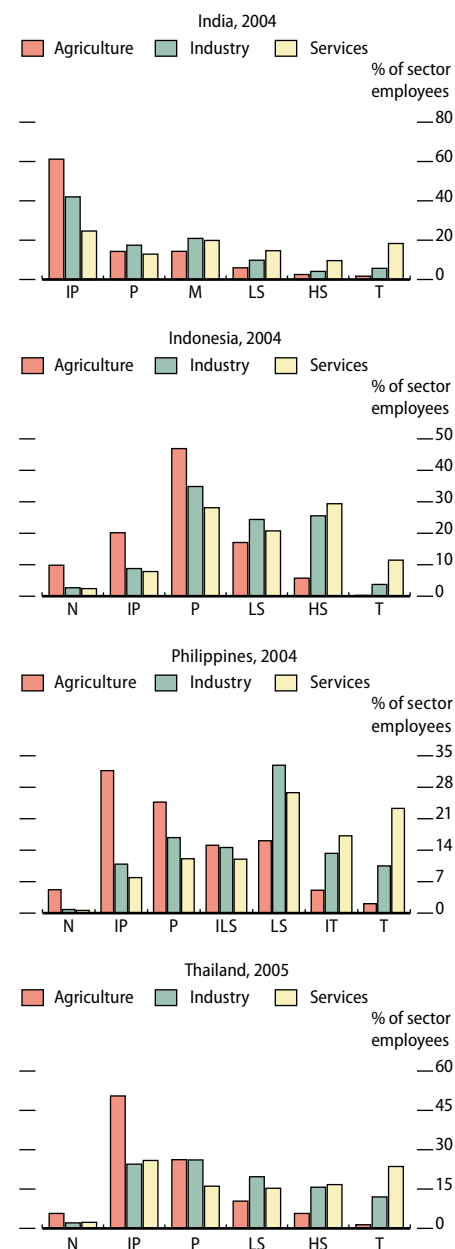
The first three columns depict the proportions of each country's labor force in each activity in the initial and final years, and how they have changed. (Note that unemployment rates are comparable over time but not across countries.) The table shows unemployment rising rapidly in every country. Trends in agricultural, industrial, and services employment shares, however, are country specific.

Agriculture's employment share has been declining very rapidly in those countries that reached their land frontiers before the 1990s. The Philippines ran out of new arable land in the 1970s. Thailand did so by 1980, as did most regions of India. In contrast, Indonesia, which is still clearing forests for agriculture, experienced only a small decline in agriculture's employment share. The Indonesian figures also reflect a return of low-skilled labor to agricultural activity in the wake of the Asian crisis of 1997–98. Thailand, with its more sophisticated arrangements for reallocating capital, has come back from the crisis sooner than Indonesia, and agricultural employment has continued to contract.

Industrially, India has had some recent success, while Thailand has been industrializing for some time now. Industrial employment in Indonesia and the Philippines has been shrinking. *Growth amid change* (Part 3) shows that this deindustrialization is occurring at very low levels of industrial development, which raises alarm bells, especially in the Philippines, where deindustrialization cannot be explained in terms of the crisis alone.

Services employment is rising everywhere, though most in the

### 3.2.2 Education distribution by sectors



N = none; IP = incomplete primary; M = middle; P = primary; ILS = incomplete lower secondary; LS = lower secondary; HS = higher secondary; IT = incomplete tertiary; T = tertiary.

Sources: India National Sample Survey Organisation, Socio-economic Survey, Round 60, January–June 2004; Indonesia SAKERNAS 2004; Philippine Labor Force Survey, October 2004; Thailand Labor Force Survey, October 2005.

[Click here for figure data](#)

## 3.2.2 Education intensification and structural change, lower secondary

India	Employment share (%)			Education intensity (%)			Between sector	Within sector	Contribution by sector	Contribution by sector (%)
	1993/94	2004	Change	1993/94	2004	Change				
Aggregate	100.0	100.0	0.0	16.7	21.5	4.8	1.8	3.0	4.8	100.0
Agriculture	59.3	51.3	-8.0	6.8	10.2	3.4	-0.5	1.7	1.2	24.6
Industry	15.1	19.0	3.9	18.4	19.6	1.2	0.7	0.2	0.9	19.8
Services	21.9	24.7	2.8	38.0	42.6	4.6	1.1	1.1	2.2	46.1
Unemployed	3.8	5.1	1.3	41.2	39.3	-1.9	0.5	-0.1	0.5	9.5
Percentage of intensification due to between- and within-sector effects							37.3	62.7		
Indonesia	Employment share (%)			Education intensity (%)			Between sector	Within sector	Contribution by sector	Contribution by sector (%)
	1994	2004	Change	1994	2004	Change				
Aggregate	100.0	100.0	0.0	30.4	45.9	15.5	1.5	14.0	15.5	100.0
Agriculture	42.9	40.5	-2.4	12.1	23.1	11.0	-0.3	4.5	4.2	26.9
Industry	18.2	16.8	-1.3	34.1	53.7	19.6	-0.5	3.3	2.8	18.3
Services	34.3	36.2	1.8	45.5	61.6	16.1	0.8	5.8	6.7	42.9
Unemployed	4.6	6.5	1.9	74.4	81.4	7.0	1.4	0.5	1.8	11.9
Percentage of intensification due to between- and within-sector effects							9.6	90.4		
Philippines	Employment share (%)			Education intensity (%)			Between sector	Within sector	Contribution by sector	Contribution by sector (%)
	1991	2004	Change	1991	2004	Change				
Aggregate	100.0	100.0	0.0	39.1	50.9	11.7	3.4	8.3	11.7	100.0
Agriculture	41.3	33.1	-8.2	17.1	23.2	6.2	-1.4	2.0	0.6	5.4
Industry	14.6	13.7	-0.9	46.5	56.7	10.3	-0.4	1.4	1.0	8.3
Services	35.1	42.3	7.2	57.5	67.3	9.8	4.1	4.2	8.3	70.6
Unemployed	9.0	10.9	1.9	56.7	63.5	6.8	1.1	0.7	1.8	15.7
Percentage of intensification due to between- and within-sector effects							29.0	71.0		
Thailand	Employment share (%)			Education intensity (%)			Between sector	Within sector	Contribution by sector	Contribution by sector (%)
	1995	2005	Change	1995	2005	Change				
Aggregate	100.0	100.0	0.0	20.2	36.5	16.3	2.8	13.6	16.3	100.0
Agriculture	51.4	42.0	-9.4	6.7	17.5	10.7	-0.6	4.5	3.9	23.7
Industry	19.5	21.6	2.2	28.4	46.6	18.3	0.6	4.0	4.6	27.9
Services	28.0	35.0	7.0	38.8	51.9	13.1	2.7	4.6	7.3	44.8
Unemployed	1.1	1.4	0.2	27.6	65.4	37.9	0.1	0.5	0.6	3.5
Percentage of intensification due to between- and within-sector effects							17.0	83.0		

Sources: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004; Indonesia SAKERNAS 1994, 2004; Philippine Labor Force Survey, 1991, 2004, October rounds; Thailand Labor Force Survey, 1995, 2005, October rounds.

Philippines and Thailand. In India, where industrial employment surged, services employment rose only slightly, challenging the view from value-added data that India is becoming a services economy. Low net exit from agriculture in Indonesia has been associated with limited services growth.

The next three columns of the table depict measures of education intensity—the share of workers in each sector holding at least a lower secondary (LS) certificate—and how they have shifted. Consistent with Figure 3.2.2, services are always the most intensive users of LS graduates, followed by industry, and then agriculture. Also, the unemployed are more likely to have completed LS than the employed.

In Indonesia, Philippines, and Thailand, LS intensities are rising rapidly economywide. India is focusing on raising primary completion rates and LS prevalence has grown much less. Not having many primary graduates to push up the ladder further, limits scope for LS expansion in India. Perhaps most important, education intensity has risen in every section of the labor force.

The seventh column asks what increase in the labor force share of LS educated workers would be required algebraically to support the observed



change in employment structure, without raising LS prevalence within sectors. In India, for example, with 38% of service workers having LS education initially, 2.8% growth in the services employment share would have required a further 1.1% of the labor force to pass LS ( $1.1\% = 38\% \times 2.8\% \times 100$ ). Adding this 1.1% to the corresponding projected changes in the other three sectors implies that to accommodate its employment shift between these four sectors without increasing LS-intensity within sectors, India would have required only a 1.8% increase in LS graduates. The remaining 3% increase in graduates' share in the labor force (or 62.7% of the 4.8 point intensity increase between 1993/94 and 2004) is accounted for by increases in intensity *within* each sector.

The penultimate column shows that, of the 4.8 point increase in LS graduates, 2.2% of the labor force (or 46.1% of the increase in graduates) were absorbed in services. Given that the sector employs only 24.7% of the labor force, services disproportionately absorbed the increase in LS educated workers. So did unemployment.

This last trend, whereby services and unemployment disproportionately absorb LS graduates, is common to all countries. Industry also absorbs its fair share of LS graduates in India and Thailand.

Country experiences differ. In rapidly educating and glacially transforming Indonesia, structural change accounts for less than a tenth of the increase in education. That figure rises to 17% in Thailand, where rapidly rising employment in industry and services helped absorb some of the educated entrants. The extraordinarily large increase in education among Thailand's unemployed is also noteworthy. In the Philippines, nearly 30% of the observed intensification can be algebraically attributed to structural change, as workers shifted out of both (education unintensive) agriculture and industry, and into services and unemployment. As the country deindustrialized, services absorbed 70% of new graduates.

These differences notwithstanding, what remains remarkable is the much larger portion of the education expansion that is *not* attributable to structural change at the four-sector level. A possible explanation is that four sectors is not enough, and this analysis masks subsectoral shifts in the composition of economic activity. Perhaps education-intensive *subsectors* have been growing. Therefore, a more disaggregated look at the data is warranted. (Unfortunately, incompatibility of sector classifications

### 3.2.3 Contribution of structural change to Education intensification in the services sector, lower secondary, Philippines

	Employment share (%)			Education intensity (%)		
	1991	2004	Change	1991	2004	Change
Retail trade	32.7	33.5	0.7	45.5	61.0	15.4
Transportation and storage	12.2	15.4	3.1	49.1	57.2	8.1
Personal and household services	17.8	14.2	-3.6	34.2	48.1	13.9
Public administration and defense	11.1	9.6	-1.5	84.7	84.0	-0.7
Education	8.1	6.4	-1.7	96.8	98.3	1.6
Hotels and restaurants	3.7	5.3	1.6	59.6	76.6	17.0
Business services	2.5	4.0	1.5	83.5	92.7	9.2
Health, social work, and other social and community services	3.4	3.1	-0.3	83.6	87.9	4.3
Wholesale trade	3.0	2.9	-0.1	55.9	60.5	4.7
Recreational and cultural services	1.9	2.0	0.1	55.8	65.6	9.9
Communications	0.6	0.9	0.3	94.8	96.4	1.6
Banking institutions	1.2	0.8	-0.3	95.4	97.5	2.1
Nonbank financial intermediation	0.3	0.8	0.6	90.4	95.1	4.7
Real estate	0.6	0.7	0.1	79.6	90.8	11.1
Insurance	0.6	0.3	-0.3	96.2	93.5	-2.7
Sanitary and similar services	0.1	0.2	0.0	70.0	22.4	-47.6
Extraterritorial organizations and bodies	0.2	0.0	-0.2	82.9	100.0	17.1
<b>Services sector as a whole</b>	<b>100.0</b>	<b>100.0</b>		<b>57.3</b>	<b>67.3</b>	<b>10.0</b>
Increase in lower secondary intensity necessary to accommodate shifting labor force shares between sectors						-0.2
As percentage of observed increase in intensification						-1.9
Increase in lower secondary intensity due to rising intensity within sectors						10.2
As percentage of observed increase in intensification						101.9

Source: Philippine Labor Force Survey, 1991, 2004, October rounds.

between survey years precludes a much more detailed analysis of the Indonesian experience.)

Noting that an 86% of the increase in educated Filipino workers was absorbed into services and unemployment, Table 3.2.3 disaggregates services to shed light on why 10% more service workers now have LS degrees. The results are stark. If education intensities in the 17 services subsectors remained unchanged, while employment shares moved as they have, the share of service workers with LS education would have *fallen* by 0.2 percentage points. This happens for two reasons. First, the changes in employment shares (third column) are not large, indicating very little structural change within services. Second, while employment shares in a few LS-intensive subsectors (e.g., “business services,” “hotels and restaurants”) have increased, unintensive sectors (e.g., “transportation”) have grown as well. Thus *the entire* increase in education intensity in services is algebraically attributable to intensification *within* these 17 subsectors.

Together with Table 3.2.2, these results show that, other than a push out of agriculture into services and unemployment, there have been precious few changes in the structure of the Philippine economy that could absorb the surge in educated workers.

In Thailand and India, all sectors absorbed significant numbers of the educated, so it is more useful to disaggregate their entire employment structure, not just the services sector. Table 3.2.4 shows that in Thailand, even after disaggregating the labor force into 23 subsectors, transformation only explains 21% of the proliferation of LS graduates. Although some education intensive subsectors of the economy (e.g., “manufacturing and repair,” “hotels and restaurants”) grew, they were initially not sufficiently large or education intensive to absorb the increase in educated workers. Similarly in India, a 25 subsector decomposition (Table 3.2.5) only raises the fraction of intensification explained by structural change from 37% to 39%. Thus, education levels rose in almost every subsector in both countries.

Indian and Thai employment data share other important features. Manufacturing’s employment share is growing. Construction is booming, at least in India, while the apparent construction slowdown in Thailand is relative to the pre-Asian crisis building

**3.2.4 Decomposing Education intensification into 23 subsectors, lower secondary, Thailand**

	Employment share (%)			Education intensity (%)		
	1995	2005	Change	1995	2005	Change
Agriculture, hunting, and forestry	50.3	40.8	-9.5	6.6	17.4	10.8
Fishing	1.1	1.2	0.1	12.7	20.3	7.6
Mining and quarrying	0.1	0.1	0.0	26.6	39.8	13.3
Manufacturing and repair	13.3	16.2	2.9	31.0	51.7	20.7
Electricity, gas, and water supply	0.5	0.3	-0.2	77.2	74.9	-2.3
Construction	5.6	5.0	-0.6	18.2	29.0	10.9
Retail trade	9.9	10.3	0.3	31.4	47.8	16.4
Transportation	2.8	2.6	-0.2	27.5	44.7	17.2
Personal and household services	1.8	1.8	0.0	15.2	32.8	17.5
Public administration and defense	3.0	3.1	0.1	69.2	81.3	12.1
Education, science, and research	2.7	3.2	0.5	37.5	38.6	1.1
Hotels and restaurants	3.2	6.3	3.1	32.1	39.9	7.8
Health and medical services	0.9	1.4	0.5	79.5	86.1	6.6
Social work, and other social and community services	0.1	0.3	0.3	37.4	71.4	34.0
Wholesale trade	1.6	2.5	0.9	31.8	48.7	16.9
Recreational, cultural, and sporting activities	0.3	0.6	0.3	36.8	64.7	27.9
Warehousing	0.0	0.1	0.1	46.0	65.7	19.7
Communication	0.2	0.2	0.1	89.7	89.1	-0.6
Financial intermediation	0.6	0.7	0.1	85.5	93.5	8.0
Real estate	0.1	0.3	0.1	73.9	58.9	-14.9
Business activities including renting	0.6	1.4	0.8	61.3	68.5	7.3
Insurance	0.2	0.3	0.1	78.4	85.4	7.1
Sanitary and similar activities	0.1	0.2	0.1	14.5	30.4	15.9
Unemployed	1.1	1.4	0.3	27.6	65.4	37.9
<b>Aggregate</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>	<b>20.1</b>	<b>36.5</b>	<b>16.3</b>
Increase in lower secondary intensity necessary to accommodate shifting labor force shares between sectors						3.4
As percentage of observed increase in intensification						21.1
Increase in lower secondary intensity due to rising intensity within sectors						12.9
As percentage of observed increase in intensification						78.9

Source: Thailand Labor Force Survey, 1995, 2005, October rounds.

boom. Wholesale trade is on the rise. Growth of India's transport sector in this context probably reflects demand-side factors, rather than just growing labor supply (as it does in the Philippines). Even in Thailand, where transport's employment share fell slightly, crudely disaggregating the employment data shows a falling share of taxi drivers, and a rising share of truck drivers.

Furthermore, there is credible evidence of falling education intensity within some large subsectors in India. One positive sign is the 2.5 point reduction in the proportion of workers in household and personal services with LS degrees. This subsector, which includes most of the traditional trades—hair-dressing, house cleaning, child care, etc.—is probably a residual category housing many of the disguised unemployed. De-intensification in this sector might indicate that secondary graduates are finding more remunerative employment.

Perhaps the most surprising result in India is the de-intensification of business services and IT-enabled services. The sector contains a large and diverse set of services besides IT, and has doubled its employment in absolute terms. Indeed, one common feature of transformation is that firms outsource a number of activities, leading to growth in separate low-skill business services such as photocopying, renting of equipment, filing, etc. If growth of low-skill complementary services indeed explains the de-intensification of business services, this puts the promise of job growth led by the high-tech business services sector into perspective. This sector must have employed far less than 0.9% of India's labor force in 2004.

Also in contrast to the hype about India's high-end service economy, labor force *shares* in most "knowledge economy" subsectors (including education, science, and research; financial intermediation; business services; insurance) are much larger in Thailand than in India. On recent trends, this is unlikely to change.

Finally, the above tables help to examine the role of increased international competition between workers in driving demand for education. This role is often championed by the media. From the disaggregated analyses of each country, it can be seen that the majority of additional educated workers are absorbed in the nontraded services sector

### 3.2.5 Decomposing Education intensification into 25 subsectors, lower secondary, India

	Employment share (%)			Education intensity (%)		
	1993/94	2004	Change	1993/94	2004	Change
Agriculture, hunting, and forestry	58.8	50.9	-8.0	6.9	10.2	3.3
Fishing	0.5	0.4	0.0	3.7	8.1	4.4
Mining and quarrying	0.8	0.9	0.1	14.5	15.2	0.7
Manufacturing	10.4	11.7	1.3	20.3	23.1	2.8
Utilities	0.4	0.3	-0.1	47.5	51.0	3.5
Construction	3.5	6.1	2.6	10.5	12.1	1.6
Retail	5.9	5.2	-0.6	26.0	31.7	5.7
Transportation	2.7	3.8	1.0	22.6	24.4	1.8
Household and personal services	2.7	2.1	-0.6	11.3	8.7	-2.5
Public administration and defense	3.2	2.1	-1.1	60.8	65.5	4.7
Education, science, and research	1.8	2.4	0.6	83.8	86.3	2.5
Hotels and restaurants	0.9	1.3	0.5	13.8	20.2	6.4
Health and medical	0.5	0.7	0.2	69.6	77.7	8.1
Social work and other community services	0.3	0.4	0.1	30.7	39.7	9.0
Wholesale trade	1.2	2.8	1.7	38.3	42.7	4.5
Recreational and cultural services	0.2	0.2	0.0	37.8	39.9	2.1
Warehousing	0.0	0.0	0.0	28.3	49.0	20.8
Communications	0.2	0.4	0.2	71.9	76.5	4.6
Financial intermediation	0.5	0.5	0.0	87.1	82.8	-4.4
Real estate	0.0	0.1	0.0	56.1	64.3	8.2
Business services	0.3	0.9	0.6	75.3	70.1	-5.2
Insurance	0.1	0.1	0.1	86.9	91.9	5.0
Sanitary and similar services	0.1	0.1	0.0	11.6	12.4	0.8
Extraterritorial organizations and bodies	0.0	0.0	0.0	62.9	35.6	-27.3
Repair	1.0	1.3	0.3	23.7	29.3	5.6
Unemployment	3.8	5.1	1.3	41.2	39.3	-1.9
<b>Aggregate</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>	<b>16.7</b>	<b>21.5</b>	<b>4.8</b>
Increase in lower secondary intensity necessary to accommodate shifting labor force shares between sectors						1.9
As percentage of observed increase in intensification						39.4
Increase in lower secondary intensity due to rising intensity within sectors						2.9
As percentage of observed increase in intensification						60.6

Source: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004.

and in unemployment—i.e., they are not in competition with foreign workers. Further, even in India and Thailand, where industry is absorbing educated workers, this is not sufficient to posit a link between trade and education. Specifically, in India, industrial workers have become less educated than the labor force at large during the very time when trade has been liberalized and industrial exports have been growing. And, as the next section shows, returns to education in Indian and Thai industry have also been falling during this time.

## Returns to education

The above results are insufficient for drawing economic conclusions regarding the need for educated workers. True, education levels are rising in almost every subsector of the economy. But this could simply reflect a shortage of educated workers in the first place. To understand whether educated workers are over- or undersupplied, the discussion now turns to an analysis of the relative prices (wages) of workers of different education levels.

To do so, Box 3.2.1 introduces two important terms—the Mincerian and full rate of return—and explains how each of them could be interpreted to assess whether the labor force is “overeducated” relative to the job opportunities available.

Table 3.2.7 presents Mincerian returns to years of different levels of schooling for workers in two experience brackets—those who left school 10–15 years before the sample was drawn (“midcareer workers”), and those who did so 20–25 years before (“senior workers”). These returns are calculated from median wages paid to employees in each education category. Returns to education for all employees are presented first, followed by the returns among agricultural, industrial, and services sector workers. Returns for each experience bracket are provided from the initial survey year (10–13 years before) and the final survey year (2004 or 2005). There are several gaps in the table corresponding to returns that could not be estimated because there were too few sector workers with the necessary education and experience levels in the sample.

Several trends are apparent in the Mincerian returns. They are lower at lower levels of the school system, probably because private costs of basic education are lower as well. Moreover, returns to basic education (primary, middle, and sometimes LS school) have fallen in most sectors. Nowhere is this clearer than in the industry sector, where the returns to basic education are now moderately low. The immediate implication of falling returns is that if the supply of educated workers has been a constraint on industrial growth, this bottleneck is easing. One interpretation of this result is that the expansion of supply of suitably educated workers for industrial jobs has reduced scarcity. A possible complementary explanation is that, consistent with the writings of Harry Braverman (1974), industrialization and the splitting of the industrial supply chain across ever-more workers have led to tasks being fragmented to an extent where mental acuity and flexibility no longer matter as much.

In contrast with basic education, tertiary returns have risen. This is consistent with many studies documenting a polarizing income distribution in Asia.

### 3.2.1 Mincerian returns vs. full returns to education

The Mincerian return (Mincer 1958) to a particular education qualification is the percentage difference in wages earned by two workers who differ only in that one has the qualification and the other does not. The full (private) rate of return captures this wage premium, aggregated over the workers' careers, but also factors in the direct costs (fees, uniforms, books, etc.) of obtaining the qualification. Given that wages rise slowly over a worker's career, and that schooling is relatively expensive, the full rate of return is usually lower than the Mincerian return (for illustration, see Psacharopoulos and Ng 1994; for emphasis, see McEwan 1999).

Thus, if Mincerian returns are zero, full rates of return are usually negative. Or, if the Mincerian return is smaller than the return to other forgone investments in the economy, the full rate of return is likely to be below the opportunity cost of investment as well. In such a circumstance, the workforce may be said to be "overeducated" (Harberger 1965). Whereas a growing body of work on overeducation provides several other, generally weaker definitions of the phenomenon (McGuinness 2006), given the variety of other roles served by education in development, this chapter uses the definition least likely to take issue with investments in schooling economically.

This brief overview of the relationship between Mincerian and full returns was necessary, because while the results in the previous section imply that it will be useful to ask whether investments in education are paying off, good estimates of the direct cost of schooling are lacking. In the following section, any situation wherein the Mincerian return is less than the real cost of funds

is taken to be indicative of "overeducation." The return on a 10-year bond, corrected for expected inflation (box table) is taken as an estimate of the economywide real cost of funds. The economic cost of funds for education investment would certainly be higher than these rates, as sovereign loans carry lower rates of interest than private ones, especially private loans to finance education. Using these rates therefore deliberately biases the study against finding evidence of overeducation.

A cautionary word: overeducation may be short term, while investments in schooling are not, so the distance from such results to education policy should not be traversed in a single bound. Further, several benefits of education are not captured in wages, implying that private returns underestimate the social returns. Conversely, if talent is not observable, academic credentials may be used to dispense better jobs or promotions, in which case the private returns overstate the true social returns of education.

While the evidence from a very limited set of developing countries suggests that this type of "credentialism" is not empirically important for determining wages (Glewwe 2002), the issue could well be important in extreme environments where unemployment is high and education levels are rising fast. Thus, the following analysis of wage returns should only be taken as

a crude indicator of where overeducation is occurring.

Rather than drawing education policy conclusions from this, it is hoped that the results will draw attention to other distortions that may be preventing the full benefits of schooling from being realized.

Estimated cost of funds, %

	Period bond rate observed	Annual inflation in year of observation	10-year bond rate	Minimum real cost of funds
India	June 2004	6.4	5.9	-0.5
Indonesia	August 2004	6.1	6.1	0.0
Philippines	October 2004	6.0	13.5	7.0
Thailand	October 2005	4.5	6.1	1.5

Sources: Asian Development Outlook database; CEIC Data Company Ltd.; Money Market Association of the Philippines, available: <http://www.mart.com.ph>; Bloomberg; all downloaded 26 February 2007.

Returns in services are higher than in industry and agriculture. This suggests that the concentration of more-educated workers in services is not entirely residual. In contrast, comparing the returns between agriculture and industry does not yield obvious trends.

Finally, returns to higher secondary and tertiary education, and in the Philippines, LS education, have mostly held up much better for senior workers than their midcareer counterparts. These effects are most pronounced in industry and services (except in Thailand). Combined with falling returns to basic education and rising returns to tertiary, this yields a picture highly evocative of Nelson and Phelps' view of the links between education and structural change. Highly skilled workers in senior positions who can introduce new ideas and technologies are rewarded well for their education, while more junior workers are not.



## 3.2.7 Returns to education by sector, cohort, and country

	All sectors				Agriculture				Industry				Services			
	Initial		Subsequent		Initial		Subsequent		Initial		Subsequent		Initial		Subsequent	
	MC	S	MC	S	MC	S	MC	S	MC	S	MC	S	MC	S	MC	S
<b>India</b>	<b>1993/94</b>		<b>2004</b>		<b>1993/94</b>		<b>2004</b>		<b>1993/94</b>		<b>2004</b>		<b>1993/94</b>		<b>2004</b>	
Middle	9.1	10.1	6.3	12.3	0.0	2.3	3.4	0.0	11.1	11.9	7.3	3.6	5.2	13.1	8.7	14.5
Secondary	14.5	26.4	10.1	23.3	0.0	10.1	3.6	0.0	11.2	20.3	2.8	14.5	16.7	12.8	10.3	18.6
Higher secondary	22.5	7.3	14.6	16.0			0.0		12.8	3.3	8.0	6.9	16.3	5.9	18.4	13.1
Postsecondary	15.9	15.4	29.6	20.1					18.6	17.4	28.9	23.3	13.9	15.2	20.5	20.5
<b>Indonesia</b>	<b>1994</b>		<b>2004</b>		<b>1994</b>		<b>2004</b>		<b>1994</b>		<b>2004</b>		<b>1994</b>		<b>2004</b>	
Primary school	3.1	12.2		5.8		6.0		6.6		5.3				17.4		
Junior high school	11.6	14.0	11.2	18.6	12.0	26.6	10.1	21.6	7.4	11.9	7.7	6.8	11.6	9.1	14.1	21.1
Senior high school	11.9	14.9	10.9	19.7	10.1		14.5	10.1	10.8	18.6	10.1	12.6	11.7	13.5	13.0	14.5
Tertiary	9.3	10.3	12.5	5.7					24.8	25.7	17.0	18.9	8.4	9.0	12.5	5.7
<b>Philippines</b>	<b>1991</b>		<b>2004</b>		<b>1991</b>		<b>2004</b>		<b>1991</b>		<b>2004</b>		<b>1991</b>		<b>2004</b>	
Elementary graduate	3.7		7.0	12.2												
High school graduate	16.1	10.4	7.5	9.8	5.7	0.0	4.7	2.0	9.3	2.6	3.6	5.7	24.3	17.2	10.1	10.9
College graduate	12.6	11.6	18.9	22.2					11.0	17.0	11.1	18.9	16.0	10.4	19.6	21.3
<b>Thailand</b>	<b>1995</b>		<b>2005</b>		<b>1995</b>		<b>2005</b>		<b>1995</b>		<b>2005</b>		<b>1995</b>		<b>2005</b>	
Elementary	7.4	10.6	11.0	6.2		7.0		3.1		10.0	3.8	4.2	7.6	11.4	11.3	5.8
Lower secondary	7.7	26.8	5.3	13.4	5.3		-1.4	12.6	5.4	21.3	3.7	7.1	11.1	25.0	8.4	15.5
Upper secondary	13.8	8.7	9.5	17.0			8.1	9.0	15.9	36.5	5.3	14.5	9.6	8.7	8.5	16.5
Postsecondary	16.1	15.6	19.4	28.7					13.6	7.4	23.3	36.1	16.7	14.7	17.2	24.6

- = insufficient sample size for calculation of returns.

MC = midcareer workers; S = senior workers.

Sources: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004; Indonesia SAKERNAS 1994, 2004; Philippine Labor Force Survey, 1991, 2004, October rounds; Thailand Labor Force Survey, 1995, 2005, October rounds.

Turning next to country specifics, consider India, where returns to basic education in agriculture, which employs a large majority of the primary educated, are very low. Indeed, given the low Mincerian returns, the full returns to education in India's agricultural sector are probably negative (the direct costs of schooling in India are reported to be high relative to the incomes of the poor)—a certain indicator of overeducation. Overeducation in the context of rampant illiteracy implies only that the problem originates outside the education system. While India's public schools are in a sorry state, especially in rural areas, these startling results cannot be ascribed to school quality. Economywide returns to basic education in India were much higher in 1993/94, but have fallen since then. Problems detailed in PROBE (1999) indicate that quality has been a problem for a lot longer. It is therefore more likely that the low returns in agriculture reflect the well-documented stagnation of agricultural productivity. Reasons for this stagnation, and what to do about it, are presented in the chapter on India in Part 2 of *ADO 2007*.

As in other countries, India's returns to basic education in industry have fallen (as well as in agriculture), further dragging down the overall returns. Economywide, only returns to college and, for older workers,

higher secondary education, have grown. However, returns at some levels of education and experience are rising in the services sector.

The Indonesian story is complicated by reverse migration. Less-educated workers in Indonesia were disproportionately pushed out of industry into lower-productivity agricultural jobs, driving up the returns to schooling. This was probably especially relevant for senior workers, among whom job stability would be positively correlated with education. This exemplifies the idea that if job security is tied to education, high returns in a turbulent environment do not necessarily reflect a real scarcity of educated workers. Conversely, education expansion may have exerted pressure in the other direction, driving returns down. The inability to track changes in Indonesian employment structure at a more disaggregate level precludes a more detailed interpretation of these results.

Returns to LS schooling fell sharply in the Philippines, albeit from a high base. In contrast, tertiary education has become more valued over time. Certainly, falling returns to LS schooling are consistent with the increased supply of educated workers, deindustrialization, and structural stagnation in services described in the previous section. Moreover, the next section shows that in some of the faster growing services occupations, returns to education are approximately zero.

It is also useful to note that in the Philippines there has been a substantial increase in education requirements for access to jobs. A survey compiled by the Bureau of Labor and Employment Statistics shows that LS or college degrees are now required for entry to every formal sector job in the country. An obvious interpretation is that as education levels rose, education criteria for the same old jobs became tighter, and the returns (probably associated with rank in the company hierarchy) simply migrated up the education ladder. This view sits well with the findings of the Philippine Presidential Commission on Educational Reform 2000 Report, which lamented that: "The country has too long suffered the imbalance of an overly credential-conscious society, which puts a premium more on diplomas than knowledge or skills, and values prestige institutions granting degrees more than the competence that the degree itself embodies."

It is important to note that according to the Commission on Higher Education, 66% of college education in the Philippines in 2003/04 was privately provided, and therefore unsubsidized. This may help to explain why wage returns to college have not been driven down by supply.

The real cost of funds in the Philippines in 2004 was roughly equal to the LS Mincerian returns in 2004, so overeducation is likely, especially in agriculture and industry. Having said this, the high cost of funds at that time was due to the Philippine Government's poor external debt position, which is now on the mend. Thus overeducation could be temporary. However, unless long-term stagnation within and outside agriculture is reversed, returns could fall well below the cost of funds.

Finally, in Thailand, where secondary education was made free of charge in the period considered, the supply of LS graduates has boomed and returns have fallen. While midcareer workers are too old to have taken advantage of these public subsidies, they are probably more readily replaceable by younger workers than the older cohorts. Thus it seems

reasonable that the entry of large numbers of new graduates would have driven down their returns on LS schooling. However, most college schooling is still not subsidized in Thailand, and returns to college are therefore still rising, particularly as the services sector takes off. There is also no apparent bottleneck in the supply of industrial workers with basic education. The somewhat low returns to basic education are compensated for by a low cost of funds, so it is not clear whether Thai workers are overeducated.

## A look at some telling occupations

An earlier section (*Changes in employment structure and education intensity*) showed that the availability of secondary-educated workers has expanded far faster than structural change would require algebraically, so that education levels within almost every subsector of the economy have risen. It also finds many of the newly educated employed in sectors that are shown to have very low returns. The previous section (*Returns to education*) went on to show many bottlenecks due to the limited availability of workers with basic education easing. However, it is premature to conclude that more education is not necessary. It remains possible that rising education levels within subsectors result from technological changes.

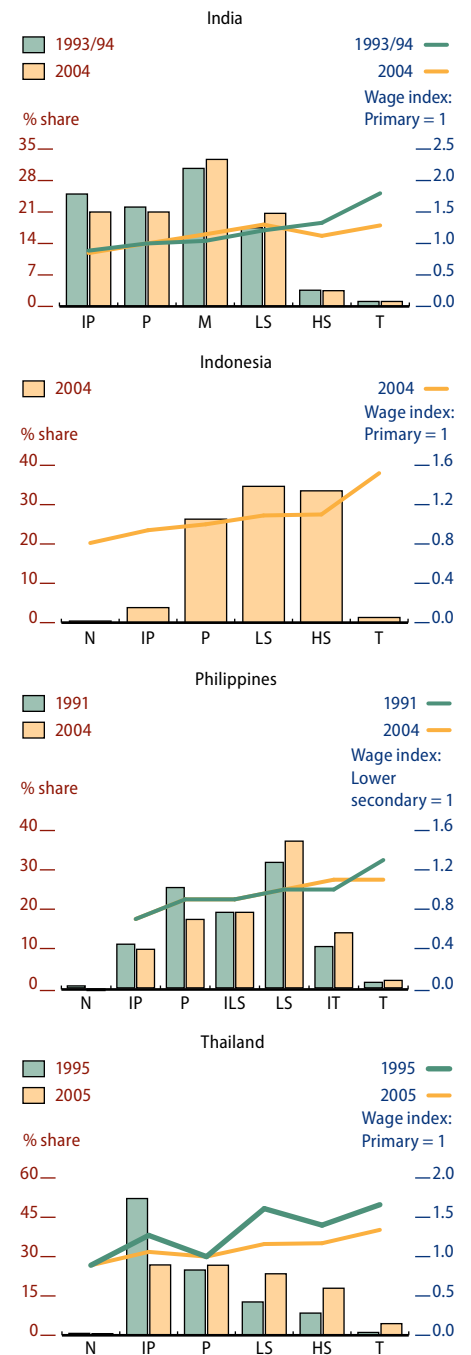
Figures 3.2.3–9 show how the distribution of education and the wage returns have altered among employees within several occupations in the four countries. Table 3.2.8 provides estimates of the relative importance of these activities over time.

While much could be said about the details of these figures, three points stand out. First, within any given occupation, education levels differ tremendously across countries. Consider drivers (Figure 3.2.3), the median among whom have around 6 years of education in Thailand, 7 years in India, 9 in Indonesia, and 10 in the Philippines. Similar discrepancies are observed in all occupations, with Indian and Thai workers always having the lowest education levels, Indonesians occupying the middle, and Filipinos always being the most educated. Given the broad similarity of technologies utilized by drivers and household helpers across countries, it is difficult to conceive of good reasons why demand for education in these activities should vary so much. It seems likely that these are residual categories into which workers of any education category may fall, rather than face unemployment. The detailed examination of wages in these jobs, below, reinforces this interpretation.

Second, the wage returns align with the more aggregate results from the previous section. Education wage premiums in most of these services sector occupations have fallen in the Philippines and Thailand, but appear to have held firm in India.

Third, the first four occupations in Table 3.2.8 are clearly not what one has in mind when one speaks of the “knowledge economy.” Yet to be sure, they account for a substantial, and in the Philippines and India—a growing—share of nonagricultural employment. The case that transformation requires more education across the board must hinge on some notion that these rather significant sources of employment will be phased out soon.

### 3.2.3 Education profile and wage indexes of male drivers



N = none; IP = incomplete primary; M = middle; P = primary; ILS = incomplete lower secondary; LS = lower secondary; HS = higher secondary; IT = incomplete tertiary; T = tertiary.

Note: Limited to commercial drivers and to those reporting wages.

Sources: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004; Indonesia SAKERNAS 1994, 2004; Philippine Labor Force Survey, 1991, 2004, October rounds; Thailand Labor Force Survey, 1995, 2005, October rounds.

[Click here for figure data](#)

## 3.2.8 Prevalence of selected occupations

Occupation	India		Indonesia	Philippines		Thailand	
	1993/94	2004	2004	1991	2004	1995	2005
Male drivers <sup>a</sup>	2.6	4.1	3.0	14.4	17.5	13.2	10.9
Female household servants <sup>b</sup>	6.5	9.9	4.7	10.3	11.6	2.7	1.8
Male security guards <sup>a</sup>	1.3	1.2	1.4	-	-	1.6	1.2
Retail sales staff	2.1	2.8	-	2.6	3.4	2.4	7.4
Directors and managers, financial <sup>c</sup>	0.3	0.3	-	-	-	-	-
Bookkeepers and cashiers <sup>c</sup>	0.8	0.6	1.4	-	-	3.3	1.9
Clerical workers <sup>c</sup>	4.3	3.5	-	3.8	4.4	0.3	0.6
Engineers and engineering technicians <sup>c</sup>	0.9	0.9	-	-	-	0.4	1.0

- = no directly comparable data available.

<sup>a</sup> % of total male nonagricultural employment. <sup>b</sup> % of total female nonagricultural employment. <sup>c</sup> % of total nonagricultural employment.

Sources: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004; Indonesia SAKERNAS 2004; Philippine Labor Force Survey, 1991, 2004, October rounds; Thailand Labor Force Survey, 1995, 2005, October rounds.

With regard to the details of jobs, it can be seen that drivers (Figure 3.2.3 above) account for an arrestingly high percentage of nonagricultural male employment in both the Philippines and Thailand. For this large portion of the Southeast Asian male labor force, technology is not propelling rising education levels, as it simply has not changed. Jeepneys, buses, motorized tricycles, and taxis have not evolved much, if at all, over the sample period. Further, the returns to education among drivers are extremely low. Indeed, when one considers that less-educated drivers reside disproportionately in rural areas with lower costs of living, the real return to education for drivers in India, Philippines, and Thailand could be around zero. In other words, these men did not acquire their education in the aspiration of becoming drivers. Yet in these three countries, drivers are significantly more educated now than they used to be. Furthermore, if it is presumed that productivity differentials between drivers will be reflected in wage differences, then the zero premium on schooling indicates that there is nothing intrinsic to the technologies operated by drivers that requires education.

Female household helpers are considered next (Figure 3.2.4). Filipino maids earned essentially no wage premium on schooling in 1991 or in 2004, while returns to LS education and below for Indian maids have also flattened to zero. Yet education levels among maids of both nationalities have risen—especially in the Philippines. The interpretation is exactly the same as for drivers.

In Thailand too, the wage premium for education among maids has fallen to nearly zero. Yet in contrast with the Philippine case, the education level of Thai maids has fallen, suggesting that the more-educated maids are finding better-paid employment.

Some tasks that underwent technological change are examined next, including retail sales, bookkeeping, and secretarial work. In each of these, economists would predict a return to education, because more-educated workers can negotiate new technologies more easily. As expected, in each of these professions, the wage premiums on secondary school are higher than those earned by drivers, maids, and security guards.

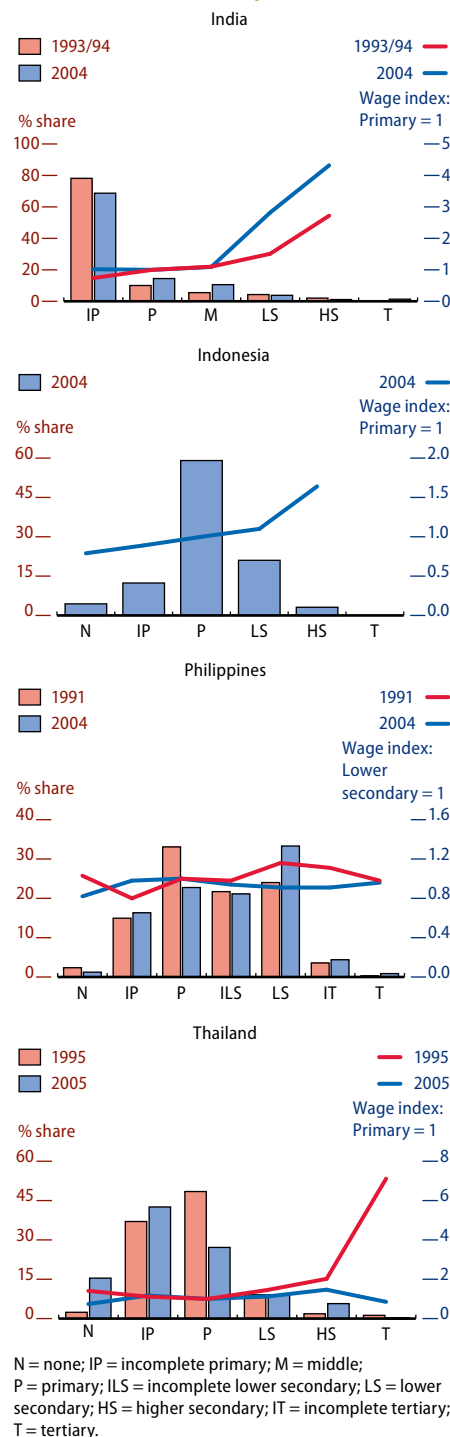
The above analysis suggests that workers of different education levels can be easily interchanged with each other, as education profiles of occupations vary greatly across countries. Countries with higher education levels in aggregate ended up with more-educated workers in

every occupation. Some of these jobs, which are large employers, have not experienced technological change, and others do not even pay a premium for more-educated workers, implying that workers did not obtain their education in order to get these jobs. Finally, education indeed reaps a higher premium in those occupations that have encountered technological change.

Some will argue, rightly, that the analysis focuses disproportionately on lower-status or mechanical jobs, to the exclusion of more “cerebral” professions. One argument for looking at these professions is that the flowering of supply chains and just-in-time inventory management may have increased the cognitive complexity of management jobs. Casual empiricism also confirms that the value of education in these professions is climbing. However, the focus of the analysis was determined by a noteworthy statistical constraint. For most of the cerebral occupations scrutinized (e.g., bank managers, software technicians, pure engineers, and retail sales managers) the samples were too thin to be statistically useful for estimating education profiles or wage premiums. There is nothing intrinsic to the sampling schemes employed by the labor force surveys that would cause these professions to be undersampled. There are simply very few people employed in such activities in the four sample countries.

A further feature of many of the cerebral professions is that education requirements are mandated by law or regulations (doctors, lawyers, nurses, engineers, bureaucrats, etc.). In this context there is very little scope for examining education intensification or changes in wage profiles within these groups, as Figure 3.2.9 shows clearly.

### 3.2.4 Education profile and wage indexes of female household helpers

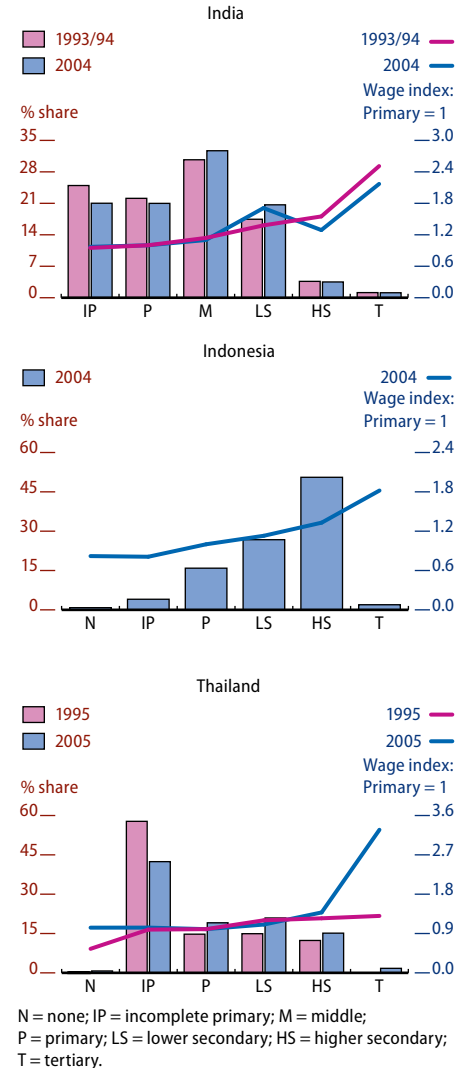


Note: Limited to those reporting wages.

Sources: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004; Indonesia SAKERNAS 1994, 2004; Philippine Labor Force Survey, 1991, 2004, October rounds; Thailand Labor Force Survey, 1995, 2005, October rounds.

[Click here for figure data](#)

### 3.2.5 Education profile and wage indexes of male security guards



Note: Limited to those reporting wages.

Sources: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004; Indonesia SAKERNAS 1994, 2004; Thailand Labor Force Survey, 1995, 2005, October rounds.

[Click here for figure data](#)



## Conclusions

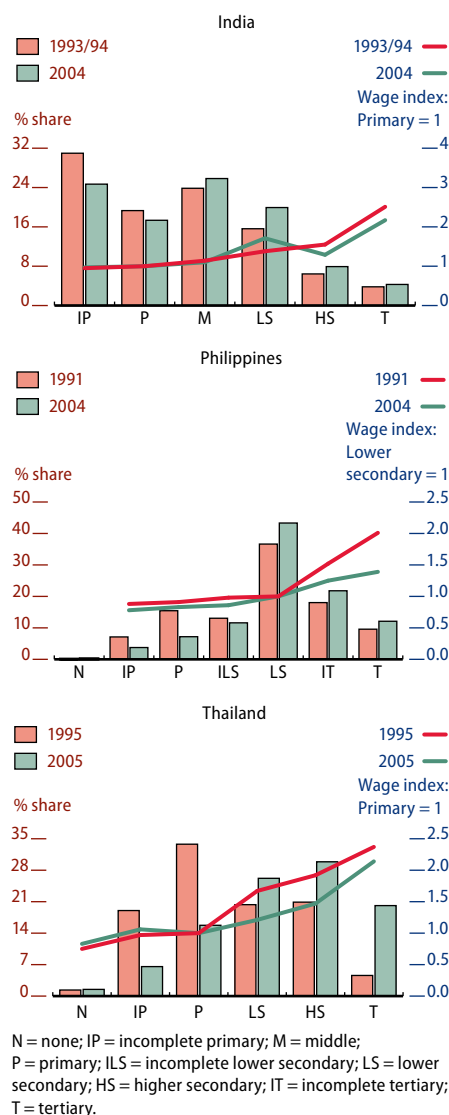
This chapter has examined the evolving distribution of education, wages, and employment in four Asian countries. It found education levels running ahead of employment growth in sectors that have traditionally hired the educated. Education levels rose in almost all sectors and occupations. This result is normatively ambiguous. Education levels may have risen within activities because they were too low from a productivity perspective to begin with. In this view, rising education levels should have increased productivity. Alternatively, education levels may have risen simply because education has become cheaper, unemployment is high, incomes are rising—or any number of other reasons unrelated to the productivity benefits of education.

It was therefore important to distinguish between two sets of explanations of education intensification: that it has been driven by productivity imperatives; or by something other than productivity imperatives. Under the assumption that worker productivity is reflected in wages, wage returns to education in specific sectors and occupations were therefore examined.

The returns to basic education have fallen, and now lie below the cost of funds in several sectors and occupations. Moreover, the sector this occurs in varies by economy. There is evidence that Filipino and Indian agricultural workers are overeducated, as are Filipino and (perhaps) Thai industrial workers. Furthermore, there are particular groups of workers, including Indian agricultural laborers, and drivers and maids everywhere, who receive a negligible return on their schooling. In the Philippines, where job creation has been anemic, the education levels and employment shares of drivers and maids are increasing. This is a sure sign that marginal educated workers reap no rewards for their schooling.

However, the point of this discussion is not that education subsidies need to be scaled back. Overeducation can be resolved relatively quickly through declines in the cost of funds, and more occasionally by dramatic technological shifts. Rather, the point is that severe distortions must

3.2.6 Education profile and wage indexes of retail sales staff

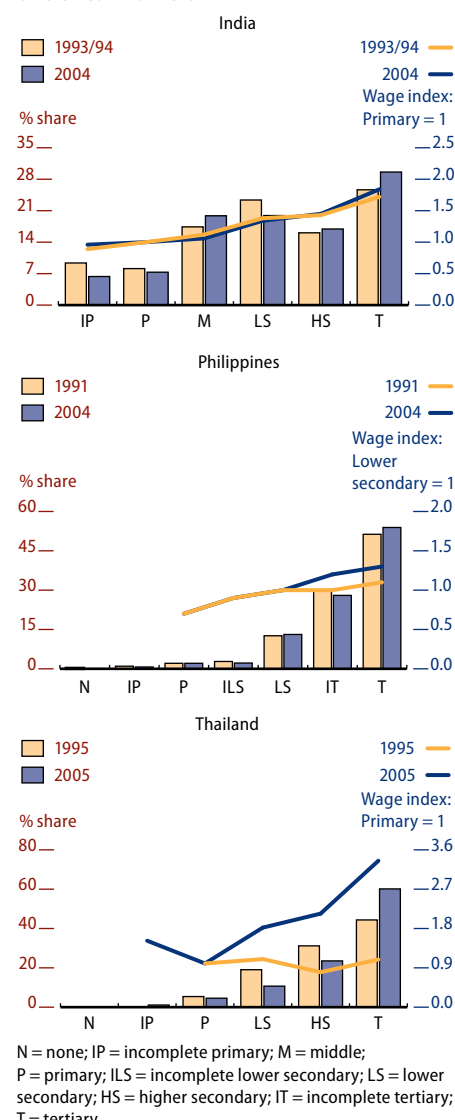


Note: Limited to those reporting wages.

Sources: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004; Philippine Labor Force Survey, 1991, 2004, October rounds; Thailand Labor Force Survey, 1995, 2005, October rounds.

[Click here for figure data](#)

3.2.7 Education profile and wage indexes of clerical workers



Note: Limited to those reporting wages.

Sources: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004; Philippine Labor Force Survey, 1991, 2004, October rounds; Thailand Labor Force Survey, 1995, 2005, October rounds.

[Click here for figure data](#)

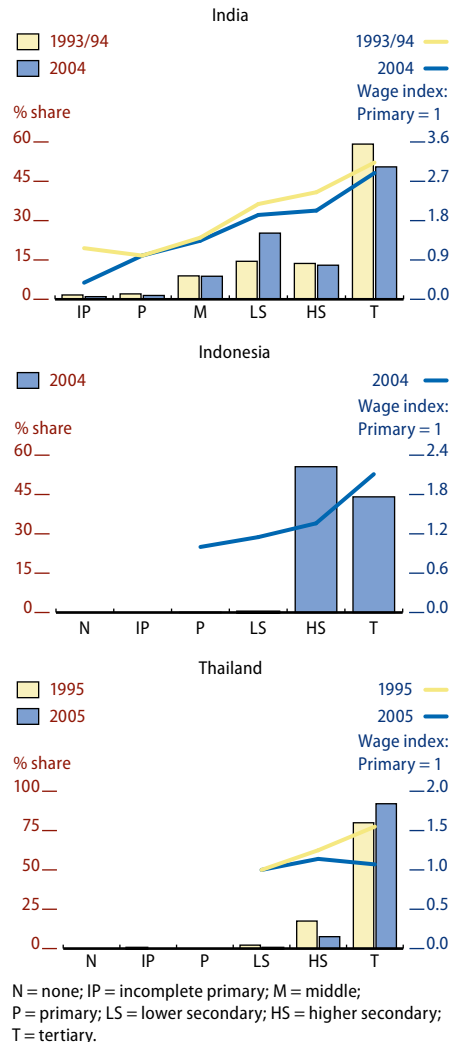
be hindering job creation and economic dynamism, thereby muting the pecuniary benefits of schooling.

It is often argued that it is in fact the limited supply of educated workers itself that is the constraint on economic dynamism. Surely growth of Filipino call centers and of IT-enabled services in India is hindered by a shortage of suitably educated workers? After all, call center managers informally interviewed for this work believe the employment opportunities in the sector to be substantial, if education bottlenecks can be overcome. This is certainly possible, and job creation in the sector would indeed bring benefits. However, there are at least three reasons against forging education policy based on the conclusion that raising target schooling levels will unleash transformation through high-end services.

First, as shown in this chapter, the employment shares of these sectors are extremely small, so projecting their capacity to create a large number of jobs involves tremendous out-of-sample extrapolation. Magtibay-Ramos et al. (2007) argue that to meet the forecast of the business process outsourcing (BPO) industry (and subsequently the Government) of 1 million BPO jobs in the Philippines by 2010, over one quarter of all new jobs would have to be in the industry—a historically unusual figure. Furthermore, other constraints, lurking just out of sight, may become apparent as the sectors expand. This is indeed one of the key lessons of the young literature on binding constraints to growth.

Second, the economic cost of bottlenecks should be considered. Certainly in India's high-end services, salaries have sky-rocketed to industrial-economy levels, and job retention is becoming harder as workers leave one job in the sector for more remunerative options elsewhere in the sector. In the Philippines call center business, the impact of education bottlenecks on productivity growth is much less clear. Call center salaries for college graduates range from \$250 to \$400 a month—or around two or three times GDP per capita—an attractive number, but perhaps less so for graduates of the nations' top universities.

### 3.2.8 Education profile and wage indexes of bookkeepers/cashiers

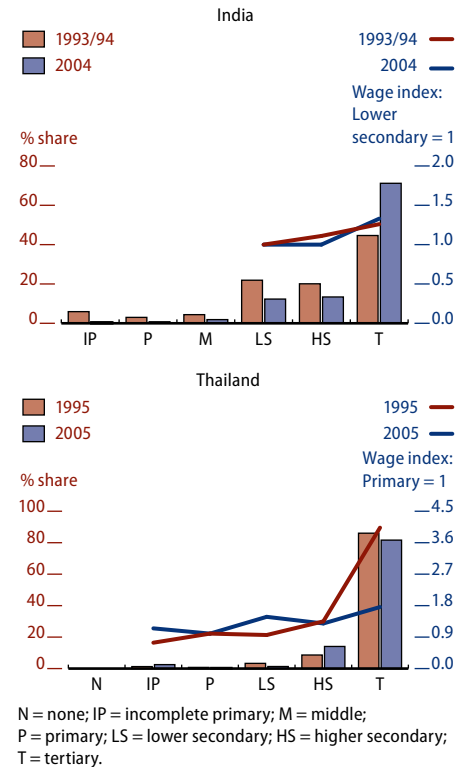


Note: Limited to those reporting wages.

Sources: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004; Indonesia SAKERNAS 1994, 2004; Thailand Labor Force Survey, 1995, 2005, October rounds.

[Click here for figure data](#)

### 3.2.9 Education profile and wage indexes of engineers and engineering technicians



Note: Limited to those reporting wages.

Sources: India National Sample Survey Organisation, Socio-economic Survey, Schedule 10, 1993/94, 2004; Thailand Labor Force Survey, 1995, 2005, October rounds.

[Click here for figure data](#)

As constraints on growth go, this is not particularly expensive. Moreover, employers report rising rates of absenteeism and that worker retention is becoming a problem. Anecdotally speaking, employees frequently leave the profession in favor of less remunerative jobs that do not require them to work the “graveyard shift.” Thus, the wages paid by the sector overstate the welfare improvement for workers.

Third, it is not obvious that the skills required in all of these professions are best obtained through general education. Several call center managers have expressed the view that their employees probably learned their English outside the classroom. Reports are starting to trickle in that firms in both countries are entertaining reasonable alternatives to college-educated workers. Some are establishing in-house training programs and report being satisfied with the results, while others are seeking high school graduates with the requisite skills. Despite the sector’s growth potential, these trends cast doubt on the relevance of this potential for education policy.

This chapter has therefore argued that policy advisers should price constraints to growth via the return to education before forging conclusions on education policy. This being done, it takes no issue with the view that some select groups of educated workers are in short supply and that this is a constraint to growth.

One final issue concerns the quality of education. Results from the labor force surveys are only representative of the quality of education typically available in each country. Certainly, raising the quality of education might increase the returns to schooling and probably would be helpful for igniting growth. Lacking data on school quality, this chapter cannot speculate on these issues. It is certainly possible—even likely—that higher-quality education will precipitate higher rates of investment and job creation, particularly in industry and services. This point made, and given that returns to the types of basic education available have fallen fast, this chapter concludes that it is mainly by measuring and credibly delivering improvements in quality that basic education projects could contribute directly to structural change and growth.

These caveats notwithstanding, the employment numbers provided are quite sobering, and caution against mechanically raising general education targets in the hope of generating growth. Certainly other reasons exist for raising education levels. But expectations of the contribution of education to structural change must be rooted firmly in a thoughtful, empirical understanding of what workers are likely to do with their education. The evidence provided suggests that when economies or sectors stagnate, the availability of jobs and new technologies may do more for many than more time in the classroom.

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### Datasets used and sources

Country	Source	Date
India	Socio-Economic Survey, Schedule 10, National Sample Survey Organisation, India	1993/94 (Round 50), 2004 (Round 60)
Indonesia	SAKERNAS, Badan Pusat Statistik, Indonesia	1994, 2004
Philippines	Labor Force Survey, National Statistics Office, Philippines	1991, 2004 October rounds
Thailand	Labor Force Survey, National Statistics Office, Thailand	1995, 2005 October rounds

The authors are grateful to Guntur Sugiyarto for providing statistics from the Indonesian SAKERNAS labor force surveys.



# Statistical Appendix



# Statistical notes and tables

The statistical appendix presents selected economic indicators for 43 developing member countries (DMCs) of the Asian Development Bank (ADB) in a total of 23 tables. These tables can generally be classified into the following accounts, namely: national accounts, both production and demand sides; labor (unemployment); prices; money supply; components of the balance of payments; external debt and debt service; exchange rates; international liquidity (gross international reserves); and government finance. The DMCs are grouped into five subregions: Central Asia, East Asia, South Asia, Southeast Asia, and the Pacific. These tables contain historical data from 2002 to 2006. Forecasts for 2007 to 2008 are also provided in the following tables: growth rate of GDP (A1), growth rate of per capita GDP (A2), inflation (A8), growth rate of merchandise exports (A10), growth rate of merchandise imports (A12), trade balance (A13), current account balance (A14), and current account balance as percent of GDP (A15).

As much as possible, efforts were undertaken to standardize the data to allow comparability over time and across DMCs. However, limitations exist because of differences in statistical methodology, definitions, coverage, and practices. A discussion of the sources, definitions, scope, and nature of data in the 23 tables, as well as the methodology for the computation of regional and subregional averages/totals, follows. Historical data were obtained from official sources, statistical publications, secondary publications, other working papers, and documents of the Asian Development Bank (ADB), International Monetary Fund (IMF), and World Bank. Projections for 2007 and 2008 are generally staff estimates, although for a few countries some projections are in accord with government economic programs agreed with IMF. Data in the tables are reported either on a calendar year or fiscal year basis. The DMCs that record most of their accounts on a calendar year basis (except for government finance data, which are reported on a fiscal year basis) are: Armenia; Azerbaijan; Hong Kong, China; Kazakhstan; Kyrgyz Republic; Lao People's Democratic Republic (Lao PDR); Samoa; Taipei, China; Tajikistan; Thailand; Democratic Republic of Timor-Leste; and Uzbekistan. Palau reports government finance and balance-of-payments data on a fiscal year basis. Some countries record the majority of their accounts on a fiscal year basis, with some of their accounts recorded on a calendar year basis, e.g., GDP data for Bhutan.

Regional and subregional averages/totals for DMCs are provided for nine economic indicator tables. Data for Myanmar, and Nauru are excluded from the computation of subregional averages/totals due to measurement problems. Out of the nine economic indicator tables, six have regional and subregional averages (A1, A2, A8, A10, A12, and A15). Where there are missing data for a given year, regional and subregional averages are computed on the basis of available information only.

Meanwhile, regional and subregional totals are incorporated in three tables (A11, A13, and A14) except that in Table A11, subregional totals are represented in terms of percentage shares of the subregions' exports to DMCs (excluding PRC), PRC, Japan, United States (US), and the rest of the world. For four tables, (A1, A2, A8, and A15), levels of gross national income (GNI) in current US\$ using the World Bank Atlas method are used as weights to calculate the subregional and regional averages. Tables on growth rates of merchandise exports and imports (A10 and A12) do not incorporate weights in the computation of averages; regional and subregional averages in these two tables are computed on the basis of a consistent sum, which means that if there are missing country data for a given year, the sum of the prior year used for computing the growth rate excludes the corresponding country data.

The GNI data, in current US\$, for DMCs from 2002 to 2005 were obtained from the World Bank, *World Development Indicators* online database. The most recent data, 2005 are also used to derive the weights for the computation of regional and subregional averages for 2006 to 2008. The GNI data, in current US\$, for three of the DMCs are unavailable, namely Cook Islands; Taipei, China; and Tuvalu. For these economies, GNI data are estimated using the Atlas conversion factor. For Turkmenistan, the 2005 data was estimated using the 2004 GNI figure. The GNI data for Afghanistan, previously excluded in regional and subregional computations, is now included. There are no GNI data for Myanmar and Nauru.

Six tables (A1, A2, A3, A4, A5, and A7) refer to the national income accounts. They show output and sector growth rates, as well as gross domestic investment (GDI) as a percentage of GDP. Definitions relating to output growth, production, and demand, are generally based on the United Nations System of National Accounts. For the PRC, GDP figures for the year 2004 onward were compiled following the Programme of Compilation of GDP and National Accounts for the Year of Economic Census, while those for earlier years were derived using a trend deviation approach. For Indonesia, the national income accounts data, starting in 2000 was revised to reflect their adoption of a new base year.

Sector shares of agriculture, industry, and services for 2005 are, respectively, presented in Tables A3 to A5. Sector shares are computed based on constant prices. For Hong Kong, China, import duties and taxes net of imputed bank service charges are added to the services sector only for the computation of the sector shares to obtain a 100% sum for all sectors. For Azerbaijan, Bhutan, Cambodia, Fiji Islands, Republic of Korea, Kyrgyz Republic, Lao PDR, Maldives, and Nepal, the calculation of sector shares is based on the share of each sector to the sum of gross value added. For Armenia and Bangladesh, import duties and taxes are excluded in the sector data but are also netted out in the total GDP level so that the sector shares still add up to 100%. Gross domestic investment (GDI) from the expenditure side of the national income accounts is also presented in Table A7. This represents final expenditures on investment at purchasers' prices. It is presented as a percentage of GDP, valued at current prices.

The following paragraphs examine the tables in more detail.

*Table A1: Growth rate of GDP (% per year).* This shows annual growth

rates of GDP valued at constant market prices, factor costs, or basic prices. GDP at market prices is the aggregation of the value added of all resident producers at producers' prices including taxes less subsidies on imports plus all nondeductible value-added or similar taxes. Factor cost measures differ from market price measures in that they exclude taxes on production and include subsidies. Basic price valuation is the factor cost plus some taxes on production, such as property and payroll taxes, and less some subsidies, such as labor-related subsidies but not product-related subsidies. Most DMCs use constant market price valuation. South Asian countries predominantly use constant factor costs, including Bhutan, India, Nepal, Pakistan, and Sri Lanka, while the Maldives' GDP valuation is at basic prices. Among the Pacific countries, Fiji Islands employs constant factor cost valuation. For Hong Kong, China, the computations of real GDP and sector growth rates are based on volume indexes, while GDP sector growth rates for Solomon Islands are based on GDP production indexes. Growth forecasts for Papua New Guinea, Samoa, and Vanuatu adopt official government projections.

*Table A2: Growth rate of per capita GDP (% per year).* The table provides the growth rates of real per capita GDP, which is defined as GDP at constant prices divided by the population. **Data on per capita gross national product in US\$ terms for 2005, sourced from the World Bank,** are also shown. Per capita GNP for Taipei, China, Tuvalu, and Cook Islands are estimated based on derived GNI data.

*Table A3: Growth rate of value added in agriculture (% per year).* The table shows the growth rates of value added in agriculture and its corresponding share in 2005. The agriculture sector includes agricultural crops, livestock, poultry, fisheries, and forestry.

*Table A4: Growth rate of value added in industry (% per year).* The table provides the growth rates of value added in industry and its corresponding share in 2005. This sector includes the manufacturing and nonmanufacturing subsectors. Mining and quarrying, construction, and utilities fall under the latter subsector.

*Table A5: Growth rate of value added in services (% per year).* The table gives the growth rates of value added in services, as well as its corresponding share in 2005. Subsectors include trade, banking, finance, real estate, public administration, and other services. For Uzbekistan, construction is included in services while for Tajikistan, trade and other items are included in services. For Singapore, ownership of dwellings is included in services.

*Table A6: Unemployment rate (%).* The unemployment rate is the percentage of the labor force that actively seeks work but is unable to find work at a given time. The age of the working population ranges from 15 to 65, except for Bangladesh where the labor force includes those aged 10 and above. In the case of the Philippines, the new definition of unemployment is applied starting 2006. The new definition (which took effect only in April 2005) introduced "availability for work" as a third criterion. The unemployment rates of the PRC and Viet Nam refer to unemployment in urban areas only.

*Table A7: Gross domestic investment (% of GDP).* This table provides the ratio of GDI to GDP. GDI is the sum of gross fixed capital formation plus changes in inventories. Gross fixed capital formation is measured by

the total value of a producer's acquisitions, less disposals, of fixed assets in a given accounting period. Additions to the value of nonproduced assets, e.g., land, form part of gross fixed capital formation. Inventories are stocks of goods held by institutional units to meet temporary or unexpected fluctuations in production and sales. For India, GDI includes valuables and errors and omissions.

*Table A8: Inflation (% per year).* Data on inflation rates represent period averages. Except for India, which reports the wholesale price index, inflation rates presented are based on consumer price indexes. The consumer price indexes of the following countries are for a given city or group of consumers only: Cambodia is for Phnom Penh, Republic of Marshall Islands is for Majuro, and Nepal is for urban consumers.

*Table A9: Growth in money supply (% per year).* This table tracks the annual percentage change in the end-of-period supply of broad money as represented by M2 (for most DMCs). M2 is defined as the sum of M1 and quasi-money where M1 denotes currency in circulation plus demand deposits and quasi-money consists of time and savings deposits including foreign currency deposits. For Korea, M2 includes transferable savings deposits. For Sri Lanka, money supply (M2b) includes time and savings deposits held by commercial banks' foreign currency banking units. For India and Philippines, broad money is represented by M3, defined as M2 plus other assets that are less liquid than what would be classified under M2 and M1. In the case of Turkmenistan, M2 excludes deposits in foreign currency. For Azerbaijan and Kazakhstan, the national definition of money is M3 but the components are the same as the IMF's definition of M2. For Kyrgyz Republic, broad money (also called M2x) is equal to M2 plus foreign currency deposits. For India, M3 includes deposits with the Reserve Bank of India. For Timor-Leste, M2 excludes currency holdings by the public, for which data are not available. The 2006 figure for Uzbekistan is based on projections.

*Tables A10, A12, A13, A14, A15, A16: Balance of payments.* This set of tables primarily contains items from the balance of payments (BOP). These items cover the annual flows recorded in the BOP account. Data for the Philippines have been revised to conform to international standards. Major revisions involve valuation adjustments of imports under consignment arrangement; adoption of residency criterion for overseas Filipino workers and adjustments to account for remittances channeled outside the banking system; and use of survey-based data to estimate trade credits under the "other investment" account.

*Tables A10 and A12: Growth rates of merchandise exports and imports (% per year).* The annual growth rates of exports and imports, in terms of merchandise goods only, are shown in these tables. Data are in million US\$, primarily obtained from the balance-of-payments accounts of each DMC. Exports in general are reported on a free-on-board (f.o.b.) basis. In this case, exports are valued at the customs frontier of the exporting country plus export duties and the costs of loading the goods onto the carrier unless the latter is borne by the carrier. It excludes the cost of freight and insurance beyond the customs frontier. Import data are reported either on an f.o.b. or c.i.f. (cost, insurance, freight) basis. On a c.i.f. basis, the value of imports includes the cost of international freight and insurance up to the customs frontier of the importing country. It



excludes the cost of unloading the goods from the carrier unless it is borne by the carrier. For East Asia, all economies report imports on an f.o.b. basis except Mongolia, which records them on a c.i.f. basis. Imports are valued on an f.o.b. basis for Indonesia, Malaysia, and Viet Nam while the rest of the Southeast Asian countries' imports are valued on a c.i.f. basis. Afghanistan, Bhutan, and India record imports on a c.i.f. basis while Bangladesh, Maldives, Nepal, Pakistan, and Sri Lanka value imports on an f.o.b. basis. For most of the Central Asian republics, namely Armenia, Azerbaijan, Kyrgyz Republic, Kazakhstan, Tajikistan, and Uzbekistan, all imports are reported on an f.o.b. basis. Most of the Pacific countries report imports on an f.o.b. basis. The only countries that record imports on a c.i.f. basis are Samoa and Solomon Islands. The 2006 data on merchandise exports and imports for Armenia and Tajikistan are estimated based on the actual figure for the first three quarters of the year. The 2006 data for Kyrgyz Republic and Azerbaijan are based on official preliminary estimates, while that of Turkmenistan and Uzbekistan are based on projections.

*Table A11: Direction of exports (% of total).* Data from this table are sourced from IMF, *Direction of Trade and Statistics*, CD-ROM (January 2007). This table shows the exports of ADB's DMCs, except Taipei, China of which data on exports were sourced from CEIC Data Company Ltd. This table shows the percentage share of exports of each DMC to developing Asia excluding the PRC; PRC only; US; Japan; European Union (EU); and others (or rest of the world). The rest of the world is derived as total exports of DMCs to the world minus their exports among themselves and to US, Japan, and EU.

*Table A13: Trade balance (US\$ million).* The trade balance is the difference between merchandise exports and merchandise imports. Figures on this table are based on the exports and imports levels used to generate Tables A10 and A12.

*Table A14: Current account balance (US\$ million).* The current account balance is the sum of the balance of trade for merchandise, net trade in services and factor income, and net transfers. In the case of Mongolia, Cambodia, Lao PDR, and Viet Nam, official transfers are excluded from the current account balance. The 2006 data for Armenia is estimated based on the actual figure for the first three quarters of the year. The 2006 data for Kyrgyz Republic and Azerbaijan are based on official preliminary estimates, while for Turkmenistan, Tajikistan and Uzbekistan, the figures are based on projections.

*Table A15: Current account balance (% of GDP).* The values reported in Table 14 are divided by GDP at current prices in US\$. In the case of Bhutan, GDP for the previous calendar year is used as the denominator.

*Table A16: Foreign direct investment (US\$ million).* Foreign direct investment refers to equity capital, reinvested earnings, investment in debt securities, and other capital associated with the transactions of the enterprises, net of repatriations and intercompany loan repayments. For the PRC, foreign direct investment refers to investments of foreign enterprises, economic organizations, and individuals through joint ventures and cooperation; reinvested earnings; and enterprises' borrowings from abroad under approved investment projects. The series was revised to reflect actually utilized foreign direct investment.

Data on foreign direct investment for Korea comprise equity purchases and long-term intercompany loans. In the case of the Lao PDR, gross capital flows, instead of net capital flows, are presented. Data for the Maldives are derived from the United Nations Conference on Trade and Development (UNCTAD) database and refer to gross inflows. The 2006 data for Armenia and Kyrgyz Republic cover only the first three quarters of the year, while the figures for Tajikistan and Turkmenistan are based on projections.

*Table A17: External debt outstanding (US\$ million).* For most DMCs, external debt outstanding—public and private—includes medium- and long-term debt, short-term debt, and IMF credit. For Cambodia and Lao PDR, only public external debt is reported. For Azerbaijan; Korea; Hong Kong, China; India; and Singapore, the figures for 2006 are as of September 2006. The 2006 data for Armenia is estimated based on the actual figure for the first three quarters of the year. In the case of Kazakhstan, total external debt includes inter-company debt.

*Table A18: Debt service ratio (% of exports of goods and services).* This table presents the total debt service payments of each DMC as a percentage of exports of goods and services. Total debt service payments comprise principal repayments (excluding on short-term debt) and interest payments on outstanding external debt. For Cambodia, Taipei, China, and Lao PDR, debt service refers to external public debt only. Exports of goods are used as the denominator in the calculation of the ratio for Papua New Guinea, and Viet Nam. For the Philippines, exports of goods, services, and income are used as the denominator in the calculation of the ratio. For Bangladesh, the ratio represents debt service payments on medium- and long-term loans as a percentage of exports of goods, nonfactor services, and workers' remittances. For Azerbaijan, the ratio represents public- and publicly-guaranteed external debt service payments as a percentage of exports of goods and nonfactor services. The data for 2006 for Malaysia is as of September 2006.

*Table A19: Exchange rates to the US dollar (annual average).* The annual average exchange rates of the DMCs are quoted in local currencies per US dollar. For Azerbaijan, the exchange rate figures reflect the new currency. In 1 January 2006, the government redenominated its currency, exchanging 5,000 old manat for 1 new manat.

*Table A20: Gross international reserves (US\$ million).* Gross international reserves (GIR) are defined as the US\$ value of holdings of special drawing rights (SDR), reserve position in the IMF, foreign exchange, and gold at the end of a given period. Most DMCs report GIR without gold. However, for Southeast Asian countries, gold is included in the computation of gross international reserves. For a few countries, GIR data are reported as of the end of the fiscal year. For the PRC, and for Taipei, China, GIR refers to foreign exchange reserves only. For Maldives, GIR comprises foreign assets of the Maldives Monetary Authority. For Pakistan, GIR consists of net foreign reserves with the State Bank of Pakistan. For Azerbaijan, GIR includes Oil Fund assets, while for Turkmenistan, the figures refer only to foreign exchange reserves excluding gold. GIR data for Marshall Islands, Samoa, Solomon Islands, Tonga, and Vanuatu refer to gross official foreign exchange reserves. For Kiribati, GIR refers to total official external assets. In the case of Papua

New Guinea, GIR includes the Bank of Papua New Guinea's holdings of gold. For India, data for 2006 is based on actual figures as of 2 March 2007 only, while that for Turkmenistan is based on projections.

*Tables A21, A22, and A23: Government finance.* This set of tables refers to the revenue and expenditure transactions as well as the fiscal balance of the central government. For PRC, India, Mongolia, Kazakhstan, and Tajikistan, transactions are those reported by the general government. The shares of these major fiscal items as against GDP are calculated for this group of tables. For Bhutan, ratios are calculated relative to the previous calendar year's GDP.

*Table A21: Central government expenditures (% of GDP).* Central government expenditures comprise all nonrepayable payments to both current and capital expenses, plus net lending. These amounts are computed as a share of GDP at current prices. For Singapore, expenditures refer to outlays made from the Consolidated Revenue Account, Development Fund Account, and Sinking Fund Account plus lending minus repayments. For Thailand, expenditures refer to budgetary expenditures excluding externally financed expenditures and corresponding borrowing. Data for 2005 and 2006 is not available due to a change in government accounting procedures. For Bangladesh, expenditures include a residual. One-time expenditures are excluded for Pakistan. For Viet Nam, off-budget expenditures are excluded.

*Table A22: Central government revenues (% of GDP).* Central government revenues comprise all nonrepayable receipts, both current and capital, plus grants. These amounts are computed as a percentage of GDP at current prices. For Korea, revenues incorporate the repayment on government-guaranteed debts but exclude social security contributions. For Singapore, revenues refer to receipts credited to Consolidated Revenue Account, Development Fund Account, and Sinking Fund Account, including investment income, capital receipts, and investment adjustments. In some countries, other revenue items are included or excluded in the reported revenue figures: grants are excluded for Cambodia, Lao PDR, Malaysia, Singapore, and Thailand; capital receipts are excluded but revenues from disinvestment are included for India; only current revenues are included for Bangladesh; and grants and privatization proceeds are excluded for Sri Lanka. For Cambodia, the proceeds of the IMF debt relief program are reflected in their revenues for 2006.

*Table A23: Fiscal balance of central government (% of GDP).* Fiscal balance is the difference between central government revenues and expenditures presented in nominal local currency. The difference is also computed as a share of GDP. Data variations may arise due to statistical discrepancies, e.g., balancing items for both central and local governments, and differences in the concept used in the individual computations of revenues and expenditures as compared with the calculation of the fiscal balance. For Thailand, the fiscal balance is a cash balance composed of the budgetary balance and nonbudgetary balance. Some off-budget accounts are included in the computation of the fiscal balance for Turkmenistan.

**Table A1 Growth rate of GDP (% per year)**

	2002	2003	2004	2005	2006	2007	2008
<b>Central Asia</b>	8.7	9.4	9.7	11.2	12.4	10.3	9.4
Armenia	13.2	14.0	10.5	13.2	13.4	10.0	9.0
Azerbaijan	8.1	10.4	10.2	26.4	32.0	25.0	17.0
Kazakhstan	9.8	9.2	9.4	9.7	10.6	8.6	8.9
Kyrgyz Republic	0.0	7.0	7.0	-0.2	2.7	4.0	5.0
Tajikistan	10.8	11.0	10.3	6.7	7.0	7.5	7.1
Turkmenistan	15.8	17.1	14.7	9.6	9.0	8.5	8.5
Uzbekistan	4.2	4.4	7.7	7.0	7.3	7.4	7.1
<b>East Asia</b>	7.5	7.3	8.4	8.3	8.7	8.0	8.0
China, People's Rep. of	9.1	10.0	10.1	10.4	10.7	10.0	9.8
Hong Kong, China	1.8	3.2	8.6	7.5	6.8	5.4	5.2
Korea, Rep. of	7.0	3.1	4.7	4.0	5.0	4.5	4.8
Mongolia	4.0	6.5	10.8	6.6	8.4	7.0	7.0
Taipei, China	4.2	3.4	6.1	4.0	4.6	4.3	4.5
<b>South Asia</b>	3.7	7.8	7.4	8.7	8.7	7.7	8.0
Afghanistan, Islamic Rep. of	28.6	15.7	8.0	14.0	8.0	10.0	10.0
Bangladesh	4.4	5.3	6.3	6.0	6.7	6.5	7.0
Bhutan	10.0	7.6	6.8	6.5	9.0	18.0	10.0
India	3.8	8.5	7.5	9.0	9.2	8.0	8.3
Maldives	6.5	8.5	9.5	-4.5	18.2	12.1	8.0
Nepal	-0.4	3.0	3.5	2.3	2.3	2.8	2.8
Pakistan	3.1	4.7	7.5	8.6	6.6	6.8	6.5
Sri Lanka	4.0	6.0	5.4	6.0	7.2	6.1	6.0
<b>Southeast Asia</b>	4.8	5.3	6.5	5.6	6.0	5.6	5.9
Cambodia	6.2	8.6	10.0	13.4	10.4	9.5	9.0
Indonesia	4.5	4.8	5.0	5.7	5.5	6.0	6.3
Lao People's Dem. Rep.	5.9	6.1	6.4	7.0	7.3	6.8	6.5
Malaysia	4.4	5.5	7.2	5.2	5.9	5.4	5.7
Myanmar	12.0	13.8	13.6	13.2	-	-	-
Philippines	4.4	4.9	6.2	5.0	5.4	5.4	5.7
Singapore	4.2	3.1	8.8	6.6	7.9	6.0	5.5
Thailand	5.3	7.1	6.3	4.5	5.0	4.0	5.0
Viet Nam	7.1	7.3	7.8	8.4	8.2	8.3	8.5
<b>The Pacific</b>	0.4	1.8	3.6	2.5	3.1	4.5	2.8
Cook Islands	2.6	8.2	4.3	2.2	1.8	3.2	3.9
Fiji Islands	2.9	1.2	5.6	0.5	3.4	-2.3	1.3
Kiribati	5.5	1.5	-1.4	3.6	0.9	-	-
Marshall Islands, Rep. of	5.2	4.1	4.5	1.1	3.0	3.5	-
Micronesia, Fed. States of	1.4	3.3	-4.3	1.5	-0.7	1.0	1.5
Nauru	-	-	-	-	-	-	-
Palau, Rep. of	-3.5	-1.3	4.9	5.5	5.7	5.5	4.8
Papua New Guinea	-0.2	2.2	2.9	3.3	3.7	4.5	3.5
Samoa	1.0	3.2	3.3	5.2	4.6	3.1	-
Solomon Islands	-1.6	6.4	8.0	5.0	5.3	5.0	4.0
Timor-Leste, Dem. Rep. of	-6.7	-6.2	0.4	2.3	-1.6	32.1	3.5
Tonga	3.0	3.2	1.4	2.3	1.9	0.0	2.9
Tuvalu	5.5	4.0	4.0	2.0	3.0	2.5	2.5
Vanuatu	-7.3	3.1	5.8	6.1	5.5	4.7	4.6
<b>Average</b>	6.4	7.1	7.9	7.9	8.3	7.6	7.7

- = data not available.

Table A2 Growth rate of per capita GDP (% per year)

	2002	2003	2004	2005	2006	2007	2008	Per capita GNP, \$, 2005
<b>Central Asia</b>	7.7	7.8	8.8	10.0	11.4	9.4	9.1	
Armenia	13.2	14.1	10.4	13.9	14.2	10.0	9.0	1,470
Azerbaijan	7.3	9.6	9.4	25.2	30.6	22.2	15.7	1,240
Kazakhstan	9.6	8.7	9.0	8.3	9.7	7.9	8.9	2,930
Kyrgyz Republic	-0.8	5.9	5.9	-1.1	1.5	5.3	6.3	440
Tajikistan	6.8	7.8	8.0	4.5	7.8	6.0	5.6	330
Turkmenistan	10.1	7.6	11.1	8.1	7.6	-	-	-
Uzbekistan	3.1	3.2	6.7	6.2	5.7	5.5	5.6	510
<b>East Asia</b>	6.8	6.8	7.8	7.6	8.1	7.4	7.4	
China, People's Rep. of	8.4	9.4	9.4	9.6	10.0	9.3	9.2	1,740
Hong Kong, China	1.4	3.4	7.7	7.1	6.1	4.9	4.7	27,670
Korea, Rep. of	6.4	2.6	4.3	3.7	4.7	4.2	4.4	15,830
Mongolia	2.3	5.6	9.4	5.3	7.3	5.5	5.5	690
Taipei, China	3.7	3.0	5.7	3.7	4.2	3.9	4.1	14,874
<b>South Asia</b>	1.9	6.1	5.7	6.9	6.9	6.1	6.6	
Afghanistan, Islamic Rep. of	-	13.6	3.3	12.1	4.2	6.2	6.2	-
Bangladesh	3.1	3.8	4.9	4.6	5.3	4.6	5.1	470
Bhutan	7.3	4.9	4.2	4.1	6.6	15.4	7.6	870
India	2.1	6.7	5.8	7.3	7.5	6.5	6.8	720
Maldives	4.8	6.8	8.0	-6.1	16.4	10.3	-	2,390
Nepal	-13.6	13.5	1.3	0.1	0.1	7.6	8.5	270
Pakistan	0.9	2.6	6.5	6.1	4.7	4.4	-	690
Sri Lanka	2.5	4.7	4.3	4.9	0.7	4.5	4.5	1,160
<b>Southeast Asia</b>	3.3	4.0	4.8	3.8	4.5	3.9	4.3	
Cambodia	4.2	6.6	9.3	10.9	8.2	7.6	7.0	380
Indonesia	3.2	3.5	3.7	3.4	5.1	4.4	4.7	1,280
Lao People's Dem. Rep.	3.1	3.2	3.5	-1.7	5.2	4.8	2.0	440
Malaysia	2.2	3.3	5.0	3.0	3.9	3.6	4.0	4,960
Myanmar	9.8	11.6	11.3	11.0	-	-	-	-
Philippines	2.4	2.8	4.0	2.8	3.2	3.2	3.6	1,300
Singapore	3.2	2.8	7.4	4.1	4.5	3.4	3.5	27,490
Thailand	4.4	6.2	4.5	4.4	3.9	3.2	3.9	2,750
Viet Nam	5.7	5.8	6.3	7.0	6.9	5.3	7.0	620
<b>The Pacific</b>	-1.5	0.0	1.6	0.8	1.4	2.6	1.1	
Cook Islands	-0.8	8.2	-5.4	2.7	1.8	3.2	3.9	-
Fiji Islands	1.6	0.4	4.9	-0.5	2.4	-3.1	0.7	3,280
Kiribati	3.7	-0.2	-3.0	1.1	-0.7	-	-	1,390
Marshall Islands, Rep. of	1.7	0.2	0.5	-2.7	-0.5	0.0	-	2,930
Micronesia, Fed. States of	1.2	3.1	-4.5	1.4	-0.7	1.9	0.6	2,300
Nauru	-	-	-	-	-	-	-	-
Palau, Rep. of	-4.3	-2.1	4.1	4.6	4.6	4.5	3.8	7,630
Papua New Guinea	-2.3	0.0	0.8	1.5	1.9	2.7	1.7	660
Samoa	0.1	2.3	2.6	4.5	4.2	2.7	-	2,090
Solomon Islands	-4.2	3.6	5.2	2.3	2.9	2.6	1.6	590
Timor-Leste, Dem. Rep. of	-11.1	-12.1	-6.4	-3.0	-6.7	25.3	-1.9	750
Tonga	2.6	2.9	1.0	2.1	1.7	-0.2	2.7	2,190
Tuvalu	5.0	3.5	3.5	-	1.0	0.5	0.5	-
Vanuatu	-9.7	0.5	3.1	3.4	2.8	2.0	1.9	1,600
<b>Average</b>	5.4	6.2	7.0	6.9	7.4	6.7	6.8	

- = not available.



Table A3 Growth rate of value added in agriculture (% per year)

	2002	2003	2004	2005	2006	Sector share 2005, %
<b>Central Asia</b>						
Armenia	3.6	4.0	14.0	10.8	-	22.1
Azerbaijan	4.0	0.9	1.5	7.5	9.5	10.0
Kazakhstan	3.4	1.4	0.1	7.3	8.0	8.5
Kyrgyz Republic	3.1	3.2	4.1	-4.2	1.5	47.0
Tajikistan	15.7	9.4	-	-	-	-
Turkmenistan	-	-	-	-	-	-
Uzbekistan	6.0	6.8	10.1	5.6	-	36.1
<b>East Asia</b>						
China, People's Rep. of	2.9	2.5	6.3	5.2	5.0	11.1
Hong Kong, China	-0.7	-5.6	2.0	-1.9	0.5	0.1
Korea, Rep. of	-3.5	-5.3	9.2	-0.1	-1.9	3.9
Mongolia	-12.4	4.9	17.7	9.6	9.7	21.3
Taipei, China	4.7	-0.1	-4.1	-8.1	5.4	1.4
<b>South Asia</b>						
Afghanistan, Islamic Rep. of	-	16.9	-17.1	-	-	-
Bangladesh	0.0	3.1	4.1	2.2	4.5	22.3
Bhutan	2.7	2.1	2.1	0.4	1.5	22.9
India	-7.2	10.0	0.0	6.0	2.7	19.7
Maldives	15.9	1.8	3.0	11.7	2.9	10.3
Nepal	2.2	2.5	3.9	3.0	1.7	39.1
Pakistan	0.1	4.1	2.4	6.7	2.5	22.5
Sri Lanka	2.5	1.6	-0.3	1.4	5.9	17.2
<b>Southeast Asia</b>						
Cambodia	-2.2	12.1	1.2	16.6	4.4	33.2
Indonesia	3.4	3.8	2.8	2.7	3.0	14.5
Lao People's Dem. Rep.	4.0	2.2	3.5	2.5	3.3	45.0
Malaysia	2.8	5.5	5.0	2.5	6.4	7.7
Myanmar	6.0	11.7	11.0	11.8	-	50.1
Philippines	4.0	3.8	5.3	1.8	4.1	19.1
Singapore	-8.5	1.9	12.7	-1.9	12.7	0.1
Thailand	0.7	12.7	-2.4	-3.2	4.4	8.9
Viet Nam	4.2	3.6	4.4	4.0	3.4	19.6
<b>The Pacific</b>						
Cook Islands	9.5	28.3	-2.6	-	-	-
Fiji Islands	4.9	-4.0	4.5	2.8	3.9	18.3
Kiribati	-31.5	51.1	15.1	-41.7	5.7	3.7
Marshall Islands, Rep. of	-	-	-	-	-	-
Micronesia, Fed. States of	-	-	-	-	-	-
Nauru	-	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-	-
Papua New Guinea	26.0	5.0	4.6	1.7	2.9	38.5
Samoa	-6.3	-3.3	-6.8	7.0	-	12.5
Solomon Islands	8.0	33.3	20.4	3.2	-	34.3
Timor-Leste, Dem. Rep. of	6.0	-0.5	8.4	3.6	-	31.7
Tonga	3.3	3.8	-3.3	-3.0	-0.5	24.6
Tuvalu	-9.4	-	-	-	-	-
Vanuatu	-3.3	6.5	7.2	-1.4	-	18.2

- = not available.

Table A4 Growth rate of value added in industry (% per year)

	2002	2003	2004	2005	2006	Sector share 2005, %
<b>Central Asia</b>						
Armenia	22.9	27.6	8.1	18.3	-	36.3
Azerbaijan	17.4	19.2	17.9	42.7	45.6	62.3
Kazakhstan	10.4	9.1	10.1	4.6	7.0	34.7
Kyrgyz Republic	-9.0	12.7	3.0	-9.8	-7.4	15.8
Tajikistan	12.0	4.9	-	-	-	-
Turkmenistan	-	-	-	-	-	-
Uzbekistan	3.4	3.2	5.0	8.9	-	36.6
<b>East Asia</b>						
China, People's Rep. of	9.8	12.7	11.1	11.7	12.5	57.3
Hong Kong, China	-3.6	-5.1	-2.6	-1.8	1.4	9.0
Korea, Rep. of	6.4	6.1	8.8	5.7	6.5	43.6
Mongolia	3.8	6.6	14.5	1.2	8.0	24.6
Taipei, China	5.9	3.8	8.7	5.9	6.7	29.4
<b>South Asia</b>						
Afghanistan, Islamic Rep. of	-	11.9	32.4	-	-	-
Bangladesh	6.5	7.3	7.6	8.3	9.6	28.3
Bhutan	17.7	7.1	4.1	3.0	11.3	37.6
India	7.1	7.4	9.8	9.6	10.0	26.2
Maldives	10.4	8.3	12.9	3.0	15.5	16.7
Nepal	-2.9	3.3	1.1	1.5	3.5	22.2
Pakistan	2.7	4.2	16.3	11.4	5.9	26.2
Sri Lanka	1.0	5.5	5.2	8.3	6.9	27.0
<b>Southeast Asia</b>						
Cambodia	17.3	12.1	16.4	12.1	17.0	28.5
Indonesia	4.3	3.8	3.9	4.7	4.7	44.1
Lao People's Dem. Rep.	10.1	11.5	12.5	16.0	13.0	29.6
Malaysia	4.3	7.3	7.9	4.0	5.3	42.0
Myanmar	35.0	20.7	21.4	19.1	-	15.2
Philippines	3.9	4.0	4.7	4.9	4.8	33.0
Singapore	4.0	1.2	10.5	8.0	10.2	31.7
Thailand	7.1	9.6	7.9	5.4	5.9	47.0
Viet Nam	9.5	10.5	10.2	10.6	10.4	40.2
<b>The Pacific</b>						
Cook Islands	-0.3	16.7	10.6	-	-	-
Fiji Islands	2.2	1.3	9.8	-6.4	2.2	29.3
Kiribati	-4.9	-1.1	2.8	19.6	0.0	12.6
Marshall Islands, Rep. of	-	-	-	-	-	-
Micronesia, Fed. States of	-	-	-	-	-	-
Nauru	-	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-	-
Papua New Guinea	-14.1	4.6	1.9	6.0	4.8	33.7
Samoa	-0.6	4.1	5.1	2.7	-	26.3
Solomon Islands	1.7	-1.7	3.5	9.3	-	8.5
Timor-Leste, Dem. Rep. of	-10.6	-15.3	0.5	-	-	-
Tonga	5.0	2.4	-1.0	9.7	2.5	17.1
Tuvalu	6.5	-	-	-	-	-
Vanuatu	-5.8	3.6	5.4	8.4	-	9.8

- = not available.

Table A5 Growth rate of value added in services (% per year)

	2002	2003	2004	2005	2006	Sector share 2005, %
<b>Central Asia</b>						
Armenia	17.0	10.3	12.9	10.4	-	41.6
Azerbaijan	4.4	11.5	11.2	9.2	12.6	27.7
Kazakhstan	10.9	10.4	10.8	10.5	10.7	56.7
Kyrgyz Republic	4.2	7.3	11.9	8.4	8.4	37.2
Tajikistan	3.5	13.6	-	-	-	-
Turkmenistan	-	-	-	-	-	-
Uzbekistan	3.3	3.2	7.4	7.1	-	27.3
<b>East Asia</b>						
China, People's Rep. of	10.4	9.5	10.0	10.5	10.3	31.7
Hong Kong, China	2.8	4.5	10.1	8.0	7.1	90.9
Korea, Rep. of	7.8	1.6	1.9	3.0	4.1	52.4
Mongolia	11.6	7.0	6.6	8.1	8.1	54.1
Taipei, China	3.6	3.4	5.3	3.5	3.7	69.2
<b>South Asia</b>						
Afghanistan, Islamic Rep. of	-	13.8	34.6	-	-	-
Bangladesh	5.4	5.4	5.7	6.4	6.5	49.4
Bhutan	4.5	11.0	11.0	13.2	10.4	39.5
India	7.4	8.5	9.6	9.8	11.2	54.1
Maldives	4.7	9.5	9.7	-8.1	21.2	73.0
Nepal	-1.3	3.4	4.8	2.4	2.4	38.8
Pakistan	4.8	5.2	5.8	8.0	8.8	51.3
Sri Lanka	6.1	7.9	7.6	6.4	7.7	55.8
<b>Southeast Asia</b>						
Cambodia	6.3	4.4	11.7	12.1	11.4	38.3
Indonesia	5.2	6.4	7.1	7.9	7.2	41.4
Lao People's Dem. Rep.	5.7	7.2	7.5	6.7	5.5	25.5
Malaysia	6.5	4.6	7.0	6.5	6.6	50.3
Myanmar	14.8	14.5	14.4	12.8	-	34.7
Philippines	5.1	6.1	7.6	6.4	6.3	47.9
Singapore	4.1	3.5	7.4	6.1	6.7	68.2
Thailand	4.6	3.5	6.7	5.2	4.2	44.1
Viet Nam	6.5	6.5	7.3	8.5	8.3	40.3
<b>The Pacific</b>						
Cook Islands	1.7	3.7	4.8	-	-	-
Fiji Islands	2.0	1.1	4.2	4.1	3.8	72.5
Kiribati	5.5	4.7	-3.7	5.8	1.0	83.7
Marshall Islands, Rep. of	-	-	-	-	-	-
Micronesia, Fed. States of	-	-	-	-	-	-
Nauru	-	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-	-
Papua New Guinea	9.6	-1.5	-0.7	2.9	3.6	27.7
Samoa	3.7	4.3	4.9	5.9	-	61.2
Solomon Islands	-5.9	-4.0	4.1	3.5	-	57.1
Timor-Leste, Dem. Rep. of	-10.7	-6.5	-3.7	-	-	-
Tonga	2.0	3.0	4.8	2.7	2.8	58.3
Tuvalu	3.4	-	-	-	-	-
Vanuatu	-8.6	2.3	5.1	8.8	-	72.0

- = not available.

Table A6 Unemployment rate (%)

	2002	2003	2004	2005	2006
<b>Central Asia</b>					
Armenia	10.8	10.1	9.6	8.1	7.4
Azerbaijan	1.3	1.4	1.4	1.4	1.3
Kazakhstan	9.3	9.6	9.2	8.7	7.2
Kyrgyz Republic	8.6	9.0	8.9	8.6	-
Tajikistan	2.5	2.4	2.0	2.0	-
Turkmenistan	2.5	2.5	-	-	-
Uzbekistan	0.3	0.2	0.2	-	-
<b>East Asia</b>					
China, People's Rep. of	4.0	4.3	4.2	4.2	4.1
Hong Kong, China	7.3	7.9	6.8	5.6	4.8
Korea, Rep. of	3.3	3.6	3.7	3.7	3.5
Mongolia	3.4	2.6	3.6	3.3	-
Taipei, China	5.2	5.0	4.4	4.1	3.9
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	3.9	3.8	3.6	-	-
Bangladesh	-	4.3	-	-	-
Bhutan	-	-	-	-	-
India	-	-	-	-	-
Maldives	-	-	-	-	-
Nepal	5.0	-	-	-	-
Pakistan	8.3	8.3	7.7	7.7	6.2
Sri Lanka	8.8	8.4	8.3	7.7	6.7
<b>Southeast Asia</b>					
Cambodia	-	-	-	-	-
Indonesia	9.1	9.6	9.9	10.3	10.3
Lao People's Dem. Rep.	-	-	-	-	-
Malaysia	3.5	3.6	3.5	3.5	3.4
Myanmar	-	-	-	-	-
Philippines	11.4	11.3	11.8	11.5	7.9
Singapore	3.6	4.0	3.4	3.1	2.7
Thailand	2.4	2.2	2.1	1.8	1.5
Viet Nam	6.0	5.8	5.5	3.8	4.4
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	8.4	8.1	8.0	7.6	-
Kiribati	-	-	-	-	-
Marshall Islands, Rep. of	-	-	-	-	-
Micronesia, Fed. States of	-	-	-	-	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	-	-	-	-	-
Samoa	-	-	-	-	-
Solomon Islands	-	-	-	-	-
Timor-Leste, Dem. Rep. of	-	-	-	-	-
Tonga	-	-	-	-	-
Tuvalu	-	-	-	-	-
Vanuatu	-	-	-	-	-

- = not available.

Table A7 Gross domestic investment (% of GDP)

	2002	2003	2004	2005	2006
<b>Central Asia</b>					
Armenia	21.7	24.3	24.9	25.9	26.9
Azerbaijan	34.6	53.2	54.5	43.3	37.0
Kazakhstan	27.3	25.9	26.3	27.0	28.8
Kyrgyz Republic	17.6	11.8	14.5	16.4	17.8
Tajikistan	9.4	10.0	18.4	11.6	-
Turkmenistan	40.3	38.7	-	-	-
Uzbekistan	21.2	20.8	23.9	23.0	-
<b>East Asia</b>					
China, People's Rep. of	37.9	41.2	43.3	43.3	44.9
Hong Kong, China	22.8	21.9	21.8	20.6	21.6
Korea, Rep. of	29.1	30.0	30.4	30.1	30.2
Mongolia	32.2	47.3	45.1	43.4	-
Taipei, China	17.4	17.4	21.5	20.2	20.3
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	-	-	-	-	-
Bangladesh	23.1	23.4	24.0	24.5	25.0
Bhutan	59.5	57.7	62.7	-	-
India	25.2	28.0	31.5	33.8	-
Maldives	25.5	26.9	36.0	-	-
Nepal	24.2	25.8	26.4	28.9	30.3
Pakistan	16.6	16.8	16.6	18.1	20.0
Sri Lanka	21.2	22.2	25.0	26.5	28.7
<b>Southeast Asia</b>					
Cambodia	19.7	21.5	17.4	19.5	20.8
Indonesia	21.4	25.6	24.1	24.6	24.6
Lao People's Dem. Rep.	-	-	-	-	-
Malaysia	24.0	21.6	22.7	19.9	20.0
Myanmar	10.1	11.0	-	-	-
Philippines	17.7	16.8	16.8	15.1	14.8
Singapore	23.9	15.7	19.6	19.0	18.8
Thailand	23.8	25.0	26.8	31.5	27.9
Viet Nam	33.2	35.4	35.5	35.4	-
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	19.7	22.1	19.1	19.0	-
Kiribati	-	-	-	-	-
Marshall Islands, Rep. of	48.1	-	-	-	-
Micronesia, Fed. States of	8.5	-	-	-	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	21.2	-	-	-	-
Samoa	-	-	-	-	-
Solomon Islands	-	-	-	-	-
Timor-Leste, Dem. Rep. of	35.7	31.3	28.4	-	-
Tonga	20.4	18.9	17.5	-	-
Tuvalu	-	-	-	-	-
Vanuatu	22.6	-	-	-	-

- = not available.



Table A8 Inflation (% per year)

	2002	2003	2004	2005	2006	2007	2008
<b>Central Asia</b>	10.6	6.6	5.8	7.7	8.0	8.6	7.9
Armenia	1.1	4.7	7.0	0.6	2.9	4.0	4.0
Azerbaijan	2.8	2.2	6.7	9.6	8.3	14.0	10.0
Kazakhstan	5.9	6.4	6.9	7.6	8.6	8.0	8.0
Kyrgyz Republic	2.0	3.0	4.0	4.4	5.6	5.0	5.0
Tajikistan	10.2	13.7	6.8	7.1	11.9	7.0	5.0
Turkmenistan	8.8	5.6	5.9	10.7	9.0	8.0	8.0
Uzbekistan	27.6	10.3	1.6	7.8	6.8	9.0	8.2
<b>East Asia</b>	-0.1	1.3	3.4	2.0	1.6	1.9	2.2
China, People's Rep. of	-0.8	1.2	3.9	1.8	1.5	1.8	2.2
Hong Kong, China	-3.0	-2.6	-0.4	1.0	2.0	1.6	2.3
Korea, Rep. of	2.8	3.4	3.6	2.8	2.2	2.4	2.6
Mongolia	0.2	5.0	8.2	12.7	5.1	6.0	6.0
Taipei, China	-0.2	-0.3	1.6	2.3	0.6	1.6	1.5
<b>South Asia</b>	3.5	5.0	6.3	5.3	6.0	5.5	5.3
Afghanistan, Islamic Rep. of	5.1	24.1	13.2	12.3	5.5	5.0	5.0
Bangladesh	2.8	4.4	5.8	6.5	7.2	7.0	6.0
Bhutan	2.9	2.1	3.6	4.8	4.9	5.0	5.0
India	3.4	5.4	6.4	4.4	5.5	5.0	5.0
Maldives	0.9	-2.9	6.4	3.3	3.7	4.0	4.0
Nepal	2.9	4.8	4.0	4.5	8.0	5.3	5.4
Pakistan	3.5	3.1	4.6	9.3	7.9	7.0	6.5
Sri Lanka	10.2	2.6	7.9	10.6	9.6	10.0	9.0
<b>Southeast Asia</b>	4.5	3.4	4.2	6.3	7.1	4.2	4.0
Cambodia	3.3	1.2	3.9	5.8	4.7	4.2	3.5
Indonesia	11.9	6.8	6.1	10.5	13.1	6.2	6.1
Lao People's Dem. Rep.	10.7	15.5	10.5	7.2	6.8	5.0	5.2
Malaysia	1.8	1.1	1.4	3.0	3.6	2.7	2.7
Myanmar	58.1	24.9	3.8	10.7	-	-	-
Philippines	3.0	3.5	6.0	7.6	6.2	4.8	5.0
Singapore	-0.4	0.5	1.7	0.5	1.0	1.6	1.0
Thailand	0.6	1.8	2.8	4.5	4.6	2.5	2.5
Viet Nam	3.8	3.1	7.8	8.3	7.5	6.8	6.3
<b>The Pacific</b>	6.2	8.0	3.2	2.4	3.3	3.5	3.3
Cook Islands	3.4	2.0	0.9	2.4	3.3	2.8	2.0
Fiji Islands	0.7	4.2	2.8	2.4	2.5	3.0	3.0
Kiribati	3.2	1.9	-1.0	-0.3	1.5	-	-
Marshall Islands, Rep. of	0.4	1.2	2.2	4.4	4.3	2.4	2.4
Micronesia, Fed. States of	-0.1	0.1	2.3	4.1	3.0	3.0	-
Nauru	-	-	-	-	-	-	-
Palau, Rep. of	-1.3	0.9	5.0	3.9	4.4	3.9	-
Papua New Guinea	11.8	14.7	2.2	1.7	3.1	3.0	3.0
Samoa	8.1	0.1	16.3	1.9	3.8	3.6	-
Solomon Islands	9.4	10.1	6.9	7.3	8.2	8.0	7.5
Timor-Leste, Dem. Rep. of	-0.4	0.1	0.8	1.8	4.2	5.0	4.0
Tonga	10.0	10.7	11.8	10.0	7.2	10.0	9.0
Tuvalu	5.1	3.3	2.8	3.2	3.8	3.0	3.0
Vanuatu	2.0	3.0	1.4	1.2	1.6	2.5	2.5
<b>Average</b>	1.4	2.3	4.0	3.4	3.4	3.0	3.2

- = not available.

Table A9 Change in money supply (% per year)

	2002	2003	2004	2005	2006
<b>Central Asia</b>					
Armenia	34.0	10.4	22.3	27.8	32.9
Azerbaijan	14.5	29.5	47.5	22.5	86.8
Kazakhstan	32.8	27.0	69.8	25.2	79.9
Kyrgyz Republic	34.1	33.5	32.0	9.9	51.6
Tajikistan	40.5	40.9	9.8	25.9	59.7
Turkmenistan	1.6	40.9	13.4	27.2	-
Uzbekistan	29.7	27.1	47.8	54.3	35.0
<b>East Asia</b>					
China, People's Rep. of	16.9	19.6	14.5	16.7	16.9
Hong Kong, China	-0.9	8.4	9.3	5.1	15.6
Korea, Rep. of	14.0	3.0	6.3	7.0	12.5
Mongolia	42.0	49.6	20.4	34.6	34.8
Taipei, China	2.6	5.8	7.4	6.6	5.3
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	-	50.5	41.8	14.1	17.7
Bangladesh	13.1	15.6	13.8	16.8	19.5
Bhutan	17.6	28.7	4.0	10.7	24.8
India	14.7	16.7	12.3	21.2	20.0
Maldives	19.5	14.5	32.7	11.7	20.6
Nepal	4.4	9.8	12.8	8.3	15.6
Pakistan	15.4	18.0	19.6	19.3	15.2
Sri Lanka	13.4	15.3	19.6	19.1	17.8
<b>Southeast Asia</b>					
Cambodia	31.1	15.3	30.0	16.1	38.2
Indonesia	4.7	8.1	8.1	16.4	14.9
Lao People's Dem. Rep.	27.0	19.2	22.9	8.1	19.5
Malaysia	5.8	11.1	25.4	15.4	16.6
Myanmar	18.4	11.0	33.3	25.1	-
Philippines	21.0	4.2	10.2	10.3	21.4
Singapore	-0.3	8.1	6.2	6.2	19.4
Thailand	2.6	4.9	5.4	8.2	6.0
Viet Nam	17.6	21.0	28.0	29.4	28.9
<b>The Pacific</b>					
Cook Islands	3.2	9.9	9.6	-5.2	22.4
Fiji Islands	7.9	25.2	10.4	15.0	16.7
Kiribati	29.0	-	-	-	-
Marshall Islands, Rep. of	4.2	-3.3	15.4	14.9	-
Micronesia, Fed. States of	-12.0	-3.7	-0.1	-	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	7.3	-4.4	14.8	29.5	39.0
Samoa	3.6	6.6	12.7	15.0	13.0
Solomon Islands	-3.6	25.8	13.3	39.8	28.4
Timor-Leste, Dem. Rep. of	6.8	32.4	16.2	13.1	-
Tonga	7.8	13.4	18.6	12.1	8.0
Tuvalu	-	-	-	-	-
Vanuatu	44.7	5.7	4.6	10.3	-

- = not available.

Table A10 Growth rate of merchandise exports (% per year)

	2002	2003	2004	2005	2006	2007	2008
<b>Central Asia</b>	8.9	26.0	41.1	41.1	32.8	16.9	14.4
Armenia	45.5	35.5	6.1	36.1	3.0	8.2	16.5
Azerbaijan	12.7	13.9	37.7	111.6	60.7	27.0	31.3
Kazakhstan	12.3	32.0	55.7	37.4	35.2	15.0	9.3
Kyrgyz Republic	3.7	18.5	24.2	-6.3	15.9	12.1	16.1
Tajikistan	7.3	29.6	21.0	1.0	26.3	4.6	5.4
Turkmenistan	9.0	10.7	9.6	42.6	7.3	18.9	18.0
Uzbekistan	-8.4	29.1	31.6	17.9	11.6	11.4	5.6
<b>East Asia</b>	12.2	22.6	28.0	19.0	19.0	13.6	14.0
China, People's Rep. of	22.4	34.6	35.4	28.5	26.0	18.0	16.0
Hong Kong, China	4.9	12.1	15.9	11.2	9.0	3.6	10.1
Korea, Rep. of	7.9	20.7	30.6	12.1	14.8	13.5	14.2
Mongolia	3.2	16.2	39.0	22.1	43.6	20.0	20.0
Taipei, China	7.1	11.3	21.1	8.8	12.8	8.8	9.4
<b>South Asia</b>	13.6	20.9	24.0	20.8	18.8	14.9	14.8
Afghanistan, Islamic Rep. of	82.1	46.7	-13.3	-2.6	7.9	5.9	5.2
Bangladesh	-7.6	9.5	15.9	14.0	21.6	20.0	18.0
Bhutan	4.1	8.9	39.7	18.0	61.0	-	-
India	20.3	23.3	28.5	23.4	20.0	16.0	15.0
Maldives	20.1	14.9	19.1	-10.7	39.7	7.8	-
Nepal	-20.3	-13.8	14.8	11.0	4.2	4.7	6.0
Pakistan	2.3	20.1	13.5	16.2	14.0	8.0	15.0
Sri Lanka	-2.4	9.2	12.2	10.2	8.5	7.0	8.0
<b>Southeast Asia</b>	5.1	12.9	20.4	15.1	17.9	10.0	10.7
Cambodia	12.7	17.9	24.1	12.4	26.9	14.3	9.4
Indonesia	3.1	8.4	10.4	22.9	18.1	9.8	12.0
Lao People's Dem. Rep.	2.3	21.6	11.0	31.4	50.9	15.3	31.0
Malaysia	7.2	11.0	20.9	12.0	16.9	9.5	10.6
Myanmar	-3.9	12.6	8.2	-	-	-	-
Philippines	9.9	2.7	9.8	3.7	14.0	6.5	9.5
Singapore	3.0	15.0	24.3	15.6	18.3	10.5	10.0
Thailand	4.8	18.2	21.6	15.0	17.4	7.9	8.9
Viet Nam	11.2	20.6	31.4	22.5	23.0	19.0	18.0
<b>The Pacific</b>	-5.4	33.9	11.1	21.6	27.4	-4.0	-12.0
Cook Islands	3.2	34.9	7.0	20.6	-	-	-
Fiji Islands	-0.8	37.2	-1.1	2.0	-1.8	-	-
Kiribati	7.8	44.2	14.6	-7.2	1.2	-	-
Marshall Islands, Rep. of	14.0	24.6	10.6	5.1	-1.8	-	-
Micronesia, Fed. States of	5.8	2.4	-23.9	8.1	-	-	-
Nauru	-	-	-	-	-	-	-
Palau, Rep. of	22.8	-58.7	-30.1	128.1	1.0	-	-
Papua New Guinea	-8.9	35.6	15.5	28.1	35.4	-4.4	-12.0
Samoa	-9.3	8.6	-20.0	9.0	-16.9	1.6	-
Solomon Islands	22.7	28.4	30.3	6.0	13.5	0.4	-
Timor-Leste, Dem. Rep. of	50.0	33.3	-	12.5	-11.1	25.0	-
Tonga	49.0	-1.1	-21.2	15.9	-1.2	6.3	-
Tuvalu	-	-	-	-	-	-	-
Vanuatu	-7.1	32.4	43.3	-1.4	4.0	17.7	-
<b>Average</b>	9.9	19.5	25.7	18.4	19.0	12.7	13.1

- = not available.

Table A11 Direction of exports (% of total)

From \ To	DMCs		People's Rep. of China		Japan		United States		European Union		Others	
	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
<b>Central Asia</b>	16.9	8.7	3.2	8.3	1.3	1.1	0.9	3.6	28.1	37.3	49.7	41.0
Armenia	19.8	0.7	0.0	0.9	0.0	0.1	0.2	11.2	22.3	46.5	57.7	40.4
Azerbaijan	6.7	12.1	0.3	2.3	0.0	0.0	0.2	1.0	19.0	46.7	73.8	38.0
Kazakhstan	9.4	5.2	5.7	11.2	0.9	1.3	0.8	4.5	26.6	43.7	56.7	34.2
Kyrgyz Republic	47.3	22.1	0.6	13.4	0.0	0.0	0.5	0.7	16.3	2.6	35.2	61.1
Tajikistan	20.7	11.8	0.8	0.6	1.1	0.0	2.0	0.0	53.5	54.7	22.0	32.9
Turkmenistan	23.2	10.8	0.4	0.3	0.0	0.0	1.7	2.3	26.7	15.8	48.0	70.8
Uzbekistan	22.2	23.9	2.4	11.9	3.7	3.3	0.5	2.6	29.8	17.3	41.6	41.0
<b>East Asia</b>	26.4	24.9	11.9	15.3	12.3	9.0	20.0	18.4	13.9	16.5	15.5	15.8
China, People's Rep. of	37.6	31.1	0.0	-	19.1	11.0	16.6	21.4	13.6	18.9	13.0	17.6
Hong Kong, China	9.6	9.4	33.3	45.0	6.1	5.3	21.8	16.1	15.3	14.5	13.9	9.8
Korea, Rep. of	23.9	17.6	7.0	21.8	13.0	8.5	18.5	14.6	13.3	15.4	24.3	22.2
Mongolia	22.4	7.7	16.4	48.1	9.9	0.5	5.5	14.2	15.0	12.5	30.9	16.9
Taipei, China	40.4	35.0	0.3	21.8	11.8	7.7	23.7	15.2	12.7	11.7	11.0	8.5
<b>South Asia</b>	18.4	20.1	1.0	5.4	6.5	2.1	19.5	18.9	29.9	24.8	24.8	28.8
Afghanistan, Islamic Rep. of	55.9	45.6	9.2	0.6	0.6	1.1	3.2	25.8	20.6	12.6	10.5	14.4
Bangladesh	8.2	5.2	0.6	0.5	3.3	0.8	31.9	23.6	44.8	46.8	11.2	23.0
Bhutan	-	-	-	-	-	-	-	-	-	-	-	-
India	20.2	21.7	0.9	6.6	7.0	2.4	17.4	16.7	27.5	22.3	27.0	30.3
Maldives	31.4	49.1	0.0	0.0	5.7	22.8	19.2	0.8	38.4	24.5	5.3	2.8
Nepal	9.8	55.5	0.1	1.2	0.5	1.5	30.5	17.4	53.3	17.0	5.8	7.4
Pakistan	19.6	18.5	1.5	2.7	6.8	0.9	15.1	24.8	31.0	26.5	26.1	26.6
Sri Lanka	8.9	14.2	0.1	0.5	5.3	2.3	35.6	31.1	32.4	30.9	17.7	21.0
<b>Southeast Asia</b>	35.7	40.3	2.7	8.4	13.9	11.3	18.7	14.8	14.7	13.2	14.2	12.0
Cambodia	74.0	27.2	1.5	0.6	1.9	3.5	1.4	48.6	14.5	14.3	6.7	5.8
Indonesia	25.9	33.5	3.8	7.8	27.1	21.1	13.9	11.5	15.2	12.0	14.0	14.1
Lao People's Dem. Rep.	55.0	44.1	2.8	3.3	1.7	1.1	1.7	0.6	10.9	19.7	27.9	31.1
Malaysia	37.8	39.1	2.6	6.6	12.5	9.3	20.8	19.7	14.4	11.7	12.0	13.5
Myanmar	51.1	67.9	11.3	6.7	7.1	5.0	6.6	-	6.1	8.5	17.7	11.9
Philippines	21.1	29.2	1.2	9.9	15.8	17.5	35.8	18.0	17.7	17.0	8.4	8.4
Singapore	43.5	53.1	2.3	9.5	7.8	6.0	18.3	11.5	13.9	13.3	14.3	6.5
Thailand	29.2	32.2	2.9	8.3	16.6	13.6	17.6	15.4	16.1	13.5	17.7	17.0
Viet Nam	28.8	20.1	6.4	9.0	26.0	13.6	3.0	18.3	12.6	16.9	23.2	22.1
<b>The Pacific</b>	14.0	11.0	1.9	5.4	19.8	7.9	3.2	3.7	17.1	9.4	44.1	62.5
Cook Islands	-	-	-	-	-	-	-	-	-	-	-	-
Fiji Islands	13.7	13.5	1.0	0.2	5.8	5.4	11.5	19.7	24.5	13.4	43.4	47.7
Kiribati	44.5	7.2	0.0	0.0	17.0	29.2	10.5	9.1	25.9	51.9	2.1	2.6
Marshall Islands, Rep of	-	-	-	-	-	-	-	-	-	-	-	-
Micronesia, Fed. States of	-	-	-	-	-	-	-	-	-	-	-	-
Nauru	15.3	17.5	0.0	0.0	1.5	7.2	0.0	0.0	2.2	28.8	81.0	46.5
Palau	-	-	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	12.9	7.9	2.3	5.4	21.2	8.6	1.6	1.1	16.3	8.7	45.7	68.4
Samoa	1.5	1.2	0.0	0.0	1.8	0.4	0.9	6.5	2.1	0.2	93.7	91.7
Solomon Islands	35.5	31.8	0.4	41.6	46.6	6.4	2.4	0.9	10.3	8.5	4.8	10.8
Timor-Leste, Dem. Rep. of	-	-	-	-	-	-	-	-	-	-	-	-
Tonga	1.6	8.1	0.0	0.0	47.8	41.8	25.8	33.4	0.0	3.0	24.7	13.7
Tuvalu	17.4	14.4	0.0	0.0	0.3	0.0	0.0	0.0	22.6	82.0	59.6	3.6
Vanuatu	8.3	62.9	0.0	0.2	25.1	6.9	0.0	1.1	37.9	14.5	28.7	14.5
<b>DMCs</b>	29.0	28.4	8.1	12.7	12.4	9.1	19.3	17.2	15.1	16.4	16.1	16.1

- = not available.

Table A12 Growth rate of merchandise imports (% per year)

	2002	2003	2004	2005	2006	2007	2008
<b>Central Asia</b>	0.9	20.4	34.5	26.4	22.2	14.5	11.3
Armenia	14.1	28.1	5.8	33.1	3.8	6.5	9.0
Azerbaijan	24.5	49.3	28.7	19.8	4.5	-5.9	13.3
Kazakhstan	1.2	18.8	44.6	30.1	31.7	20.4	13.3
Kyrgyz Republic	27.2	26.6	25.0	22.3	54.0	8.0	8.7
Tajikistan	7.5	24.6	20.2	16.1	20.4	6.4	6.1
Turkmenistan	-9.8	5.8	30.1	24.7	4.5	15.8	2.3
Uzbekistan	-14.4	10.0	27.3	21.7	12.5	10.7	9.9
<b>East Asia</b>	10.5	23.9	28.7	14.4	17.5	13.5	14.1
China, People's Rep. of	21.3	39.8	35.8	17.6	22.0	18.0	17.0
Hong Kong, China	3.1	12.2	17.0	10.2	11.2	5.0	9.5
Korea, Rep. of	7.7	18.0	25.6	16.4	18.1	14.0	13.7
Mongolia	8.6	9.8	22.3	17.1	25.7	25.0	25.0
Taipei, China	4.4	13.2	32.2	8.6	11.1	9.2	9.6
<b>South Asia</b>	8.8	22.2	39.3	30.0	24.9	17.8	17.7
Afghanistan, Islamic Rep. of	52.5	50.9	2.3	9.0	10.1	4.0	3.0
Bangladesh	-8.7	13.1	13.0	20.6	12.1	15.0	14.0
Bhutan	8.6	1.6	27.3	63.2	-3.5	-	-
India	14.5	24.1	48.6	32.0	26.2	20.0	19.2
Maldives	-0.5	20.2	36.3	16.1	26.5	28.7	-
Nepal	-15.3	7.1	15.9	12.1	18.4	6.5	10.0
Pakistan	-7.5	20.1	21.2	38.3	31.3	9.0	13.5
Sri Lanka	2.2	9.3	19.9	10.8	15.7	8.0	9.0
<b>Southeast Asia</b>	5.3	9.9	24.6	18.1	15.6	10.8	12.5
Cambodia	12.8	13.0	22.5	20.2	20.3	15.8	12.4
Indonesia	2.8	10.9	28.0	37.2	5.1	12.3	20.0
Lao People's Dem. Rep.	-2.6	9.6	40.9	23.8	13.5	30.0	67.0
Malaysia	8.3	4.8	25.5	9.6	24.5	11.5	11.8
Myanmar	-16.1	1.3	-10.6	-	-	-	-
Philippines	6.3	3.1	8.0	7.4	11.2	9.0	11.0
Singapore	2.2	8.4	27.3	16.3	17.6	11.0	11.0
Thailand	4.6	17.4	25.7	25.9	7.0	8.0	10.0
Viet Nam	23.3	28.0	26.6	15.7	33.3	14.5	16.4
<b>The Pacific</b>	3.9	13.6	19.1	7.7	19.0	11.0	-1.8
Cook Islands	4.7	40.3	12.0	8.3	-	-	-
Fiji Islands	8.2	21.9	27.5	10.1	12.7	-	-
Kiribati	12.7	21.7	11.4	4.8	-0.1	-	-
Marshall Islands, Rep. of	-11.1	9.8	-5.7	17.4	15.4	-	-
Micronesia, Fed. States of	-3.8	5.0	10.1	3.9	-	-	-
Nauru	-	-	-	-	-	-	-
Palau, Rep. of	-3.2	-8.8	21.6	-2.0	9.8	-	-
Papua New Guinea	15.5	11.4	22.3	4.4	30.0	10.1	-1.8
Samoa	4.3	10.9	6.6	8.0	16.8	-1.3	-
Solomon Islands	-31.2	36.8	15.8	45.6	26.9	3.6	-
Timor-Leste, Dem. Rep. of	-23.2	-11.0	-16.0	-16.0	2.9	62.4	-
Tonga	-0.3	21.1	11.5	27.5	7.9	7.2	-
Tuvalu	-	-	-	-	-	-	-
Vanuatu	-2.3	16.7	22.2	14.5	2.0	2.2	-
<b>Average</b>	8.6	19.6	28.5	16.9	17.8	13.2	14.0

- = not available.



Table A13 Trade balance (US\$ million)

	2002	2003	2004	2005	2006	2007	2008
<b>Central Asia</b>	2,963	4,648	7,878	15,042	23,543	28,530	34,072
Armenia	-369	-434	-458	-588	-619	-641	-615
Azerbaijan	482	-98	110	3,449	7,899	11,476	15,819
Kazakhstan	1,987	3,679	6,785	10,322	14,574	15,500	15,800
Kyrgyz Republic	-73	-133	-171	-419	-907	-947	-964
Tajikistan	-124	-120	-135	-323	-324	-369	-402
Turkmenistan	736	919	545	1,301	1,500	1,900	2,934
Uzbekistan	324	835	1,202	1,300	1,420	1,610	1,500
<b>East Asia</b>	77,853	85,496	103,214	177,018	231,732	265,300	300,908
China, People's Rep. of	44,167	44,652	58,982	134,189	194,210	229,168	256,790
Hong Kong, China	-5,053	-5,775	-9,311	-7,631	-15,000	-20,000	-20,000
Korea, Rep. of	14,777	21,952	37,569	32,683	29,214	31,644	37,863
Mongolia	-213	-200	-140	-120	40	-27	-125
Taipei, China	24,175	24,867	16,113	17,897	23,269	24,515	26,381
<b>South Asia</b>	-16,383	-20,981	-43,315	-66,716	-91,801	-112,716	-137,127
Afghanistan, Islamic Rep. of	-1,218	-1,892	-2,231	-2,623	-2,924	-3,009	-3,057
Bangladesh	-1,768	-2,215	-2,319	-3,297	-2,879	-2,790	-2,680
Bhutan	-99	-93	-105	-242	-114	-	-
India	-10,690	-13,718	-33,702	-51,841	-71,943	-91,379	-115,071
Maldives	-212	-262	-384	-494	-604	-824	-
Nepal	-695	-902	-1,052	-1,188	-1,526	-1,640	-1,840
Pakistan	-294	-359	-1,279	-4,514	-8,442	-9,367	-10,364
Sri Lanka	-1,407	-1,539	-2,243	-2,517	-3,370	-3,708	-4,116
<b>Southeast Asia</b>	57,141	75,241	74,213	69,122	94,234	98,018	95,047
Cambodia	-591	-581	-680	-1,018	-1,034	-1,253	-1,537
Indonesia	23,513	24,562	20,152	17,533	29,718	30,787	27,922
Lao People's Dem. Rep.	-170	-147	-326	-370	-203	-393	-1,019
Malaysia	18,978	25,727	27,493	33,155	30,526	30,702	32,039
Myanmar	502	790	1,232	-	-	-	-
Philippines	-5,530	-5,851	-5,684	-7,546	-7,265	-9,065	-10,795
Singapore	18,753	29,564	32,853	36,735	44,719	48,264	50,537
Thailand	2,739	3,759	1,460	-8,530	2,245	2,296	1,004
Viet Nam	-1,054	-2,581	-2,287	-838	-4,471	-3,320	-3,104
<b>The Pacific</b>	-572	-158	-447	21	583	1,357	1,638
Cook Islands	14	15	11	27	42	44	47
Fiji Islands	-418	-432	-752	-884	-1,100	-	-
Kiribati	-32	-38	-42	-44	-44	-	-
Marshall Islands, Rep. of	-59	-63	-57	-69	-83	-68	-
Micronesia, Fed. States of	-121	-128	-157	-161	-	-	-
Nauru	-	-	-	-	-	-	-
Palau, Rep. of	-76	-80	-101	-92	-102	-	-
Papua New Guinea	560	1,020	1,097	1,753	2,457	2,061	1,591
Samoa	-121	-134	-147	-159	-190	-187	-
Solomon Islands	-5	-11	-2	-41	-66	-72	-
Timor-Leste, Dem. Rep. of	-212	-186	-155	-128	-133	-219	-
Tonga	-44	-57	-69	-90	-98	-105	-
Tuvalu	-	-	-	-	-	-	-
Vanuatu	-58	-65	-74	-90	-100	-98	-
<b>Total</b>	121,002	144,246	141,543	194,488	258,292	280,489	294,538

- = not available.

Table A14 Current account balance (US\$ million)

	2002	2003	2004	2005	2006	2007	2008
<b>Central Asia</b>	-1,307	-1,388	-1,298	841	4,094	4,228	6,227
Armenia	-148	-189	-162	-193	-330	-350	-385
Azerbaijan	-769	-2,021	-2,585	-152	1,844	5,429	8,210
Kazakhstan	-1,024	-273	335	-724	400	-2,275	-3,166
Kyrgyz Republic	-49	-85	-76	-203	-414	-356	-351
Tajikistan	-17	-5	-57	-19	-380	-401	-271
Turkmenistan	583	304	82	875	400	700	700
Uzbekistan	117	881	1,164	1,258	2,574	1,481	1,490
<b>East Asia</b>	78,662	103,342	131,102	212,134	278,719	317,990	379,075
China, People's Rep. of	35,422	45,875	68,659	160,818	227,210	271,768	325,790
Hong Kong, China	12,412	16,469	15,728	20,232	20,191	19,265	25,070
Korea, Rep. of	5,394	11,950	28,174	14,981	6,093	969	1,128
Mongolia	-178	-186	63	84	39	35	35
Taipei, China	25,612	29,234	18,478	16,019	25,187	25,953	27,053
<b>South Asia</b>	7,593	18,432	-1,042	-12,315	-24,400	-30,289	-33,222
Afghanistan, Islamic Rep. of	-147	140	86	-68	-175	-501	-683
Bangladesh	157	176	176	-557	572	647	142
Bhutan	-65	-84	-73	-211	-30	-	-
India	6,345	14,083	-2,470	-9,186	-18,814	-22,534	-25,862
Maldives	-36	-31	-122	-269	-376	-637	-
Nepal	237	149	198	160	191	-	-
Pakistan	1,338	4,070	1,811	-1,534	-4,999	-6,500	-6,000
Sri Lanka	-237	-71	-648	-650	-769	-764	-819
<b>Southeast Asia</b>	31,272	46,268	40,588	42,753	71,149	68,557	67,456
Cambodia	-406	-497	-440	-594	-554	-700	-921
Indonesia	7,822	8,106	1,564	278	9,628	3,887	3,122
Lao People's Dem. Rep.	-38	-55	-221	-239	-482	-553	-472
Malaysia	8,025	13,323	14,871	19,984	19,642	18,476	19,945
Myanmar	115	-75	443	-	-	-	-
Philippines	-351	282	1,626	2,354	4,643	4,373	4,398
Singapore	12,093	22,333	21,543	28,605	36,290	39,843	42,126
Thailand	4,685	4,784	2,767	-7,852	3,240	3,100	-1,793
Viet Nam	-673	-1,932	-1,565	217	-1,258	131	1,051
<b>The Pacific</b>	-294	-84	-219	378	383	698	143
Cook Islands	14	15	11	27	42	44	47
Fiji Islands	-3	-178	-449	-466	-760	-388	-
Kiribati	-3	1	2	2	3	-	-
Marshall Islands, Rep. of	18	26	16	9	7	7	-
Micronesia, Fed. States of	-5	5	-40	-32	-	-	-
Nauru	-	-	-	-	-	-	-
Palau, Rep. of	-11	10	13	15	4	-	-
Papua New Guinea	-128	140	122	640	804	452	134
Samoa	-19	-14	-21	-30	-29	-24	-
Solomon Islands	-16	3	32	-32	-52	-55	-38
Timor-Leste, Dem. Rep. of	-128	-58	103	292	411	688	-
Tonga	7	-5	8	-10	-14	-12	-
Tuvalu	-	-	-	-	-	-	-
Vanuatu	-19	-28	-15	-37	-33	-14	-
<b>Total</b>	115,926	166,570	169,131	243,792	329,946	361,184	419,680

- = not available.

Table A15 Current account balance (% of GDP)

	2002	2003	2004	2005	2006	2007	2008
<b>Central Asia</b>	-3.0	-2.4	-1.7	1.2	4.3	3.2	3.3
Armenia	-6.2	-6.7	-4.5	-3.9	-5.0	-5.0	-5.0
Azerbaijan	-12.3	-27.8	-30.3	-1.2	9.0	20.5	24.6
Kazakhstan	-4.2	-0.9	0.8	-1.3	0.6	-1.6	-2.1
Kyrgyz Republic	-3.0	-4.4	-3.4	-8.3	-14.7	-12.2	-10.7
Tajikistan	-3.5	-1.3	-4.0	-3.4	-4.2	-4.8	-5.0
Turkmenistan	6.7	2.8	0.7	5.1	5.7	7.4	6.3
Uzbekistan	1.2	8.7	10.0	13.0	19.5	10.0	9.2
<b>East Asia</b>	3.3	3.9	4.3	6.0	7.0	6.8	6.9
China, People's Rep. of	2.4	2.8	3.6	7.2	8.6	8.8	8.9
Hong Kong, China	7.6	10.4	9.5	11.4	10.7	9.5	11.5
Korea, Rep. of	1.0	2.0	4.1	1.9	1.0	0.1	0.1
Mongolia	-16.0	-14.6	3.9	4.0	1.5	2.0	2.0
Taipei, China	8.7	9.8	5.7	4.6	7.1	6.7	6.5
<b>South Asia</b>	1.2	2.4	-0.1	-1.2	-2.1	-2.2	-2.2
Afghanistan, Islamic Rep. of	-3.6	3.0	1.4	-0.9	-2.0	-4.8	-5.7
Bangladesh	0.3	0.3	0.3	-0.9	0.9	1.0	0.2
Bhutan	-13.4	-15.5	-11.6	-29.7	-3.6	3.0	3.0
India	1.2	2.3	-0.4	-1.1	-2.1	-2.2	-2.2
Maldives	-5.6	-4.5	-15.7	-35.8	-41.5	-60.9	-15.0
Nepal	4.3	2.5	2.9	2.2	2.4	1.0	1.0
Pakistan	1.8	4.9	1.8	-1.4	-3.9	-4.5	-3.9
Sri Lanka	-1.4	-0.4	-3.2	-2.8	-2.8	-2.5	-2.4
<b>Southeast Asia</b>	4.9	6.7	5.1	4.9	7.0	6.1	5.6
Cambodia	-9.5	-10.8	-8.3	-9.5	-7.7	-8.6	-10.1
Indonesia	4.0	3.5	0.6	0.1	2.6	1.0	0.7
Lao People's Dem. Rep.	-2.1	-2.6	-8.8	-8.3	-14.0	-15.3	-13.1
Malaysia	8.4	12.8	12.6	15.3	12.8	10.7	10.2
Myanmar	0.0	0.0	0.0	-	-	-	-
Philippines	-0.5	0.4	1.9	2.4	4.0	3.2	2.9
Singapore	13.7	24.2	20.1	24.5	27.5	27.0	27.0
Thailand	3.7	3.4	1.7	-4.5	1.6	1.3	-0.7
Viet Nam	-1.9	-4.9	-3.4	0.4	-2.1	0.2	1.3
<b>The Pacific</b>	-4.5	-1.2	-1.7	6.2	-2.0	-1.2	2.0
Cook Islands	13.4	10.4	6.6	14.3	15.2	14.9	15.1
Fiji Islands	-0.1	-7.7	-16.4	-15.6	-24.4	-12.6	-
Kiribati	-5.8	0.9	3.4	3.2	4.7	-	-
Marshall Islands, Rep. of	15.6	21.8	12.8	6.8	4.8	-	-
Micronesia, Fed. States of	-2.4	2.3	-18.0	-13.4	-	-	-
Nauru	-	-	-	-	-	-	-
Palau, Rep. of	-9.1	7.9	9.6	10.6	2.5	-	-
Papua New Guinea	-4.3	3.9	3.1	12.9	14.2	7.9	2.3
Samoa	-7.3	-4.4	-5.6	-7.2	-6.5	-5.2	-
Solomon Islands	-7.2	1.3	12.2	-10.8	-15.8	-15.9	-10.4
Timor-Leste, Dem. Rep. of	-37.3	-17.3	30.4	83.5	-	-	-
Tonga	5.1	-3.1	4.2	-4.8	-6.2	-5.2	-
Tuvalu	-	-	-	-	-	-	-
Vanuatu	-8.8	-10.7	-4.9	-11.0	-	-	-
<b>Average</b>	3.1	4.0	3.5	4.5	5.3	5.0	5.0

- = not available.

Table A16 Foreign direct investment (US\$ million)

	2002	2003	2004	2005	2006
<b>Central Asia</b>					
Armenia	111	121	217	248	196
Azerbaijan	1,067	2,293	2,330	458	475
Kazakhstan	2,164	2,213	5,392	1,721	4,700
Kyrgyz Republic	5	46	131	43	109
Tajikistan	36	32	272	54	195
Turkmenistan	276	226	354	320	300
Uzbekistan	65	70	140	200	-
<b>East Asia</b>					
China, People's Rep. of	52,743	53,505	60,630	72,406	69,468
Hong Kong, China	9,682	13,653	34,035	33,627	38,300
Korea, Rep. of	2,392	3,526	9,246	6,309	3,645
Mongolia	173	201	236	317	367
Taipei, China	1,445	453	1,898	1,625	7,445
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	50	58	187	378	219
Bangladesh	391	376	385	800	675
Bhutan	2	2	3	9	6
India	5,036	4,322	5,987	7,661	-
Maldives	12	14	15	10	14
Nepal	-4	12	0	2	-6
Pakistan	483	771	906	1,459	3,451
Sri Lanka	181	171	217	234	480
<b>Southeast Asia</b>					
Cambodia	139	74	121	318	-
Indonesia	145	-597	1,896	8,336	7,514
Lao People's Dem. Rep.	415	420	450	500	650
Malaysia	3,203	2,473	4,624	3,967	5,147
Myanmar	191	128	-	-	-
Philippines	1,542	491	688	1,132	1,600
Singapore	7,338	11,664	19,827	15,002	24,208
Thailand	3,164	4,614	5,786	8,405	8,837
Viet Nam	2,023	1,894	1,878	1,972	4,100
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	-	-	-	-	-
Kiribati	-	-	-	-	-
Marshall Islands, Rep. of	0	-2	0	2	0
Micronesia, Fed. States of	-	-	-	-	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	-	-	-	-	-
Samoa	-	-	-	-	-
Solomon Islands	-	-	-	-	-
Timor-Leste, Dem. Rep. of	-	-	-	-	-
Tonga	-	-	-	-	-
Tuvalu	-	-	-	-	-
Vanuatu	-	-	-	-	-

- = not available.

Table A17 External debt outstanding (US\$ million)

	2002	2003	2004	2005	2006
<b>Central Asia</b>					
Armenia	1,026	1,098	1,183	1,099	1,257
Azerbaijan	1,356	1,568	1,625	1,673	1,916
Kazakhstan	18,251	22,920	31,941	41,516	77,000
Kyrgyz Republic	1,845	1,966	2,110	2,001	1,980
Tajikistan	982	1,031	822	895	866
Turkmenistan	1,660	1,519	1,273	-	-
Uzbekistan	4,776	5,012	5,007	4,635	4,717
<b>East Asia</b>					
China, People's Rep. of	186,132	208,452	247,701	281,612	323,000
Hong Kong, China	350,693	371,575	429,336	453,201	491,224
Korea, Rep. of	141,471	157,552	172,259	189,841	249,403
Mongolia	985	1,240	1,360	1,312	1,414
Taipei, China	45,033	63,054	80,888	86,732	97,100
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	539	669	764	848	1,552
Bangladesh	15,885	16,953	17,953	18,416	18,908
Bhutan	292	406	529	608	681
India	105,352	111,715	123,204	125,181	136,516
Maldives	259	290	332	397	582
Nepal	2,744	2,968	3,069	3,097	3,158
Pakistan	33,400	33,352	33,307	34,037	35,679
Sri Lanka	9,333	10,735	11,346	11,368	11,212
<b>Southeast Asia</b>					
Cambodia	2,681	2,914	2,976	3,174	3,302
Indonesia	131,343	135,402	137,024	130,652	125,258
Lao People's Dem. Rep.	1,284	1,384	1,961	2,212	1,600
Malaysia	48,858	49,141	52,786	52,301	50,839
Myanmar	6,583	7,319	7,239	-	-
Philippines	53,645	57,395	54,846	54,186	54,061
Singapore	176,367	194,406	214,833	233,435	298,173
Thailand	59,459	51,783	51,312	52,040	58,573
Viet Nam	13,100	14,100	14,410	17,400	19,483
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	233	252	268	293	280
Kiribati	14	22	30	36	-
Marshall Islands, Rep. of	88	91	103	101	-
Micronesia, Fed. States of	59	60	60	61	-
Nauru	-	-	-	-	-
Palau, Rep. of	20	19	34	32	-
Papua New Guinea	1,437	1,470	1,411	1,245	1,211
Samoa	143	153	164	167	160
Solomon Islands	152	161	161	162	164
Timor-Leste, Dem. Rep. of	-	-	-	-	-
Tonga	60	75	77	81	-
Tuvalu	-	-	-	-	-
Vanuatu	74	87	90	108	-

- = not available.

Table A18 Debt service ratio (% of exports of goods and services)

	2002	2003	2004	2005	2006
<b>Central Asia</b>					
Armenia	9.8	15.6	9.7	5.7	4.2
Azerbaijan	4.4	5.0	3.4	2.8	1.1
Kazakhstan	35.4	35.2	35.8	35.5	27.8
Kyrgyz Republic	20.0	18.2	17.8	12.6	9.0
Tajikistan	22.9	18.2	49.2	-	-
Turkmenistan	14.3	11.6	9.6	5.6	-
Uzbekistan	23.3	22.5	17.5	14.5	-
<b>East Asia</b>					
China, People's Rep. of	8.5	7.6	3.5	3.3	-
Hong Kong, China	-	-	-	-	-
Korea, Rep. of	7.8	6.5	5.6	5.8	5.4
Mongolia	5.0	4.5	3.2	2.8	1.8
Taipei, China	0.0	0.0	2.8	4.9	3.4
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	0.3	1.6	1.4	1.5	1.3
Bangladesh	6.3	5.8	5.0	4.8	3.9
Bhutan	4.9	5.0	4.2	7.2	5.3
India	16.4	16.3	6.1	10.2	-
Maldives	4.3	3.7	4.1	6.5	4.6
Nepal	8.5	9.7	8.8	9.4	8.4
Pakistan	36.7	23.0	32.9	15.3	13.8
Sri Lanka	13.2	11.6	11.6	7.9	6.8
<b>Southeast Asia</b>					
Cambodia	0.9	1.0	0.8	0.7	0.6
Indonesia	32.1	29.8	31.2	38.6	37.5
Lao People's Dem. Rep.	8.9	6.8	9.4	12.0	12.0
Malaysia	6.7	6.4	4.6	5.4	3.7
Myanmar	3.8	4.0	-	-	-
Philippines	17.1	16.9	13.8	13.5	11.4
Singapore	-	-	-	-	-
Thailand	19.6	16.0	8.5	10.8	7.9
Viet Nam	8.3	8.0	6.7	5.2	-
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	1.9	1.6	1.4	1.2	0.6
Kiribati	-	-	-	-	-
Marshall Islands, Rep. of	15.2	16.7	14.7	24.3	-
Micronesia, Fed. States of	5.0	5.0	7.0	6.0	-
Nauru	-	-	-	-	-
Palau, Rep. of	0.9	1.5	1.8	1.6	-
Papua New Guinea	1.7	1.5	1.4	0.7	-
Samoa	9.1	8.7	7.9	-	-
Solomon Islands	10.3	9.3	5.9	7.2	5.2
Timor-Leste, Dem. Rep. of	-	-	-	-	-
Tonga	4.6	6.1	8.6	8.4	-
Tuvalu	-	-	-	-	-
Vanuatu	1.5	1.5	1.7	1.5	-

- = not available.



Table A19 Exchange rates to the US dollar (annual average)

	Currency	Symbol	2002	2003	2004	2005	2006
<b>Central Asia</b>							
Armenia	Dram	AMD	573.4	578.8	533.5	457.7	416.0
Azerbaijan	Azerbaijan new manat	AZN	1.0	1.0	1.0	0.9	0.9
Kazakhstan	Tenge	T	153.3	149.6	136.0	132.9	126.1
Kyrgyz Republic	Som	Som	46.9	43.7	42.7	41.0	40.2
Tajikistan	Somoni	TJS	2.8	3.1	3.0	3.1	3.3
Turkmenistan	Turkmen manat	TMM	5,200.0	5,200.0	5,200.0	5,200.0	5,200.0
Uzbekistan	Sum	SUM	771.0	971.0	1,020.0	1,115.0	1,220.0
<b>East Asia</b>							
China, People's Rep. of	Yuan	CNY	8.3	8.3	8.3	8.2	8.0
Hong Kong, China	Hong Kong dollar	HK\$	7.8	7.8	7.8	7.8	7.8
Korea, Rep. of	Won	W	1,250.7	1,191.9	1,143.7	1,024.1	955.1
Mongolia	Togrog	MNT	1,110.3	1,146.5	1,185.3	1,205.3	1,179.5
Taipei, China	New Taiwan dollar	NT\$	34.6	34.4	33.4	32.2	32.5
<b>South Asia</b>							
Afghanistan, Islamic Rep. of	Afghani	AF	44.8	49.0	47.7	49.7	-
Bangladesh	Taka	Tk	57.4	57.9	58.9	61.4	67.1
Bhutan	Ngultrum	Nu	48.2	47.9	45.4	44.6	44.7
India	Indian rupee/s	Re/Rs	48.4	46.0	44.9	44.3	44.7
Maldives	Rufiyaa	Rf	12.8	12.8	12.8	12.8	12.8
Nepal	Nepalese rupee/s	NRe/NRs	76.7	77.9	73.8	72.2	72.3
Pakistan	Pakistan rupee/s	PRe/PRs	61.4	58.5	57.6	59.4	59.9
Sri Lanka	Sri Lanka rupee/s	SLRe/SLRs	95.7	96.5	101.2	100.5	104.0
<b>Southeast Asia</b>							
Cambodia	Riel	KR	3,917.0	3,979.0	4,019.0	4,097.0	4,107.0
Indonesia	Rupiah	Rp	9,261.0	8,571.0	8,985.0	8,931.0	9,020.0
Lao People's Dem. Rep.	Kip	KN	10,056.3	10,569.0	10,585.5	10,655.2	10,126.0
Malaysia	Ringgit	RM	3.8	3.8	3.8	3.8	3.6
Myanmar	Kyat	MK	6.4	6.0	5.7	5.8	-
Philippines	Peso	P	51.6	54.2	56.0	55.1	51.3
Singapore	Singapore dollar	S\$	1.8	1.7	1.7	1.7	1.6
Thailand	Baht	B	43.0	41.5	40.2	40.2	37.9
Viet Nam	Dong	D	15,279.5	15,509.6	15,745.0	15,858.9	15,994.3
<b>The Pacific</b>							
Cook Islands	New Zealand dollar	NZ\$	2.2	1.7	1.5	1.4	1.5
Fiji Islands	Fiji dollar	F\$	2.2	1.9	1.7	1.7	1.7
Kiribati	Australian dollar	A\$	1.8	1.5	1.4	1.3	1.3
Marshall Islands, Rep. of	US dollar	US\$	1.0	1.0	1.0	1.0	1.0
Micronesia, Fed. States of	US dollar	US\$	1.0	1.0	1.0	1.0	1.0
Nauru	Australian dollar	A\$	1.8	1.5	1.4	1.3	1.3
Palau, Rep. of	US dollar	US\$	1.0	1.0	1.0	1.0	1.0
Papua New Guinea	Kina	K	3.9	3.5	3.2	3.1	3.1
Samoa	Tala	ST	3.4	3.0	2.8	2.7	2.7
Solomon Islands	Sol. Islands dollar	SI\$	6.8	7.5	7.5	7.5	7.8
Timor-Leste, Dem. Rep. of	US dollar	US\$	1.0	1.0	1.0	1.0	1.0
Tonga	Pa'anga	T\$	2.2	2.2	2.0	1.9	2.0
Tuvalu	Australian dollar	A\$	1.8	1.5	1.4	1.3	1.3
Vanuatu	Vatu	Vt	139.1	122.2	111.9	112.5	115.0

- = not available.

Table A20 Gross international reserves (US\$ million)

	2002	2003	2004	2005	2006
<b>Central Asia</b>					
Armenia	431	502	548	669	1,072
Azerbaijan	1,414	1,620	1,075	1,186	2,500
Kazakhstan	3,141	4,962	9,277	7,070	19,113
Kyrgyz Republic	317	389	565	612	817
Tajikistan	90	118	172	189	204
Turkmenistan	2,346	2,673	2,714	3,442	6,000
Uzbekistan	1,215	1,659	2,147	2,681	2,956
<b>East Asia</b>					
China, People's Rep. of	291,128	408,151	614,500	821,514	1,068,490
Hong Kong, China	111,919	118,388	123,569	124,278	133,168
Korea, Rep. of	121,343	155,281	198,994	210,317	238,882
Mongolia	268	203	208	333	718
Taipei, China	161,656	206,632	241,738	253,290	266,148
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	425	820	1,283	1,662	1,804
Bangladesh	1,583	2,470	2,705	2,930	3,484
Bhutan	315	373	383	367	479
India	76,100	112,959	141,514	151,622	194,634
Maldives	134	160	204	187	232
Nepal	1,031	1,159	1,447	1,476	1,834
Pakistan	4,333	9,525	10,554	9,791	10,760
Sri Lanka	1,700	2,329	2,196	2,458	2,515
<b>Southeast Asia</b>					
Cambodia	663	737	806	915	1,097
Indonesia	32,039	36,296	36,321	34,724	42,586
Lao People's Dem. Rep.	192	209	223	234	300
Malaysia	33,719	44,167	66,216	70,151	82,238
Myanmar	542	684	775	888	-
Philippines	16,365	17,063	16,228	18,494	22,967
Singapore	82,276	96,324	112,808	116,646	136,809
Thailand	38,924	42,148	49,832	52,066	66,985
Viet Nam	3,692	5,620	6,314	8,557	11,425
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	359	423	636	471	495
Kiribati	391	485	571	616	-
Marshall Islands, Rep. of	18	34	11	5	2
Micronesia, Fed. States of	117	90	84	-	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	352	489	663	765	1,450
Samoa	53	52	69	84	65
Solomon Islands	18	36	79	96	104
Timor-Leste, Dem. Rep. of	4	-23	-38	-38	-22
Tonga	18	17	44	44	42
Tuvalu	-	-	-	-	-
Vanuatu	35	41	59	68	82

- = not available.

Table A21 Central government expenditures (% of GDP)

	2002	2003	2004	2005	2006
<b>Central Asia</b>					
Armenia	19.4	19.2	17.5	18.6	17.0
Azerbaijan	20.8	27.2	27.0	23.7	26.0
Kazakhstan	21.7	22.3	22.6	27.0	17.4
Kyrgyz Republic	24.2	23.8	27.2	28.0	25.4
Tajikistan	16.1	16.2	17.7	19.7	18.9
Turkmenistan	18.1	20.6	-	-	-
Uzbekistan	25.9	24.8	23.5	20.8	23.6
<b>East Asia</b>					
China, People's Rep. of	18.3	18.1	17.8	18.5	19.2
Hong Kong, China	18.7	20.1	18.8	16.9	16.9
Korea, Rep. of	19.9	22.6	22.2	23.1	23.2
Mongolia	44.2	42.1	39.4	30.3	38.7
Taipei, China	21.0	21.4	20.8	20.7	18.8
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	8.5	14.0	13.9	14.5	15.7
Bangladesh	14.8	13.7	13.3	13.7	13.9
Bhutan	44.0	37.9	36.0	48.5	43.8
India	28.2	27.8	27.3	28.0	27.0
Maldives	38.0	38.3	36.0	59.7	74.5
Nepal	16.9	16.0	15.5	16.5	16.7
Pakistan	18.3	18.5	16.7	17.0	18.4
Sri Lanka	25.5	23.7	23.5	24.7	25.7
<b>Southeast Asia</b>					
Cambodia	16.8	15.7	15.0	13.8	13.1
Indonesia	17.7	18.7	18.7	18.3	20.1
Lao People's Dem. Rep.	18.4	19.0	17.2	17.7	18.2
Malaysia	28.7	28.7	26.4	25.2	24.3
Myanmar	-	-	-	10.0	-
Philippines	19.9	19.5	18.4	17.8	17.3
Singapore	19.2	14.1	13.8	13.2	14.7
Thailand	17.8	15.9	17.0	-	-
Viet Nam	24.2	26.1	25.8	27.1	31.9
<b>The Pacific</b>					
Cook Islands	36.0	33.0	32.5	32.5	27.5
Fiji Islands	34.3	33.1	31.3	27.4	28.8
Kiribati	146.1	139.4	105.5	86.7	89.4
Marshall Islands, Rep. of	79.0	71.0	60.9	65.2	-
Micronesia, Fed. States of	64.9	68.3	65.8	62.3	-
Nauru	-	-	-	-	-
Palau, Rep. of	66.3	62.6	61.7	54.2	61.7
Papua New Guinea	32.1	30.0	32.8	34.7	35.7
Samoa	34.9	32.5	31.1	45.2	31.8
Solomon Islands	29.6	39.0	39.5	52.2	53.1
Timor-Leste, Dem. Rep. of	69.4	72.9	71.1	21.1	33.7
Tonga	29.9	31.3	28.1	26.7	-
Tuvalu	136.6	-	-	85.8	98.2
Vanuatu	26.3	23.7	21.9	21.7	-

- = not available.

Table A22 Central government revenues (% of GDP)

	2002	2003	2004	2005	2006
<b>Central Asia</b>					
Armenia	16.8	18.0	15.8	16.7	16.5
Azerbaijan	18.7	24.2	25.0	22.0	22.6
Kazakhstan	21.4	22.4	22.2	27.6	16.1
Kyrgyz Republic	19.1	18.7	23.1	24.1	22.2
Tajikistan	16.8	17.3	17.9	20.1	19.3
Turkmenistan	18.2	19.2	-	-	-
Uzbekistan	25.0	23.5	23.5	20.9	23.9
<b>East Asia</b>					
China, People's Rep. of	15.7	16.0	16.5	17.2	18.8
Hong Kong, China	13.9	16.8	20.4	17.9	17.3
Korea, Rep. of	20.3	20.8	19.7	20.7	20.8
Mongolia	38.4	37.9	37.3	33.2	42.7
Taipei, China	17.5	17.9	18.3	19.0	18.8
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	8.4	11.0	12.7	13.6	14.1
Bangladesh	10.1	10.3	10.1	10.3	10.7
Bhutan	38.6	26.9	38.0	37.5	36.7
India	18.6	19.4	19.8	20.6	20.7
Maldives	33.1	34.9	34.5	47.3	56.4
Nepal	13.1	14.5	14.4	15.6	14.9
Pakistan	14.0	14.8	14.3	13.7	14.2
Sri Lanka	16.6	15.7	15.3	16.1	16.9
<b>Southeast Asia</b>					
Cambodia	10.5	9.7	10.4	10.4	11.6
Indonesia	16.4	17.0	17.6	17.8	19.1
Lao People's Dem. Rep.	13.1	11.1	11.3	11.6	12.5
Malaysia	23.1	23.4	22.1	21.5	21.7
Myanmar	-	-	-	-	-
Philippines	14.6	14.8	14.5	15.1	16.3
Singapore	23.5	20.6	19.4	20.1	24.7
Thailand	15.5	16.2	17.3	20.8	20.2
Viet Nam	22.7	25.0	26.7	25.9	26.9
<b>The Pacific</b>					
Cook Islands	36.2	32.2	31.5	34.6	30.7
Fiji Islands	25.8	24.4	24.8	24.1	25.9
Kiribati	145.5	111.3	68.4	63.4	64.6
Marshall Islands, Rep. of	69.6	69.2	59.5	62.3	-
Micronesia, Fed. States of	71.7	68.6	59.4	56.6	-
Nauru	-	-	-	-	-
Palau, Rep. of	42.4	54.0	54.3	53.6	61.3
Papua New Guinea	28.2	29.0	34.4	34.7	35.7
Samoa	32.9	32.0	30.3	45.5	31.5
Solomon Islands	18.7	38.8	47.5	54.5	53.7
Timor-Leste, Dem. Rep. of	10.4	16.0	22.5	96.3	136.2
Tonga	30.6	28.4	29.8	29.1	-
Tuvalu	167.4	-	-	78.9	91.7
Vanuatu	24.0	21.8	23.2	22.6	-

- = not available.

Table A23 Fiscal balance of central government (% of GDP)

	2002	2003	2004	2005	2006
<b>Central Asia</b>					
Armenia	-2.6	-1.3	-1.7	-1.9	-0.6
Azerbaijan	-2.1	-3.0	-2.0	-1.7	-3.3
Kazakhstan	-0.3	0.2	-0.3	0.6	-1.3
Kyrgyz Republic	-5.1	-5.2	-4.1	-4.0	-3.3
Tajikistan	0.7	1.1	0.2	0.4	0.4
Turkmenistan	0.2	-1.3	0.4	0.9	1.1
Uzbekistan	-0.9	-1.3	0.0	1.2	0.5
<b>East Asia</b>					
China, People's Rep. of	-2.6	-2.2	-1.3	-1.2	-0.4
Hong Kong, China	-4.8	-3.3	1.7	1.0	0.4
Korea, Rep. of	0.4	-1.7	-2.5	-2.5	-2.4
Mongolia	-5.8	-4.2	-2.1	2.9	3.9
Taipei, China	-3.5	-3.5	-2.5	-1.7	0.0
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	-0.1	-3.0	-1.2	-0.9	-1.5
Bangladesh	-4.6	-3.4	-3.2	-3.4	-3.3
Bhutan	-5.4	-11.0	2.0	-11.0	-7.1
India	-9.6	-8.5	-7.5	-7.4	-6.4
Maldives	-4.9	-3.4	-1.6	-12.5	-18.1
Nepal	-3.9	-1.5	-1.0	-0.8	-1.8
Pakistan	-4.3	-3.7	-2.4	-3.3	-4.2
Sri Lanka	-8.9	-8.0	-8.2	-8.7	-8.9
<b>Southeast Asia</b>					
Cambodia	-6.3	-6.0	-4.7	-3.4	-1.5
Indonesia	-1.3	-1.7	-1.1	-0.5	-1.0
Lao People's Dem. Rep.	-5.3	-7.9	-5.8	-6.0	-5.7
Malaysia	-5.6	-5.3	-4.3	-3.8	-2.6
Myanmar	-	-	-6.0	-4.0	-
Philippines	-5.3	-4.6	-3.8	-2.7	-1.0
Singapore	4.3	6.5	5.6	6.9	10.0
Thailand	-2.2	0.6	0.3	0.2	0.1
Viet Nam	-1.4	-1.2	0.9	-1.2	-5.0
<b>The Pacific</b>					
Cook Islands	0.2	-0.8	-1.0	2.1	3.2
Fiji Islands	-8.5	-8.7	-6.5	-3.3	-2.9
Kiribati	-0.7	-28.1	-37.1	-23.3	-24.7
Marshall Islands, Rep. of	-9.4	-1.8	-1.3	-2.9	-
Micronesia, Fed. States of	6.8	0.3	-6.4	-5.7	-
Nauru	-	-	-	-	-
Palau, Rep. of	-28.3	-2.4	-6.9	-3.9	-0.4
Papua New Guinea	-3.9	-1.0	1.6	0.0	-
Samoa	-2.0	-0.6	-0.8	0.3	-0.4
Solomon Islands	-10.9	-0.2	8.0	2.3	0.6
Timor-Leste, Dem. Rep. of	-59.0	-56.9	-48.6	75.2	102.5
Tonga	0.7	-2.9	1.7	2.4	-6.1
Tuvalu	30.8	-11.0	-9.0	-6.8	-6.4
Vanuatu	-2.3	-1.9	1.3	0.9	-0.5

- = not available.

