



ASIAN DEVELOPMENT

Outlook 2008

Workers in Asia

Asian Development Bank

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Foreword

Asian Development Outlook 2008 (ADO 2008) is the 20th edition of the annual comprehensive economic report on the developing member economies of the Asian Development Bank. This year's *ADO* features changes that aim to serve readers' needs better and enhance the relevance of content.

Parts 1 and 3 provide an assessment of recent economic performance for 44 developing economies in Asia, and projections for major macroeconomic indicators for 2008 and 2009.

In 2007, developing Asia grew by 8.7%, the fastest recorded rate of growth since 1988. The People's Republic of China (PRC) and India both grew at an exceptionally rapid pace, and several other countries, including the Philippines, enjoyed the fastest growth in decades.

But in the latter part of 2007, the global economic outlook began to turn. Problems that germinated in the United States (US) subprime mortgage and housing market began to spread and amplify. A coincident slowing of growth is now under way in the G3 economies (Europe, Japan, and US). There is still considerable dissonance about the extent and duration of the expected slowdown, and the full extent of problems in US and—possibly European—credit markets is yet to be revealed.

In this difficult environment, economic activity in developing Asia is expected to remain strong and growth of 7.6% is expected in 2008. This solid performance in an unsteady global economy is underpinned by favorable policy conditions, strong productivity growth, and the ongoing structural transformation of Asian economies. Still, growth projections for 2008 and 2009 are slightly below the recent historical trend in developing Asia.

Developing Asia will not be immune to the global economic slowdown, nor will it be hostage to it. *ADO 2008* features an examination of how the G3 downturn could be transmitted to developing Asia and concludes that trade channels remain an important conduit for the transmission of shocks. As yet, market penetration by Asian suppliers in the PRC's final goods markets is limited, and strong growth in the PRC will provide only a limited cushion against the G3 downturn.

In the past decade, developing Asia has become much more deeply integrated with global financial markets, raising the potential for contagion. But Asia's financial systems are likely to be spared a credit crunch, though there may be some tightening in credit markets. Asia's banks, which still dominate private financial markets, are generally well capitalized and there does not appear to be substantial value at risk on their balance sheets.

In the near term, the major risk lies not so much in softer growth but in rising commodity prices and accelerating inflation. If inflation expectations are allowed to become ingrained, this could create distortions that damage productivity growth over a protracted period. Though measures to restrict the impact of rising food prices on the poor are understandable, these should not be allowed to jeopardize

adjustments that are needed to bring forth additional supply. As earlier *ADOs* have warned, extensive subsidies on fuel come at high fiscal cost—a rising burden in several countries—as the gap between domestic retail and border prices widens.

Over the medium term, and once developing Asia has passed through the gathering storm of rising commodity prices and inflation, its growth prospects are likely to depend much more on how successfully countries manage their economies and overcome domestic constraints to growth.

Part 2 of *ADO 2008* features three chapters on workers in Asia. The first reviews the creation of decent and productive jobs, a pressing challenge for Asia's young people particularly. Youth joblessness is a ubiquitous feature of Asia's labor markets, despite rising levels of education. Young people, especially women, those in rural areas, and the less educated are at a real disadvantage in finding employment and getting good wages. A large majority of young Asian workers end up in the informal sector with low wages and miserable working conditions. Measures to improve the relevance and quality of school curricula, to provide support for vocational training, and to help kick-start job schemes are among targeted measures that deserve greater attention.

Developing Asia is facing a skills crisis, a scenario discussed in the second chapter of Part 2. The region does not have enough accountants, doctors, pilots and other highly trained workers to meet burgeoning demands. Although these shortages may appear to be localized, they can create bottlenecks that harm the wider economy. A range of short-term measures can help relieve constraints in the short run, including relaxation of restrictions that favor “insider” workers’ groups and more liberal policies toward skilled foreign workers. In the long run, successfully overcoming skills shortages will require wholesale liberalization and reform of Asia's tertiary education systems.

Asia's workers have for long been on the move. But, in developments analyzed in the final chapter of Part 2, recent times have seen a surge of migration within Asia. This surge has been driven by divergences in demography and by widening disparities in economic opportunities between countries—often neighbors. In the future, these trends are likely to become more accentuated and pressures for migration within the region are likely to build further. Unfortunately, policies toward immigration are not keeping pace with the reality faced by migrants themselves, nor do they adequately recognize the potentially large economic gains (to both sending and receiving countries) that flow from greater labor mobility and integrated labor markets. The calculations in this chapter suggest that these losses are large—even relative to trade restrictions. The vision of an integrated Asian labor market is yet to emerge, but it is one where regional cooperation efforts could harvest a substantial dividend.



Haruhiko Kuroda
President

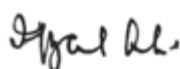
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Ann Quon and Saby Mitra of the Department of External Relations planned and coordinated the dissemination of *Asian Development Outlook 2008*.



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Definitions

The economies discussed in *Asian Development Outlook 2008 (ADO 2008)* are classified by major analytic or geographic groupings. For purposes of *ADO 2008*, 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 44 developing member countries of the Asian Development Bank.
- **Central Asia** comprises Armenia, Azerbaijan, Georgia, 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.

ADO 2008 is generally based on data available up to **17 March 2008**.

Acronyms and abbreviations

ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
BPO	business process outsourcing
CPI	consumer price index
EU	European Union
FDI	foreign direct investment
FY	fiscal year
GDP	gross domestic product
ICT	information and communications technology
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 2008*

Developing Asia's economic growth in 2008 will taper off from its multiyear high in 2007. Inflation is expected to climb to its highest level in a decade. Under the weight of subsidies for food, fuel, and power, fiscal positions are at risk. But developing Asia is not exposed to the threat of massive financial deleveraging, and its credit markets should continue to function in an orderly manner.

Synopsis

- Developing Asia recorded the highest growth in almost two decades in 2007—averaging 8.7%. A coincident slowdown in the United States (US), Europe, and Japan; surging food and fuel prices; and a credit crisis in global financial hubs notwithstanding, growth in 2008 is expected to be a robust 7.6%, only slightly below the past 5 years' average. Though Asia will not be immune to the global slowdown, neither will it be hostage to it.
- Despite subsidies and a raft of administrative measures that are restraining price rises, inflation is expected to accelerate in 2008 and could yet trigger an upward cost-price spiral. Taming inflation expectations and reining in fiscal deficits that are being bloated by fuel, food, and power subsidies are challenges facing a range of countries. Hardships and threats to poverty that are posed by rising food prices in particular may be more effectively tackled through targeted, direct cash transfers.
- Beyond these immediate bumps in the road, longer-term growth prospects will depend on how successfully countries tackle a variety of structural constraints. These are examined in their individual country contexts in Part 3 of *Asian Development Outlook (ADO) 2008*.
- In Part 2, *ADO* highlights the importance of providing relevant skills and job opportunities for Asia's burgeoning labor force. Solutions will differ from place to place, and priorities will also differ. But some of the ingredients that are likely to be necessary if Asia is to use the talents of its workers wisely, and not squander them, include better schooling and curricula; targeted support for youth job training; more liberal immigration policies for unskilled as well as skilled workers; removal of occupational restrictive practices that protect "insiders"; the overhaul of tertiary education systems; and a larger role for the private sector in the delivery of training and educational services at all levels.

Performance in 2007

- In many countries, growth in 2007 tested speed limits and was above what can be sustained over the medium term. For the region, growth is estimated to have been 8.7%, the fastest in nearly two decades.
- Signs of overheating initially appeared in quickly escalating asset prices but then spilled over into rising consumer prices. Price hikes in international commodity markets have aggravated inflation pressures. By November 2007, inflation had risen to an 11-year high in the People's Republic of China (PRC) and had reached double digits in Viet Nam and Central Asia by the end of the year.
- Current account surpluses widened again, and rose by over 1% of GDP in East Asia relative to 2006. The PRC posted a record current account surplus of \$353 billion. Surpluses widened significantly in Southeast Asia. South Asia remained in deficit.
- Accelerating growth was led by the PRC, which expanded by 11.4%, its fastest rate in 13 years. The PRC's share of regional GDP (measured at market exchange rates) continued to advance. For East Asia as a whole, growth accelerated to 9.3%. Inflation remained in check in most of East Asia other than the PRC. Mongolia, too, had high inflation averaging 9.0%, up from 5.1% in 2006.
- India grew apace. At 8.7%, growth was only marginally softer than the torrid pace of the previous 2 years. Bangladesh, Pakistan, and Sri Lanka consolidated recent gains. Nepal's growth sputtered despite some easing of political tensions. Inflation pressures were very high in Sri Lanka, and inflation accelerated to 20%. Bangladesh and Pakistan also had comparatively high rates of 7.2% and 7.8%, respectively.
- Growth in Southeast Asia inched up to 6.5%. The Philippines expanded at a 30-year high of 7.3%, and Viet Nam continued to grow quickly. Indonesia accelerated to 6.3%; Malaysia picked up gently; but Thailand—where consumer and business confidence faded in a context of heightened political uncertainty—moderated. Inflation pressures began to creep up toward the year's end in most of the subregion. Viet Nam's monthly inflation rate hit double digits late in the year.
- Central Asia, which is experiencing an oil and mineral boom, grew at 11.6%. Booming oil revenues and remittances are stoking rapid spending growth. Inflation has become the number one problem in the subregion. Central Asia as a whole saw its current account surplus drop to 1.8% of GDP from 3.3% in 2006.
- Growth in the Pacific strengthened to 3.1% thanks to a strong resurgence in Papua New Guinea. However, political problems kept growth in check in the Fiji Islands. Timor-Leste rebounded from the difficulties of 2006. Inflation in the Pacific accelerated and the current account balance was in deficit.

Outlook for 2008 and 2009

- A global slowdown is now under way. A coincident slowing of growth is expected in the economies of the US, European Union, and Japan. The ADO baseline forecasts have been revised down significantly over the last few months and, as new data are released, analysts in the public and private sectors continue to cut their growth forecasts.
- A credit crisis has gripped the US. Success of the Federal Reserve and the Treasury in coping with economic and financial market stresses is yet to be seen. The depth and duration of the US slowdown will have knock-on effects elsewhere in the global economy. The consensus view is that after a difficult first half of 2008, growth in the US should pick up in response to fiscal stimulus and aggressive interest rate cuts. It is unclear whether normal monetary transmission mechanisms will be effective in markets where confidence in counterparties appears to have been seriously weakened.
- Though the prospect of a recession in either the eurozone or Japan looks less likely than in the US, growth is expected to decelerate sharply there. Appreciation of both euro and yen real exchange rates is likely to dent export growth, and in both economies, consumer confidence is also ebbing.
- World commodity prices have soared again, testing new highs. Cyclical factors associated with the global slowdown may help mitigate this upswing. Prices may come off but are likely to be maintained at historically high levels.
- Developing Asia remains tied to global activity through traditional trade channels and, increasingly, through its closer integration in international financial markets. Nevertheless, in an unsteady global environment, favorable policy conditions and the productivity growth associated with the region's modernization and structural transformation will continue to sustain strong growth.
- During 2008, both the PRC and India are expected to slow. The PRC is expected to grow by a solid 10% in 2008 and India by a still-healthy 8%. In the past 18 months, both countries have tightened monetary policy, raising interest rates and placing higher reserve requirements on banks. The PRC has also taken a variety of steps to cool a booming export sector, including withdrawal of export subsidies and the imposition of new taxes. India's real exchange rate has appreciated, whereas the yuan moved less. In 2008, slower growth of global demand will likely have a more pronounced effect on the PRC, which is considerably more open to trade than India.
- Growth in East Asia is expected to decelerate in 2008 to 8.1%. Fixed investment growth is expected to slow somewhat as a result of tighter monetary policy in the PRC. Rebalancing growth there toward domestic consumption and away from exports and investment in industry will depend on the success of a wide range of reforms. Hong Kong, China; Mongolia; and Taipei, China will also slow, as a result both of the deterioration in the global economy and of their links with the PRC.

- Southeast Asia will slow to 5.7%, its export prospects damped by the slowdown in the global economy. In addition, efforts to prevent inflation from getting out of hand will moderate growth in Viet Nam from the fast pace of recent years. Only Thailand is expected to record higher growth after a return to normalcy in politics.
- South Asia is expected to slow in 2008, chiefly on the moderation of growth in the Indian economy. Bangladesh, Pakistan, and Sri Lanka will be affected by the growth slowdown in major markets as garment exports are expected to register declines, and may suffer terms of trade losses.
- In Central Asia, growth is expected to decelerate sharply to 7.5% in 2008 from double-digit rates in recent years. This is mainly due to a weaker expansion in Kazakhstan, the largest regional economy, where a sudden halt in capital inflows to domestic banks triggered a sharp reduction in lending and a downturn in the non-oil economy. Growth in a number of the region's non-oil countries is slowing, in part due to efforts to cool inflation.
- Growth in the Pacific Islands is expected to pick up largely because Papua New Guinea, the biggest economy in the subregion, is benefiting from high global commodity prices and an associated jump in government revenues. Fiji Islands is forecast to grow slightly after contracting in 2007. Timor-Leste is expected to maintain moderate growth, funded by oil revenues. Growth in many of the smaller Pacific economies is forecast to slow in 2008, and two of them are likely to experience economic contractions.
- Inflation in developing Asia is expected to accelerate and could hit a decade-long regional high. Inflation will be highest in Central Asia where it will remain in double digits. As the PRC's inflation rate shifts up, so too will that of East Asia. In the other subregions, inflation is also expected to edge up over the course of the year.
- Developing Asia's current account surplus is expected to narrow, to about 5.3% of GDP, from 6.4% in 2007. The narrowing of the surplus will be mainly attributable to slowing export growth, particularly in East and Southeast Asia. Oil- and mineral-rich Central Asia is expected to post a stronger surplus in 2008 while South Asia's deficit is seen changing only a little.
- In 2009, growth in developing Asia is expected to pick up a bit. This projection assumes modest recovery in the global economy beginning later in 2008 and carrying through 2009, an outcome that is far from guaranteed. Though favorable policies and structural conditions should carry growth in the near term, emerging fiscal and inflation stresses have the potential to pull down growth.
- Inflation pressures should recede slightly in 2009. The forecast deceleration in inflation is based on an assumption of some moderation in commodity prices through 2009 and monetary policies that lean against inflation pressures. Current account surpluses are expected to narrow further in 2009, and should help rebalancing, and at an aggregate regional level may fall below 5% of GDP. Even if global demand growth recovers, it is likely to be modest, and real exchange rates are expected to appreciate for many Asian economies.

The myth of uncoupling

- ADO looks at the issue of “uncoupling”. Evidence is marshaled that emphasizes that developing Asia (East and Southeast Asia) remains closely tied to global goods markets, despite burgeoning intraregional trade. Static export shares for finished products from other Asian countries to the PRC suggest that the PRC has not yet asserted itself as a significant market for final goods exports. Diversion of trade to other regions such as the Middle East and the Russian Federation helps, but cannot fully compensate for slowing demand in much larger, established markets.
- A close look at recent links between monthly retail sales in the US, eurozone, and Japan and exports in nine economies of East and Southeast Asia (in *The uncoupling hypothesis: New evidence from G3 retail sales and Asian exports*) shows powerful impulses that run from the G3 backward through the region. The precise nature of responses to G3 demand impulses depends on where the impulse occurs; on the extent of direct and indirect linkages to that market; and on the composition of the country’s exports. Those countries that have high export shares of goods (such as food) that are less sensitive to income changes respond less to external demand shocks.
- Recent trends in Asia’s exports of consumer manufactured products (*Evidence from cyclically sensitive manufactured exports*) confirm that cyclically sensitive sectors, such as garments and textiles, footwear, toys, and computers and office equipment, are quickly decelerating in both US and Japanese markets. For low-cost manufacturing countries, like Bangladesh and Cambodia, the impacts from textiles and garments are significant. In durable goods sectors, such as machinery, there is as yet little evidence of a slowdown in Asia’s exports, but in these sectors, lags between changes in demand and shipments of exports are likely to be longer.
- The PRC’s role in the evolution of intraregional trade linkages in East and Southeast Asia has been pivotal. In the past decade, the PRC has established itself as an assembly hub exporting final goods to markets outside the region and drawing in parts and components for assembly from other Asian economies. Through this vertically integrated network, changes in global final demand register first in the PRC and then cascade back through the region. Some pundits have suggested that this pattern is now changing and that the PRC is increasingly substituting locally produced intermediate goods for those that it once imported. A close look at the evidence (*Is the PRC uncoupling from developing Asia?*) suggests that these shifts are more apparent than real and that the established supply networks remain firmly in place. The PRC is still largely specialized in low-cost, labor-intensive assembly activities. Export shares of parts and components from other countries to that country show no signs of tailing off yet.
- Over the past decade, developing Asia’s financial markets have undoubtedly become more closely meshed with those in the rest of the world. Financial asset growth has fast outrun growth of nominal GDP, and cross-border holdings of assets and liabilities have flourished with the retreat of “home bias”. Indeed, a wide variety of indicators show that East and Southeast Asian financial markets are now much more closely integrated with international markets than with each other. Asia has latched on fast to the global financial system. Yet the likelihood of a credit crunch washing ashore seems remote. And though credit conditions can be expected to tighten, which

may trim investment and household spending, the prospect of abrupt deleveraging of Asia's bank-centered financial system appears remote. Nevertheless, domestic risks to Asia's banks remain, and they need close attention within broader financial and macro policy frameworks.

- Lastly, the point bears repeating that the domestic conditions supporting growth in developing Asia are strong. That said, prospects will also depend on Asian countries' ability to tap the potential of overseas markets, and this would be threatened by any significant rise in trade or investment protectionism. If the global economy were to slump, rising protectionism could present a significant risk for developing Asia.

Nervousness about commodity prices and inflation

- Developing Asia's voracious appetite for commodities, along with other factors, is contributing to global price rises. Real prices of fuel and derivative products have reached all-time highs, and food prices are now soaring. To cushion consumers, and to head off potential social stresses, many Asian governments have subsidized or otherwise controlled prices of basic commodities such as kerosene, rice, and wheat. For example, Indonesia spends inordinate amounts of budgetary resources on fuel subsidies alone, much larger than moneys spent on public sector delivery of health and education combined. If oil should average \$100 a barrel in 2008, as opposed to Indonesia's original budget assumption of \$60, then fuel and electric power subsidies will rise by over \$17 billion relative to the 2008 budget assumptions. If governments do not rethink these expensive and inefficient subsidy programs, fiscal costs could escalate sharply and require painful adjustments (or accelerating inflation, or both) later.
- The risk of an inflation spiral in Asia is palpable and warrants close attention. Indeed, published inflation rates disguise the true extent of underlying inflation pressures due to the presence of subsidies, administrative price controls, and cuts in excise taxes. The appropriate monetary response partly depends on whether price pressures are seen as temporary, and so are likely to recede, or as more structural and durable. But developing Asia cannot afford to bet on an orderly and imminent retreat of price pressures.
- The best approach is to tackle the problem at its roots. For some countries this may require a more flexible approach to exchange rate management. Attempts to resist currency appreciation by allowing interest rates to track down with global rates would only aggravate inflation pressures. For other countries, it may require close examination of fiscal spending levels and priorities. In some circumstances, targeted measures, for example, clearing away chokepoints on trade and distribution, may be required to relieve cost pressures.

Workers in Asia

- Part 2 of *ADO—Workers in Asia*—examines, in three chapters, key longer-term issues facing Asia's economies and particularly its workers. It looks at: whether developing Asia is at risk of failing to realize its “demographic dividend”; skills mismatches and shortages in key professions; and issues of surging international labor migration within developing Asia. The chapters offer some views on what developing Asia should do to maximize the dynamism of its economies, and of its people.

Young Asians: A squandered talent

- Developing Asia is passing through a demographic phase that has a high share of young adults in the total population. This “youth bulge” has enormous potential for stimulating economic growth through productive employment, asset creation, and investment. The growth opportunity must be harvested within the next two or three decades.
- However, there are major difficulties to this. For example, youth unemployment and joblessness are on the rise, disproportionately affecting three groups of young people—women, workers with little education, and those in rural areas.
- Also, poor education and training are increasingly pushing poor, young workers into informal sector jobs, often at low pay and in miserable working conditions. And although the level of education attainment has risen across all skills groups, the returns to education are falling.
- Broadly, the ingredients of an appropriate policy environment include strengthening the relevance and quality of school curricula; providing support for vocational training; and helping kick-start job schemes that will impart relevant skills.

Asia's skills crisis

- Developing Asia is suffering from a growing dearth of skills, especially among professional occupations such as accountants, doctors, engineers, and pilots. The shortage is serious enough, potentially, to harm productivity of entire industries and the economy as a whole.
- To a large extent, the problem is one of success—Asia's rapid growth and structural change. Fast-rising living standards have fueled the demand for finance, medical care, and other skills-intensive services. The structural nature of the skills gap suggests that it is likely to afflict developing Asia for years to come.
- Measures to help alleviate Asia's skills shortages, even in the short run, include attempting to stem the “brain drain” and encouraging Asian emigrants to return home; making it easier for skilled non-Asians to live and work in the region; relaxing occupational restrictions that currently favor “insider” workers' groups; and raising retirement ages.
- Longer term, Asia needs to invest in its education systems, making them more appropriate to the demands of its modernizing economies.

Asian workers on the move

- Migration within Asia is surging, driven by divergences in demography and by widening disparities in economic opportunities between even neighboring countries. No longer do Asian migrants consider only industrial economies.
- These intra-Asian migration trends are likely to become more pronounced. Yet current policies toward immigration remain quite restrictive in most Asian economies, narrowing opportunities for the region to benefit from greater labor mobility and integrated labor markets.
- Asian economies—both sending and receiving—could realize important gains by working together to liberalize intra-Asian movements of all workers, not just the highly skilled. Efforts to promote regional cooperation on and liberalization of immigration, that would complement deepening integration in goods and capital markets, hold great promise. Yet a vision of an integrated Asian labor market has still to emerge.



Part 1

The global slowdown
and developing Asia

The global slowdown and developing Asia

Introduction

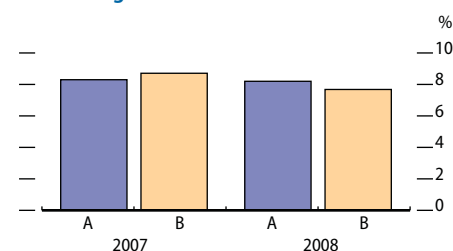
Developing Asia's economy is expected to expand by 7.6% in 2008 (Figure 1.1.1), picking up a shade to 7.8% in 2009. These projections suggest a slowdown from 2007's outcome, now estimated at 8.7%, the highest in 19 years. Still, growth projections for the next 2 years are only slightly below the recent historical trend (Figure 1.1.2) and would constitute a solid performance in an unsteady global economy.

Growth is expected to decelerate in most of developing Asia's economies in 2008, with only a few likely to match or better 2007's performance. Both the People's Republic of China (PRC) and India are projected to cool. In the PRC, growth of net exports is set to fall in 2008 and this will check expansion. In India, where domestic demand accounts for most output growth, a modest slowdown is seen. But growth is expected to ease in many other countries, too. Projected growth rates for Central Asia and for Southeast Asia are below those of 2007. Only the Pacific Islands is forecast to do better than last year.

Rising food and fuel prices are stoking headline inflation, but economic speed limits have also been tested, with recent output growth straining capacity. On the demand side, sustained balance-of-payments surpluses have seeped into domestic liquidity and credit expansion. The expected moderation of growth in 2008 and narrowing of current account surpluses may provide some respite. Nevertheless, trend inflation is rising (Figure 1.1.3) and the projected headline rate is expected to be the highest in a decade.

Risks to the baseline growth forecasts outlined in *Asian Development Outlook 2008 (ADO 2008)* are firmly to the downside. A coincident slowdown of output growth in the G3 economies—United States (US), European Union (EU), and Japan—now looks set for 2008, with only a moderate and highly uncertain pickup forecast in 2009. As new data are released, G3 growth forecasts are being cut. If the global slowdown is concentrated in sectors such as electronics, textiles and garments, and toys, as recent data appear to suggest, this would hurt Asian exporters. Although developing Asia is now exporting more to other emerging economies—the Middle East, Russian Federation, and elsewhere—this is unlikely to compensate fully for losses in the much larger, more established markets.

1.1.1 GDP growth

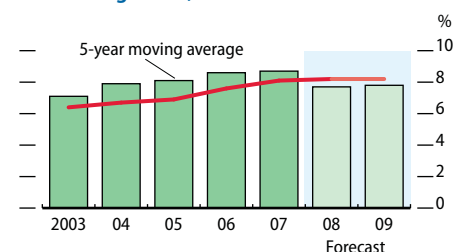


A = Asian Development Outlook 2007 Update; B = Asian Development Outlook 2008.

Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

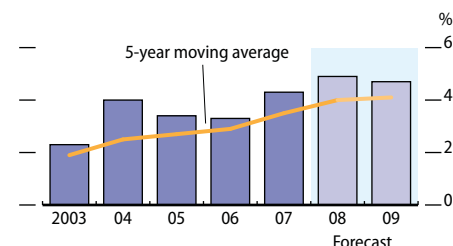
1.1.2 GDP growth, annual and trend



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

1.1.3 Inflation, annual and trend



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

There are other important uncertainties. Rising food and fuel prices could probe developing Asia's resilience. Countries that are net fuel and food importers are likely to be squeezed by adverse movements in their terms of trade; more so, when unit values of important export products are weakening, as they now are for garments and textiles. In some countries such as Pakistan, adverse terms of trade movements threaten to widen further already substantial current account deficits.

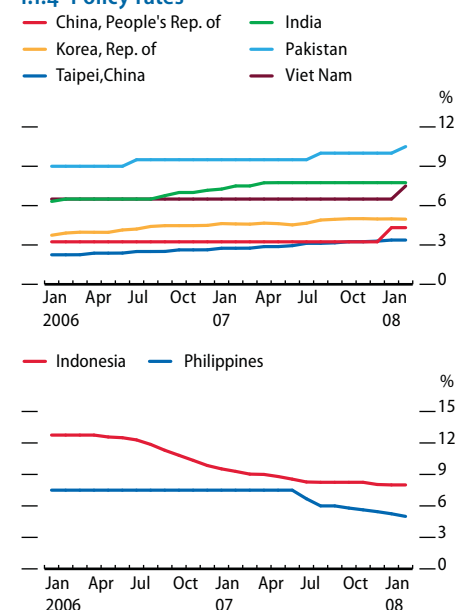
As highlighted in *ADO 2007 Update* of September last year, fuel subsidies and other methods of restraining retail prices are already costing developing Asia dearly. Though some recent hikes in administered prices have been made, for example in Bangladesh and India, these are trailing international price increases with the result that the gap between border and domestic prices is again widening. Such open-ended fiscal commitments have high social opportunity costs and, in the absence of "exit strategies," could eventually threaten macroeconomic balances. Recently introduced food subsidies, intended to soothe social pressures, are now adding to fiscal worries. If there is a respite from rising prices, as the *ADO 2008* baseline assumes, payments and fiscal risks should recede. But if food and fuel prices soar further—a possibility that cannot be ruled out—some governments may be faced with tough structural adjustments.

More general inflation risks also lurk and could limit policy options (if the deceleration of growth gives cause for concern). In the PRC, the consumer price index (CPI) climbed by 8.7% in February, the steepest rise in 11 years. In Central Asia, inflation is running in double digits, and in many other countries it is expected to accelerate this year. Monetary policy responses have been mixed (Figure 1.1.4) and occasionally lag price developments. The authorities in some economies are anxious that rising interest rates may attract capital inflows and put further upward pressure on nominal exchange rates. But if central banks attempt to resist (rather than manage) nominal currency appreciation, they will eventually court elevated inflation expectations as pressures build for the real exchange rate to appreciate. Sharp cuts in US interest rates are exacerbating pressures and will raise sterilization costs. If inflation expectations are allowed to ratchet up, this will risk long-term damage to productivity growth and to the credibility of central banks.

A key message of *ADO 2008* is that, although problems will spread from the global economy to developing Asia—a process that is already visible in high-frequency trade and financial data—the region's growth in 2008 is much more likely to moderate than to lurch down. Developing Asia is not immune to global developments, but neither is it hostage to them. In the near term, Asia's structural transformation, robust productivity growth, and favorable policy climate will continue to support healthy growth. The outlook for credit may well tighten, but the regional financial system—which is still mainly built around bank credit—should be largely insulated from the huge deleveraging now under way in the US.

There should be no room for complacency. Asia's growth is neither preordained nor guaranteed, and if economic vigor is to last, countries must address a raft of challenges. Today, weaknesses limit policy options and are mere bumps along the road to progress. However, left unattended,

1.1.4 Policy rates



Sources: Datastream; CEIC Data Company Ltd.; both downloaded 24 March 2008.

[Click here for figure data](#)

they could become inescapable road blocks along that path and a serious source of vulnerability.

Part 2 of this 20th anniversary issue of *ADO 2008, Workers in Asia*, looks beyond Asia's immediate issues and investigates the different challenges related to the creation of productive work and jobs in Asia. The first of three chapters, *Young Asians: A squandered talent*, analyzes developing Asia's capacity to fully redeem the demographic dividend of its many young people now moving into the labor force. *Asia's skills crisis* discusses the skills gap between what workers have acquired and the skills they need in economies that aim to move up the "value ladder." The last chapter, *Asian workers on the move*, analyzes the benefits to countries of the recent tectonic shifts in migration within Asia. All three chapters offer policy suggestions on what developing Asia can do to maximize the dynamism of its economies, and its people.

Part 3 presents, in a country context, overviews of recent economic performance, forecasts for the next 2 years, and the development challenges facing each country. Part 4 presents a brief analysis of the "errors and omissions" line in Asia's national accounts data.

In the following section of this chapter, *Global outlook* explains the wider backdrop for developing Asia's prospects. Economic conditions in the major industrial countries are reviewed with the spotlight on the possible implications of the still-unfolding credit crisis in the US. The evolution of the crisis affecting US credit markets is assessed and the policy challenges are identified. Prospects are then briefly reviewed for the US, eurozone, and Japan. This sets the scene for an examination of how a global downturn might be transmitted to developing Asia.

In the section, *The uncoupling myth: The G3 slowdown and developing Asia*, ties between developing Asia and the wider global economy are scrutinized at different levels. Macroeconomic models that capture historical linkages suggest that a combination of adverse shocks to output growth in the G3 and real exchange rate appreciation in developing Asia would register in slower growth, but that the effects are modest relative to potential output growth. Trade channels account for most of the spillover to Asia, though domestic demand could also be crimped by higher real interest rates. A more disaggregated look at the impact of slower consumption spending in the G3 suggests a fast-working—and in some cases substantial—drag on Asian exports. Drilling down further, patterns in recent manufacturing trade statistics show that developing Asia is already feeling the pinch from a slowdown in Japanese and US demand, particularly for cyclically sensitive consumer products.

Looking inside Asia, trade data still reveal strong economic complementarities between the PRC and other economies of East and Southeast Asia. The notion that cross-border linkages are being weakened as the PRC substitutes local for external suppliers finds little support. Vertically integrated supply chains that crisscross East and Southeast Asia remain an important mechanism that disperses and propagates the impacts of external shocks. Virtually all the increase that has occurred in intraregional trade in manufactured goods in recent years has been in parts and components. Final goods demand in the PRC still accounts for only a small share of exports from other Asian countries—though that share may be climbing.

Asia's financial markets are becoming more closely meshed with global markets. Most measures of financial integration, and thus potential contagion, have greatly strengthened over the past decade. Through these channels Asian borrowers will feel the pinch in international credit markets and Asia's bourses are likely to experience heightened volatility. But as Asia's banks are still the main originators of domestic credit, and their leverage and exposure to unsafe securities are low, the possibility of the credit crunch washing onto Asia's economic shores seems remote. Most Asian economies also have ample foreign reserves in the event of an unexpected rush to sell domestic currency.

In the final section, *Reasons to be nervous: Commodity prices and inflation*, the role of rising fuel and food prices in stoking inflation is considered. Net fuel and food importers are at particular risk of adverse terms of trade movements, and countries that choose to try and cushion the effects of rising border prices on consumers face a potentially large fiscal bill. A jump in long-run inflation—and fuel and food are major components of most household budgets in Asia—is perhaps a clearer short-run danger to developing Asia than moderating growth.

Global developments complicate the current picture. Although the slowdown in global demand should ease inflation pressures, deep cuts in US interest rates would add to them if Asian economies do not allow greater flexibility in nominal exchange rates. Lower interest rates also tend to make commodities more attractive as assets and so may support high prices (Figure 1.1.5), though the effects on inflation should be transitory. Any passive acceptance by Asia of an upward drift in inflation could deal a hard blow to long-run productivity growth. Even moderate inflation typically proves costly to get rid off. Conversely, price controls and extensive price subsidies, though they may temporarily corral inflation expectations, are not the answer and would stymie market adjustment processes.

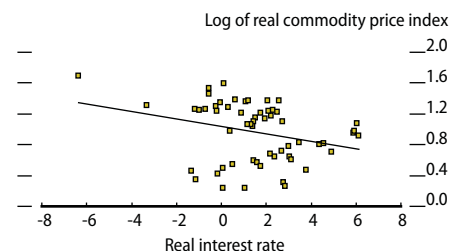
Global outlook

Financial market turmoil

Adjustments in real economic activity are now in train. As new economic data are released, pundits have been revising down their estimates of growth. In January 2008, the International Monetary Fund (IMF) cropped its growth forecasts for the G3. Consensus forecasts of growth for the three main economic blocs have tracked steadily down through the March 2008 release (Figure 1.1.6). The baseline *ADO 2008* assumptions in Table 1.1.1, anchored in IMF analysis, were last updated in mid-February and more recent news would possibly warrant cuts to these growth estimates.

The global economy's health has taken a turn for the worse. What initially appeared in mid-2007 as a domestic problem in the US housing market has now infected the broader financial system in the US and in Europe and is spilling over into the real economy worldwide. The discovery of substantial credit risks camouflaged by complex, collateralized securities has exposed highly leveraged investors to substantial losses and in some cases led to insolvency. Problems are

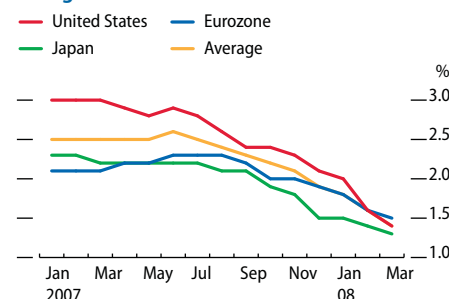
1.1.5 Real commodity prices and real interest rates, 1950–2007



Sources: Commodity Research Bureau, available: www.crbtrader.org; US Department of Labor, Bureau of Labor Statistics, available: www.bls.gov; Federal Reserve Board, available: www.federalreserve.gov; all downloaded 24 March 2008.

[Click here for figure data](#)

1.1.6 Consensus forecasts for 2008 GDP growth



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

[Click here for figure data](#)

1.1.1 Baseline assumptions for external conditions

GDP growth (%)	2006 Actual	2007 Actual	2008 ADO 2008 projection	2009 ADO 2008 projection
Industrial countries^a	2.7	2.3	1.5	1.9
United States	2.9	2.2	1.5	2.0
Eurozone	2.7	2.6	1.6	2.0
Japan	2.4	2.1	1.5	1.5
Memorandum items				
US Federal Funds rate (average, %)	5.0	5.0	2.75	2.9
Brent crude oil spot prices (average, \$ per barrel)	65.4	72.7	85.0	95.0
Nonfuel commodity prices (% increase)	24.5	15.7	0.2	-5.7
CPI inflation (OECD, average)	2.6	2.5	2.7	2.4
World trade volume (% increase)	10.1	7.5	7.0	7.7

^a Growth rates for industrial countries are a GDP-weighted average for the US, eurozone, and Japan.

Sources: US Bureau of Economic Analysis, available: www.bea.gov; Eurostat, available: <http://europa.eu.int>; Economic and Social Research Institute of Japan, available: www.esri.cao.go.jp; Bloomberg; World Bank, *Commodity Price Data and Prospects for the Global Economy Forecast Summary*, available: www.worldbank.org; OECD Main Economic Indicators, available: www.oecd.org; IMF World Economic Prospects, available: www.imf.org; all downloaded 28 March 2008; staff estimates.

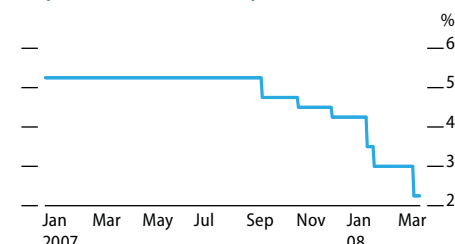
no longer confined to the “subprime” mortgage market. Troubles are amplifying and spreading—and are yet to run their full course. Nobody cares to predict what may still turn up.

Initially, much of the pain centered on banks whose balance sheets were forced to shelter the damaged assets of their (unregulated) investment entities (so-called structured investment vehicles). This sapped bank liquidity and required fresh equity to replace depleted capital. Difficulties ensued in the short-term money markets and markets for commercial paper as potential lenders lost confidence in borrowers’ ability to repay and in the true value of the collateral that they had pledged.

Now, troubles have overwhelmed non-deposit-taking (investment) banks. Balance sheets that had been puffed up on leverage and inflated asset values have been badly punctured. As investors have sold into a falling market to limit losses and to meet collateral requirements on their leveraged portfolios, they have succeeded only in tipping the market further down and raising broader market risks. The ability of all but the most creditworthy borrowers to refinance has been seriously impaired and, as investors dump assets whose values can no longer cover their debts, defaults are rising. Insurers that had acted as guarantors against default—“enhancing” credit quality and transferring risks—are now facing steeply rising claims and are scrambling to replenish their capital. As the New York Federal Reserve has warned, an unstable dynamic has been unleashed that threatens the functioning of the US and other funding markets.¹

Alarmed by clear risks to the financial system, and a rising probability of recession, the US Federal Reserve has slashed its target policy interest rate. Since its peak in September 2007, the Fed Funds rate has been gouged by 300 basis points (bps) in only 5 months (Figure 1.1.7). In the eurozone, where there had been an expectation that interest rates would track up in 2008, short-term policy rates are on hold despite inflation reaching a 14-year high of 3.3% in February. The prospects of rapid

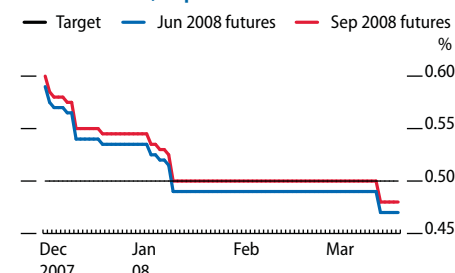
1.1.7 Federal Funds rate, United States



Source: Datastream, downloaded 26 March 2008.

[Click here for figure data](#)

1.1.8 Call rate, Japan



Source: Datastream, downloaded 25 March 2008.

[Click here for figure data](#)

slowing mean that a cut in eurozone rates in 2008 cannot be ruled out. A cut in yen interest rates, inconceivable only a few months back, is also possible (Figure 1.1.8).

Yet despite aggressive US Fed Funds rate cuts, credit spreads have widened in the US and the flight to cash and high-quality securities has persisted (Figure 1.1.9). Even qualified borrowers are having difficulty in obtaining funding as banks buttress their liquidity against the possibility of losses. Confidence about the solvency of counterparties continues to ebb despite substantial liquidity support to markets.

Efforts to support the functioning of money and funding markets are now being closely coordinated among the central banks of the G10 economies. Efforts outside the US have focused largely on ensuring liquidity in the interbank market and in the eurozone dollar market. But most of the action has been in the US where the Federal Reserve has taken unprecedented steps to extend support to “primary dealers” (all of which are nondepository financial institutions) as well as to banks. On 16 March, the discount window was opened to primary dealers, providing unlimited credit in return for pledges of investment-grade collateral, with credit being extended up to 30 days. In some ways, the Federal Reserve is now acting as a lender of last resort to nondepository financial institutions that may be facing difficulties in the wholesale funding markets. At each step, the Federal Reserve has relaxed conditions on collateral and pricing and extended greater flexibility on maturity. Through a substantial guarantee to JP Morgan, the Federal Reserve has also in effect underwritten the acquisition of Bear Stearns, the US’s fifth-ranking investment bank, after it became clear that Bear Stearns was in all likelihood insolvent.

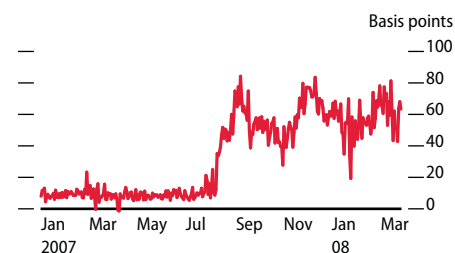
In this complex and dynamic environment, there is considerable dissonance about the outlook and appropriate policy responses (Box 1.1.1).

United States

News coming out of the US economy points to a slowing of demand in the first months of 2008. There is no end in sight to the rout in the housing market. Foreclosures are rising, housing starts are in free fall, inventories of unsold units are piling up, and house prices continue to tumble (Figure 1.1.10). Difficulties have now spread beyond housing into the wider economy. Institute for Supply Management indexes (Figures 1.1.11 and 1.1.12) show that, despite an uptick in the nonmanufacturing index in February, both manufacturing and nonmanufacturing indexes signal contraction. A variety of other survey data paint much the same picture. The University of Michigan Consumer Sentiment index (Figure 1.1.13) was at a 5-year low in March. A contraction in February’s retail sales has confirmed these early warning signals. To say the least, producers and consumers in the US are in a highly cautious mood.

Labor market indicators, which often lag other developments, are now weakening as well. March 2008’s data release from the Bureau of Labor Statistics shows a reduction in nonfarm seasonally adjusted payrolls between January and February of 63,000. This is the largest drop since March 2003. Most sectors in the US economy, other than public services, are shedding jobs. Private sector job losses in February exceeded

1.1.9 12-month US\$ interbank spreads

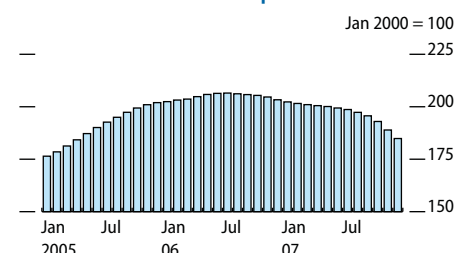


Note: Spreads refer to the difference between the interbank rate and the overnight index swap rate.

Sources: Bloomberg; Datastream; both downloaded 27 March 2008.

[Click here for figure data](#)

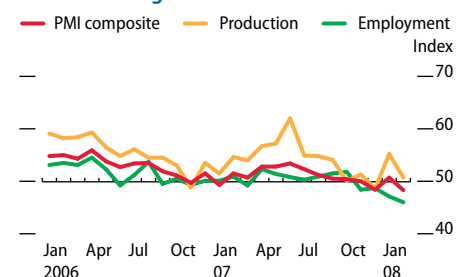
1.1.10 Case-Shiller home price index



Source: Standard & Poor’s, available: www.standardandpoors.com, downloaded 17 March 2008.

[Click here for figure data](#)

1.1.11 Institute for Supply Management manufacturing index

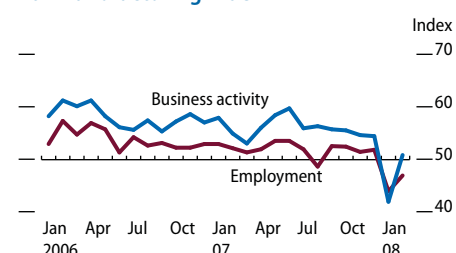


PMI = Purchasing Managers Index.

Source: Datastream, downloaded 17 March 2008.

[Click here for figure data](#)

1.1.12 Institute for Supply Management nonmanufacturing index



Source: Datastream, downloaded 17 March 2008.

[Click here for figure data](#)

1.1.1 Purging imbalances or breaking the economic fall?

Pundits disagree about what needs to be done about the current credit crisis in the United States.

One perspective is that the current setback is an inescapable consequence of a buildup of credit-fueled excesses there, regulatory failures in financial markets, and structural imbalances across the global economy. Accordingly, the solution lies in putting right these excesses, failures, and imbalances. Elements of the solution would include coordinated policy adjustments that better apportion global demand and supply, and steps to damp pro-cyclical credit growth in financial markets, including regulatory and prudential measures that put the brakes on incentives for risk origination in rising markets.

Analysts observe that the goal of restoring longer-term financial sustainability and solvency should not be confused with macroeconomic stabilization objectives. Indeed, those who believe that the priority should be on purging imbalances see a—possibly painful—correction as unavoidable. Cutting short-term interest rates cannot repair insolvent institutions or fix asset price misalignments. When risks of credit default are thought to be very high, short-term policy rates may have little purchase on market rates or credit flows.

For example, if everybody believes that house prices will continue to tumble, it will be difficult to tempt rational borrowers with even zero-interest mortgages. Likewise, lenders would be foolish to swap their cash for crumbling housing collateral. And there are significant risks built into aggressive interest rate cuts: a sharp rise in future inflation and a replay of a reckless cycle of credit boom and bust would be highly damaging.

Yet the political reality is that monetary and financial policy must attempt to balance an interest in protecting the normal functioning of the funding market against the threats presented by bailouts, moral hazard, and raised inflation expectations. When the macroeconomic and financial stakes are so high—and they appear to be so, particularly in the US economy—erring on the side of

caution makes sense. If the interplay of growing financial stresses and weakening demand is such as to take the US economy tumbling down a deflationary path there will be no second chance for monetary policy.

In such an environment, interest rate cuts that are complemented by other measures—including fiscal spending—may soothe economic pain and help break the downward spiral in confidence. Though there is a strong possibility that the effectiveness of a monetary stimulus will be diluted by rising saving and weakened credit transmission, it may provide some relief.

Other channels may help too. A steeper yield curve may support profitability for beleaguered banks. And through their (short-run) effects on the real exchange rate, interest rate cuts may also spur net exports. Central banks can help in other ways, including liquidity-support measures that help enhance the credit standing of financial market institutions. Ultimately, fiscal support may be needed to deal with insolvencies and debt restructuring.

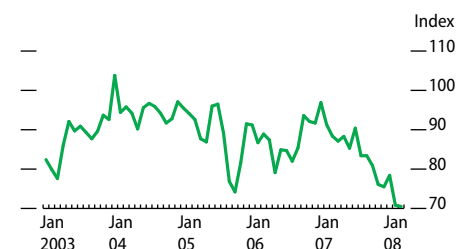
Despite divergent views on the likely effectiveness of monetary and financial policy, there is broad agreement that the circumstances that let risks build and multiply must be addressed. Over the longer term, these conditions are likely to entail a reconsideration of many aspects of financial regulation and supervision. The list of areas that needs study and possible attention is long, and would start with adequacy of liquidity and capital cushions; financial disclosure; valuation of complex assets, risk models, and risk rating; and unevenness of regulation and oversight in closely related activities.

Questions about whether central banks have instruments that are fit for managing complex financial systems (of which deposit-taking institutions are a shrinking part) also warrant close scrutiny. Whatever conclusions emerge, there must be a healthy balance between regulation on the one hand, and the role of markets and competition in disciplining errant behavior on the other.

100,000. Earlier payroll numbers for January and December were also revised down, confirming the downward trend in employment. The US unemployment rate has so far held firm but only because workers who have become discouraged in their search for work are leaving the labor force.

Rising headline inflation, stoked by increases in gasoline and to a lesser extent food prices, is taking cash out of households' wallets. Real disposable income is probably falling and data also show a decline in household financial and real estate wealth (Figure 1.1.14). These trends cast a pall over prospects for consumption in the first half of 2008. Fiscal measures will put about 1% of GDP into taxpayers' pockets from the second quarter and easier credit conditions—if in fact interest rate cuts

1.1.13 University of Michigan Consumer Sentiment index



Source: Datastream, downloaded 24 March 2008.

[Click here for figure data](#)

work (Box 1.1.1 above)—are expected to provide a fillip later in 2008. Growth of net exports could also provide important near-term support for aggregate demand.

Hunches about the depth and duration of the slowdown for the rest of 2008 (and possibly through 2009) diverge widely. The most recent labor market data and weaknesses in consumer sentiment both signal a distinct possibility of a contraction in output. The key to the near term is likely to be determined by how credit markets function. If they seize up and therapies work slowly, the expected recovery later in 2008 and in 2009 may not even materialize. Core as well as headline inflation is now showing a rising trend and yields on inflation-protected securities suggest that underlying inflation expectations are rising (Figure 1.1.15). A conjunction of rising inflation expectations and further deterioration in the real economy would undoubtedly make the Federal Reserve's job even tougher, and could limit scope for interest rate cuts.

Eurozone

Financial troubles have reverberated across the Atlantic. Though Europe has not experienced a subprime mortgage crisis, its banks have taken losses as subprime securities prices have fallen. In Germany, three small local banks have failed. Lending has tightened and market rates have risen.

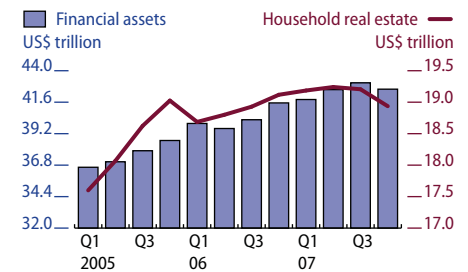
Recent signals from the real eurozone economy are mixed. GDP growth slowed in the fourth quarter of 2007 but then, following 2 months of weak data, industrial production jumped in January (Figure 1.1.16). Germany's export performance has held up well and the business mood is buoyant.

Business confidence in other European countries is not quite so perky, and the eurozone-wide confidence index dipped in February. Other signals are mixed. Although labor market conditions have improved, as unemployment rates continue to inch down, consumer confidence has plummeted (Figure 1.1.17). Indicators of the outlook for the services sector are distinctly gloomy. Inflation is now running at its highest level in 14 years, reaching 3.3% in February. Rising fuel and food prices are adding to inflation and there are concerns that rising wage costs may aggravate inflation pressures.

Growth in the eurozone in 2008 is likely to fall significantly below the outcome in 2007 (2.6%). In March, the European Central Bank (ECB) cut its own projection for 2008 to 1.7% from its earlier forecast of 2.0%. The European Commission's estimate and a range of private sector forecasts are also drifting down. A variety of troubling developments, including the real appreciation of the euro, is likely to restrain output growth. That said, the probability of a recession in the eurozone seems more distant than in the US.

The dependence of Europe's exports on demand in the US is hotly debated. One line of thought is that declining dependence on the US market—only 7% of Germany's exports now go there—and diversification toward Asia and oil exporters mean that, as Germany's exports uncouple from the US, so too will Europe's (Figure 1.1.18). It is for this reason, so the argument runs, that robust export growth has continued despite the appreciation of the euro against the dollar.

1.1.14 Gross private wealth, United States

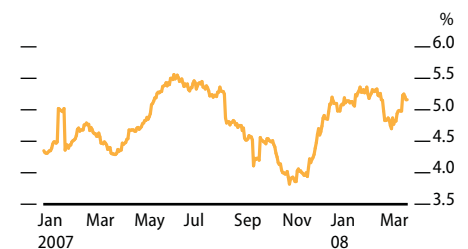


Note: In real, Q1 2005 prices.

Source: Federal Reserve Board, available: www.federalreserve.gov, downloaded 24 March 2008.

[Click here for figure data](#)

1.1.15 Yield on Lehman Brothers US TIPS index

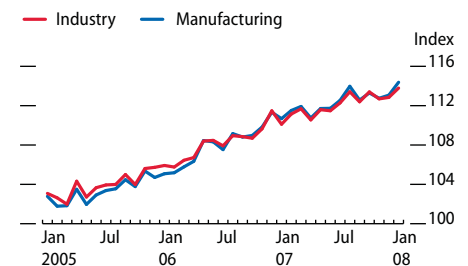


TIPS = Treasury inflation-protected securities.

Source: Datastream, downloaded 29 March 2008.

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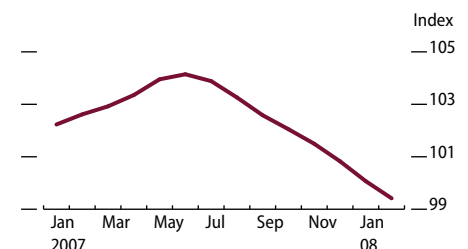
1.1.16 Industrial production, eurozone



Source: Eurostat, available: <http://europa.eu.int>, downloaded 25 March 2008.

[Click here for figure data](#)

1.1.17 Consumer confidence, eurozone



Source: Datastream, downloaded 24 March 2008.

[Click here for figure data](#)

Recent research by Deutsche Bank,² however, pours cold water on this thesis. Over a protracted period, Germany's exports have closely tracked broader measures of price competitiveness and there is no reason to think that this relationship is about to break down. Moreover, exports from other eurozone economies, including Italy and Spain, appear to be much more sensitive to the value of the euro than Germany's. In real effective terms, the euro appreciated by 5% in 2007 (Figure 1.1.19). As the impact of the euro's appreciation on exports and industrial output passes through to prices, the support that exports have provided to growth is likely to dissipate. Also, if the US slowdown percolates through to moderation of growth in other regions, this impact will be transmitted indirectly to the eurozone.

Other factors—including high oil prices; housing market troubles in countries such as Ireland, Spain, and the United Kingdom; and rising wage cost pressures in Germany—may also weigh on demand and growth in Europe. There is a risk, too, that credit market conditions will tighten further. Continental European businesses are highly dependent on bank finance and through this channel are exposed to credit market troubles. The full extent of European bank exposure to the credit market crisis is not yet known.

On a brighter note, if unemployment continues to fall and consumption sentiment turns around this may provide some favorable economic ballast. But labor market conditions cannot swim against broader economic currents indefinitely.

Policy support for eurozone growth in 2008 is likely to be limited. Fiscal options are theoretically constrained by agreements under the Stability and Growth Pact, and the ECB seems unlikely to cut interest rates until it sees hard evidence of economic slowing and retreating inflation expectations. Though the ECB has now softened its hawkish rhetoric on the inflation outlook, monetary policy adjustments, when made, are very unlikely to emulate the aggressive and anticipatory movements of the Federal Reserve.

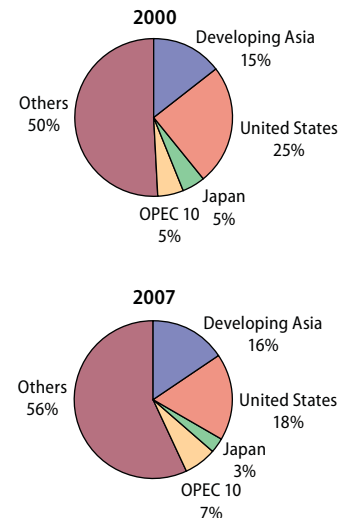
Japan

Despite unexpectedly strong fourth quarter GDP growth in 2007 (3.5% measured on an annualized basis), trouble is brewing in Japan too.

Several factors are weighing on Japanese prospects. Most immediately, export demand, which has been the mainstay of growth, is likely to be constricted by a slowdown in global economic growth. The US is still a large market for Japan, accounting for over 30% of its exports when indirect demands are taken into account, and the slowdown there as well as in Europe will curtail demand. Robust growth in developing Asia may help, but it too is expected to moderate.

A cheap yen has been one of the major factors supporting Japanese export growth in the past, but its recent sharp appreciation will likely dent exports (Figure 1.1.20). In trade-weighted terms, the yen appreciated by 10% in the 6 months to January 2008. Early indications of export slowing are already appearing. As measured in the Purchasing Managers Index, export orders fell below 50 in February, their lowest level in 3 years, indicating probable future contraction. However, the slowdown is not yet apparent in actual exports, with growth of 8.7% in February.

1.1.18 Export destinations, eurozone

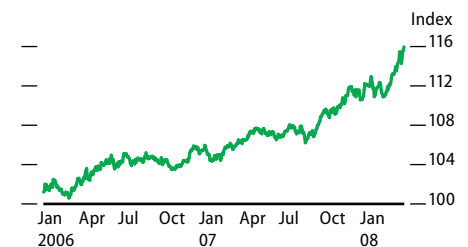


OPEC 10 = Algeria, Islamic Republic of Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Source: Eurostat, available: <http://europa.eu.int>, downloaded 24 March 2008.

[Click here for figure data](#)

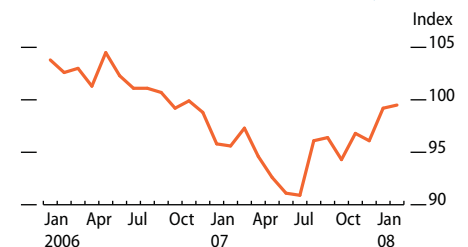
1.1.19 Real effective exchange rate, euro



Source: European Central Bank, available: www.ecb.int, downloaded 29 March 2008.

[Click here for figure data](#)

1.1.20 Real effective exchange rate, yen



Source: Bank of Japan, available: www.boj.or.jp, downloaded 27 March 2008.

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Domestic demand is unlikely to replace exports' contribution to growth. Residential construction growth is still in negative territory following regulatory changes in 2007, though this one-time reduction in the level of demand should begin to fade from growth statistics in the second quarter. There may even be catch-up of residential investment, deferred in 2007, if the mood among households holds up, but the corrosive effects of a rising yen and raw material prices on industrial profits are likely to subdue nonresidential investment. Nevertheless, if there is a bounce after the housing-induced contraction in 2007, fixed investment may grow in 2008.

Japanese consumers continue to have little appetite for spending. Consumer confidence is at a 3-year low (Figure 1.1.21). Real wages are barely growing, if at all, and hours worked are now beginning to dip. In a context of considerable fiscal uncertainty and an aging population, Japanese households are saving industriously for retirement. Equity prices, often a good barometer of the Japanese consumer's mood, are tumbling (Figure 1.1.22). With the prospect of stagnant disposable incomes and declining wealth, it seems that consumption growth will decelerate in 2008.

Japan is still struggling to reduce its public debt, limiting the scope for fiscal measures in support of growth in 2008. Likewise, there is little wiggle room for monetary policy with interest rates hovering close to the nominal floor of zero. In these circumstances, Japan's growth too is likely to slow in 2008. The Japanese Government has itself recently downgraded its growth forecast and is now expecting growth of just 1.3% this year.³

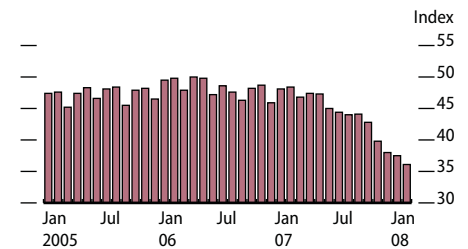
Summary

These are highly uncertain times for the global economy. Forecasts vary widely for just how difficult the next 12–24 months could be. The variance of macroeconomic growth forecasts of GDP has widened (Figure 1.1.23). One concern is that the absence of a reliable economic compass may heighten the risk of policy mistakes. Another is that the complex nature of the problems in credit markets and the changes wrought by financial innovation may render orthodox monetary policy ineffective.

In this environment, it is particularly important to keep close to rapidly developing events and to revise judgments in light of new information. The most significant departure from earlier assessments is that *ADO 2008* now expects a coincident slowdown in the US, Europe (including the UK and some other non-eurozone countries), and Japan in 2008, possibly extending into the early part of 2009. Whether these slowdowns eventually materialize in the data as technical recessions (two consecutive quarters of contraction) is still an open question—certainly in the eurozone and Japan—but their coincident nature will definitely limit opportunities for Asian producers to switch to new markets. If recessions of significant depth and duration were to occur, there is a strong risk of rising protectionist measures in industrial countries, squeezing exports by low-cost producers in Asia and elsewhere.

Robust growth in developing Asia will make a welcome and significant contribution to global growth in 2008. *ADO 2008's* baseline projections suggest that just over one fifth of global growth in 2008 will be attributable to developing Asia, though the region is yet to reach a

1.1.21 Consumer confidence, Japan



Source: Economic and Social Research Institute of Japan, available: www.esri.cao.go.jp, downloaded 17 March 2008.

[Click here for figure data](#)

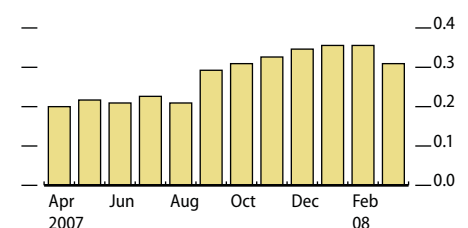
1.1.22 Nikkei 225 stock prices



Source: Datastream, downloaded 19 March 2008.

[Click here for figure data](#)

1.1.23 Standard deviation of consensus forecasts for 2008 GDP, G3 economies



G3 = United States, eurozone, Japan.

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

[Click here for figure data](#)

point where it can provide a significant cushion against slower demand growth in the G3. Indeed, to replace just a 1 percentage point reduction in US consumption demand growth, developing Asia would have to add another 1.3 percentage points of GDP growth—but in fact, developing Asia is much more likely to decelerate in 2008.

The uncoupling myth: The G3 slowdown and developing Asia

The theme of uncoupling is one that has received considerable attention recently. It is certainly true that over a protracted period, rapid growth in developing Asia has had much more to do with Asian countries successfully exploiting opportunities for economic catch-up with richer industrial countries than with them hitching a ride on broader global growth (Figure 1.1.24). But it would be a mistake to assume that wider global developments do not matter for developing Asia (ADB 2007a, 2007b). Industrial-country growth exercises an influence on Asia, but the impact appears to be asymmetric (IMF 2007). When these countries are on the upswing of their business cycle, it is difficult to detect any impact on economic momentum in developing Asia, yet when their growth slows rapidly, Asia usually feels a downdraft. Box 1.1.2 presents one approach to quantifying these impacts using a global macroeconomic model. In the remainder of this section, ties between developing Asia and the G3 are viewed from a variety of other perspectives.

G3 non-oil import demand and Asia's exports

Previous issues of *ADO* have demonstrated the strong links between non-oil imports in the G3 economies and Asian exports (ADB 2007a). The high and rising correlations of Asian exports with non-oil imports in the G3 during the first few years of this century indicate that Asian exports are highly synchronized with G3 import demand (Figure 1.1.25).⁴

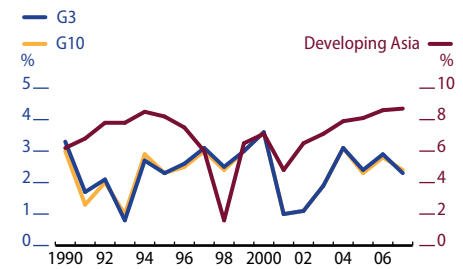
The links between US non-oil import demand and Asian exports are shown over a period of three decades. The relationship has become tighter in the most recent decade relative to the 1980s and 1990s (Figure 1.1.26).

In the case of the eurozone, the correlation has also strengthened in the current decade relative to the second half of the 1990s (Figure 1.1.27 below). The correlation is slightly less than in the US case but still quite robust, and indicates that Asian export activity has become more, not less, synchronized with external demand.

In the case of Japan (the largest national export market for some Asian economies such as Indonesia and the second largest for others), the correlation between non-oil imports and Asian exports has been positive over a longer period and has strengthened over time (Figure 1.1.28 below).

Therefore, even though intra-Asian trade has been expanding more rapidly than Asia's trade with the rest of the world, Asia has become ever more closely linked by globalization to the major global markets of the G3. This stems from the nature of Asian trade, with intra-Asian trade driven by vertically integrated Asian production chains and extra-Asian trade driven by G3 demand for the final goods produced in these networks (ADB 2007a).

1.1.24 GDP growth

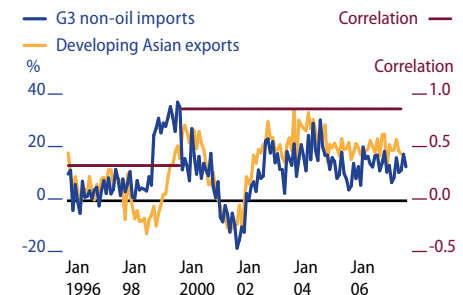


G3 = United States, eurozone, and Japan; G10 = Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, United Kingdom, and United States.

Sources: World Bank, *World Development Indicators* online; US Bureau of Economic Analysis, available: www.bea.gov; Eurostat, available: <http://europa.eu.int>; Economic and Social Research Institute of Japan, available: www.esri.cao.go.jp; Statistics Canada, available: www.statcan.ca; all downloaded 24 March 2008; *Asian Development Outlook* database.

[Click here for figure data](#)

1.1.25 Correlations between growth in developing Asian exports and G3 non-oil imports

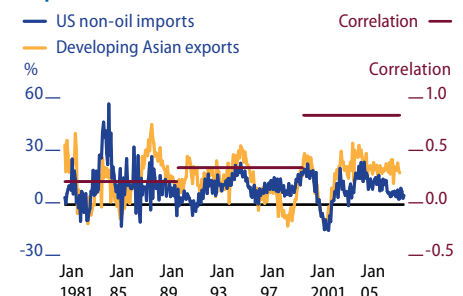


Note: Developing Asian exports exclude those from Taipei, China.

Sources: International Monetary Fund, *Direction of Trade Statistics*, February 2008; US Census Bureau, available: www.census.gov; Eurostat, available: <http://europa.eu.int>; CEIC Data Company Ltd.; downloaded 24 March 2008.

[Click here for figure data](#)

1.1.26 Correlations between growth in developing Asian exports and US non-oil imports



Note: Developing Asian exports exclude those from Taipei, China.

Sources: International Monetary Fund, *Direction of Trade Statistics*, February 2008; US Census Bureau, available: www.census.gov; downloaded 24 March 2008.

[Click here for figure data](#)

1.1.2 Asian fallout from slower global growth

On the basis of the most recent update of the Oxford Economics quarterly global model (February 2008), the impacts of global shocks on developing Asia are traced. Two sets of shocks are considered.

In the first, a simultaneous 1 percentage point reduction in GDP growth in the United States, Japan, United Kingdom, and the eurozone is imposed over 2 years. In this scenario, interest and exchange rates are held fixed. In the second, and in addition to the assumed negative shock to growth, it is assumed that there is a 10% real depreciation of the US dollar against all other currencies except the Hong Kong dollar (for which a peg holds). Considering that the yuan nominally appreciated at an annualized rate of over 20% in January 2008, this exchange rate “shock” is plausible.

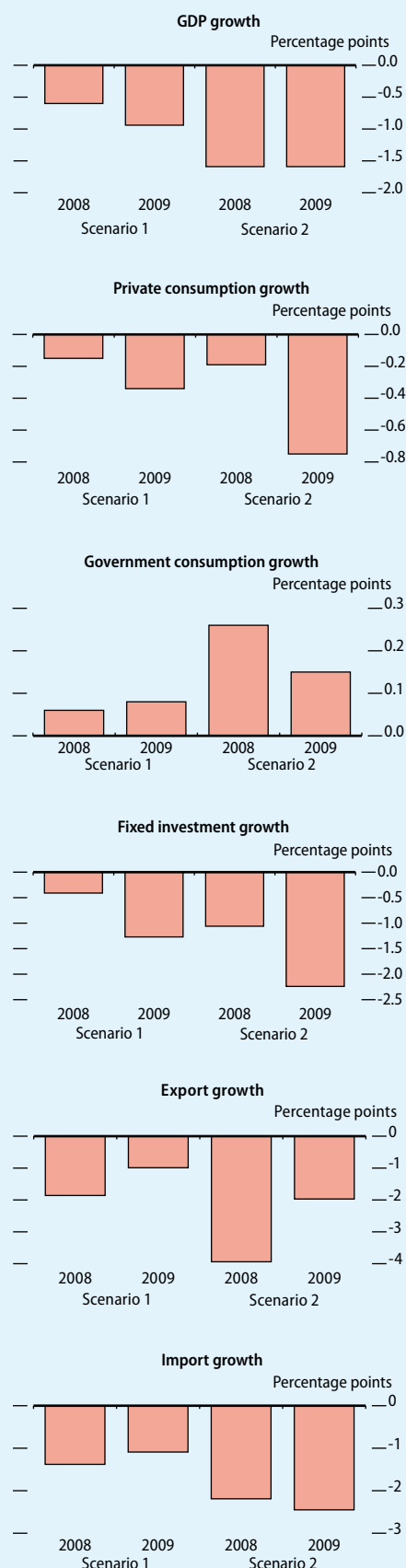
The box figures show that a coincident reduction in the industrial world reduces growth in developing Asia by 0.6 percentage points after 12 months, followed by a 1 percentage point reduction over the baseline in the following 12 months.

The region's strong trade links with industrial economies trigger the negative impact. Slower growth in the US, Japan, United Kingdom, and the eurozone reduce demand for Asia's exports. Asian export growth is squeezed by almost 2 percentage points in the first 12 months, with knock-on effects on income. Lower income growth holds domestic demand in check, easing price pressures and reducing inflation. With nominal interest rates fixed, reduced inflation raises real interest rates, reining in consumption and investment spending growth.

Singapore is hardest hit by the assumed shock, with growth in private consumption and fixed investment falling, respectively, by 0.9 and 0.5 percentage points within 1 year. India is barely affected, with GDP growth declining by a mere 0.3 percentage points, as private consumption nudges down. Export growth in the People's Republic of China and Taipei, China suffers the heaviest blow, crimping growth in both by over 0.6 percentage points in the first year.

With an attendant real currency appreciation, the repercussions of a negative shock to global growth become more acute for Asian economies. The region's exports become more expensive, making them less attractive in world markets. As a result, the adverse impact on Asian exports broadens, with export growth projected to drop by 4 percentage points within 12 months.

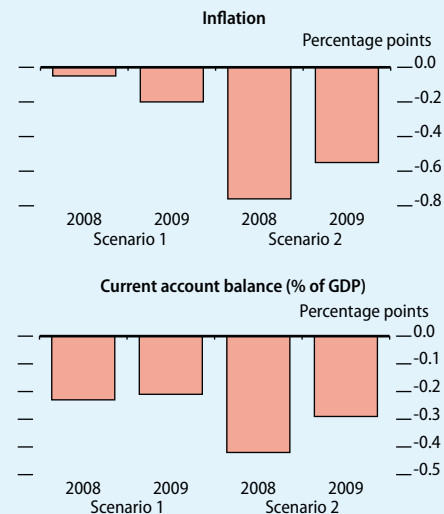
Taipei, China; People's Republic of China; and Republic of Korea show the most pronounced export slowdowns. Again, growth in private consumption and investment is arrested by rising real interest rates. Though the appreciation of Asian currencies makes imports cheaper,



1.1.2 Asian fallout from slower global growth (*continued*)

declining incomes reduce import demand so that import growth drops on a net basis. Overall, developing Asia's growth is cut back by 1.6 percentage points within a year, a full percentage point larger than the outcome when real exchange rates are steady.

These simulation results show that more than a global slowdown, a further sharp depreciation of the US dollar could cut Asia's growth in the short run. However, long-run growth prospects in developing Asia would still depend on the factors driving productivity growth and economic catch-up. Ultimately, rising real incomes will exert forces that will cause real appreciations that rebalance East Asia's economy more toward domestic demand. The risks are in real exchange rates badly overshooting, not in them merely appreciating. [Click here for figure data](#)



The importance of the G3 markets for developing Asia is explored in the next section, with a focus on the linkage between the volume of retail sales in the G3 and the volume of Asian exports.

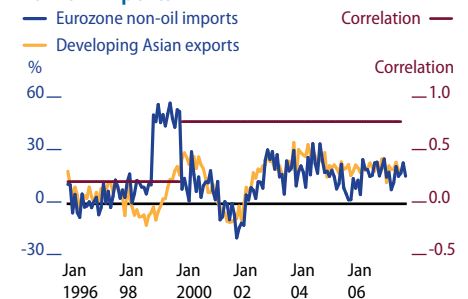
The uncoupling hypothesis: New evidence from G3 retail sales and Asian exports

Simple correlations between import growth in the G3 and Asia's export growth are revealing but other views of the data are possible. In this section, a statistical model is used to examine links between US, eurozone, and Japanese retail sales (as a proxy for demand) and export performance in nine Asian economies. Due to data limitations, only economies from East and Southeast Asia are included in the analysis.

The statistical model is estimated using monthly export data of the nine economies during 2000–2007, and retail sales of the G3. All data are suitably deflated and are measures of real economic activity. The approach chosen (Box 1.1.3 below) exploits the correlation between exports within Asia, as spillover effects along Asian supply chains are likely to be an important source of transmission of external shocks. Simple correlation analysis confirms that export performance across the nine Asian economies is highly synchronized. On average the correlation coefficient among them is around 0.8, with the highest correlations between the PRC; Hong Kong, China; Republic of Korea (hereafter Korea); Singapore; and Taipei, China.

More sophisticated, model-based estimates of the strength of the relationship between retail sales in the G3 and Asian exports are presented in Table 1.1.2 below. The coefficients associated with G3 retail sales in all nine Asian economies are almost all positive, and most are statistically significant. For example, 3 months after a 1% rise in US retail volumes, the PRC's exports rise by 0.79%. For the eurozone, the lag is longer (5 months) and the impact smaller (0.35%). Though the estimates suggest that the PRC's exports respond to a rise in Japanese retail volumes after just 2 months, this particular estimate is not statistically

1.1.27 Correlations between growth in developing Asian exports and eurozone non-oil imports

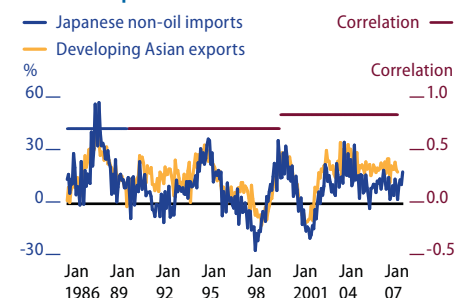


Note: Developing Asian exports exclude those from Taipei, China.

Sources: International Monetary Fund, *Direction of Trade Statistics*, February 2008; Eurostat, available: <http://europa.eu.int>; downloaded 24 March 2008.

[Click here for figure data](#)

1.1.28 Correlations between growth in developing Asian exports and Japanese non-oil imports



Note: Developing Asian exports exclude those from Taipei, China.

Sources: International Monetary Fund, *Direction of Trade Statistics*, February 2008; CEIC Data Company Ltd.; downloaded 24 March 2008.

[Click here for figure data](#)

1.1.3 The (unrestricted) vector auto-regression model

Vector auto-regression (VAR) statistical methods are routinely used to capture the statistical relationships among a system of interrelated variables over time and to analyze the dynamic impact of random disturbances on the system of variables. The VAR approach sidesteps the need for structural modeling by treating every endogenous variable in the system as a function of the lagged values of all variables in the system. The standard representation of a VAR is as follows:

$$e_t = A_1 e_{t-1} + A_2 e_{t-2} + \dots + A_p e_{t-p} + B X_t + \varepsilon_t \quad (1)$$

where e is a k vector of endogenous variables, X is a d vector of exogenous variables, A_1, A_2, \dots, A_p and B are matrices of coefficients to be estimated, and ε is a vector of innovations that may be contemporaneously correlated but are uncorrelated with their own lagged values and uncorrelated with all of the right-hand side variables.

In examining the impact of the G3 slowdown on exports in nine Asian economies, a VAR model is used because exports in these economies tend to be correlated. In particular, the emergence of product fragmentation and trade in parts and components has increased intraregional trade interdependence so that exports in the region have become highly correlated. Equation (1) can be rewritten in terms of exports and the G3 demand as follows:

$$ex_t = A_1 ex_{t-1} + A_2 ex_{t-2} + \dots + A_p ex_{t-p} + B_{11} US_t + \dots + B_{1n} US_{t-n} + B_{21} EU_t + \dots + B_{2n} EU_{t-n} + B_{31} Japan_t + \dots + B_{3n} Japan_{t-n} + \varepsilon_t \quad (2)$$

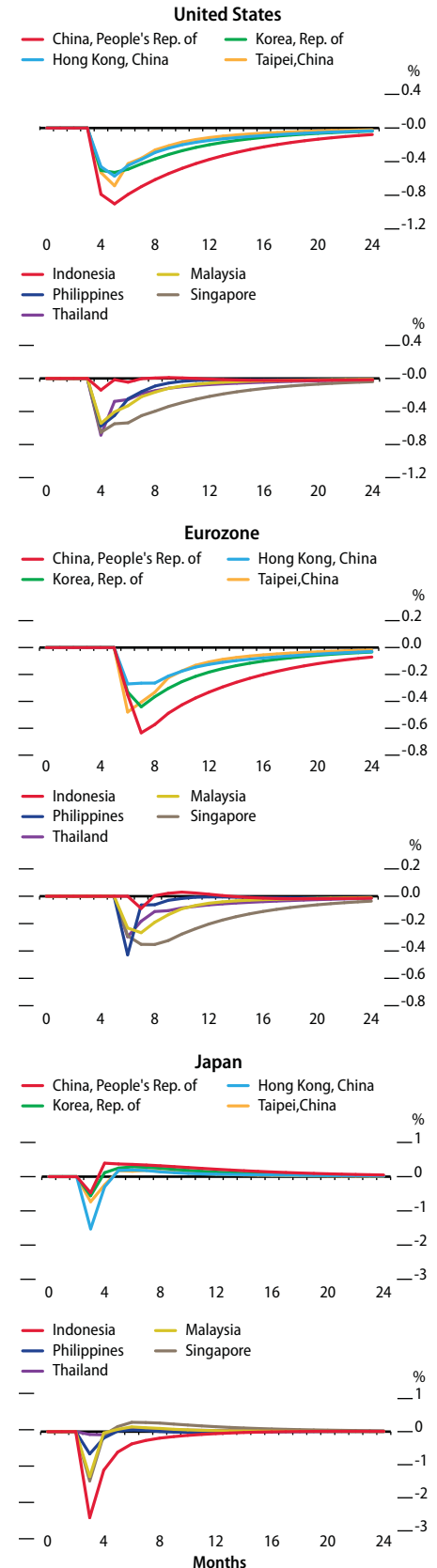
where ex is the vector of (real) exports in nine Asian economies, US , EU , and $Japan$ are the demand, represented by (real) retail sales, of the US, eurozone, and Japan, respectively. Since only lagged values of the endogenous variables appear on the right-hand side of the equations, simultaneity is not an issue and ordinary least square estimation yields consistent estimates.

The Schwarz information criterion is used to select the lag length of the unrestricted VAR model. According to this criterion, the first lag of unrestricted VAR is chosen. In fact, there are other criteria for choosing the lag order of VAR models and these suggest third and seventh order lags. However, almost all variables become insignificant when the lagged values of all the endogenous variables are expanded to the third and seventh order. Diagnostic tests do not significantly improve relative to the first lag order of the VAR model. Meanwhile, all models (the first, third, and seventh lag orders) suggest the stability (stationary character) of the estimated VAR. Based on estimation results and diagnostic tests, the first lag model of VAR is preferred.

reliable, and should be interpreted cautiously. The single largest response is for Indonesian exports to Japan, which 2 months after a 1% rise in retail volumes jump by 2.62%. Japan is Indonesia's single biggest export market, accounting for 21% of its total exports in 2002–2006.

These estimates suggest that the ongoing slowdown in the G3 could have a substantial cumulative effect on Asian exports if it were to persist.

1.1.29 Total impacts of 1% temporary decrease in G3 retail sales on Asian exports



Note: The vector auto-regression model takes account of both direct and indirect (through intraregional exports) impacts of modeled shocks.

Source: Staff estimates.

[Click here for figure data](#)

1.1.2 Estimated impacts of changes in retail sales in United States, eurozone, and Japan on Asia's exports

	United States		Eurozone				Japan	
	Coefficients (third lag)	T-ratio (third lag)	Coefficients (fifth lag)	T-ratio (fifth lag)	Coefficients (sixth lag)	T-ratio (sixth lag)	Coefficients (second lag)	T-ratio (second lag)
China, People's Rep. of	0.79	[4.50]	0.35	[2.29]	0.16	[1.25]	0.47	[0.51]
Hong Kong, China	0.46	[2.96]	0.27	[1.99]	0.02	[0.21]	1.53	[1.89]
Indonesia	0.14	[1.00]	-0.11	[-0.84]	0.16	[1.43]	2.62	[3.42]
Korea, Rep. of	0.50	[5.36]	0.33	[4.02]	0.09	[1.29]	0.56	[1.14]
Malaysia	0.54	[4.96]	0.23	[2.42]	0.00	[-0.01]	1.36	[2.38]
Philippines	0.58	[3.14]	0.43	[2.67]	-0.12	[-0.89]	0.67	[0.70]
Singapore	0.65	[5.56]	0.29	[2.82]	0.00	[0.00]	1.49	[2.44]
Taipei, China	0.53	[4.12]	0.48	[4.27]	0.09	[0.91]	0.73	[1.10]
Thailand	0.68	[7.18]	0.30	[3.55]	0.04	[0.56]	0.09	[0.17]

Note: The underlying model passes a battery of tests indicating that the estimates are statistically reliable.

Source: Staff estimates.

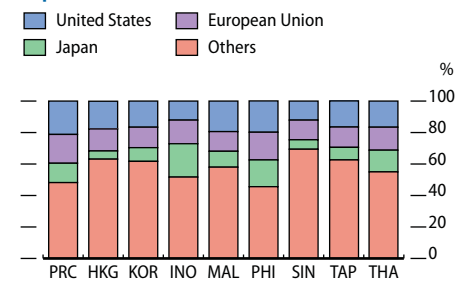
The Asian economies and export sectors likely to be hardest hit by the G3 demand slowdown vary depending on the share and composition of exports into the individual G3 markets and the severity of the slowdown in each of the G3 economies.

One advantage of the model is that by including indirect demands it allows estimation of the contagion (multiplier) effects across the nine Asian economies from the G3 demand slowdown (Figure 1.1.29).⁵ Inclusion of the induced impacts that travel down Asia's supply chains is likely to amplify the direct impacts shown in Table 1.1.2, and it is probable that these effects will depend on the strength of intraregional links through the PRC to the G3.

The model results suggest that the PRC is likely to suffer the most from falling consumer demand in the US. (The shares of the G3 economies in Asia's exports are shown in Figure 1.1.30.) In 2006, the latest year for which data are available, the US market accounted for more than 20% of the PRC's exports, up from 16% in 1995. For the other Asian economies, the US market accounted for about 15% of exports on average in 2006, down from an average of 21% in 1995. Shipments from the PRC and from Hong Kong, China are weighted more toward consumer products that are sensitive to consumer discretionary spending, including garments and miscellaneous manufactures, than are shipments from Korea, Malaysia, Philippines, Singapore, and Thailand which export machinery. Indonesia is less exposed to slowing US demand because it exports relatively greater amounts of food and raw materials than the other Asian economies.

The PRC also has the greatest exposure to a slowdown in the eurozone among the Asian economies, with about 18% of exports destined for that market. The eurozone is a significant destination for low-cost consumer goods exports from the PRC; Korea; and Taipei, China as well as from Malaysia, Singapore, and Thailand. There is some impact on the Philippines, but it dissipates quickly. Again, Indonesia's exposure to a slowdown in the eurozone is cushioned by the high proportion of food and raw materials in its exports. The smaller impacts stemming from the eurozone are probably a reflection of the fact that machinery exports dominate Asia's sales to the eurozone. This may make Asia less vulnerable to a short-term decrease in retail sales but if the slowdown persists, durable goods purchases may also fall and cut into Asian exports.

1.1.30 Shares of G3 economies in Asia's exports, 2002–2006



HKG = Hong Kong, China; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; TAP = Taipei, China; THA = Thailand.

Sources: International Monetary Fund, *Direction of Trade Statistics* CD, February 2008; CEIC database, downloaded 27 February 2008.

[Click here for figure data](#)

Indonesia is most exposed to a slowdown in the Japanese market. As it exports a large volume of primary products directly to Japan, indirect effects coming through a reduction in exports of third countries are unlikely to be important. For the PRC, the statistical estimate of the impact of Japanese retail volumes is not reliable. The PRC exports a large volume of garments, textiles, and footwear to Japan (but more so to the US) and these are highly cyclically sensitive product groups. But the PRC also exports a comparatively large volume of food to Japan, which tends to be less sensitive to income, and this may be influencing the net result. Backward linkages from the PRC to other Asian countries from its exports of garments and food are likely to be weaker than for other goods. Korea's exports are also sensitive to a decline in Japanese retail volumes, despite a modest share of Japan in Korea's total exports.

Evidence from cyclically sensitive manufactured exports

The aggregate analysis of imports and exports and the country breakdown within the G3 and East and Southeast Asia suggest the likelihood of significant impacts on Asian exports of a G3 slowdown. In this section, disaggregated trade data are examined to see if such effects can be traced in the recent evolution of shipments of manufactured goods. Specifically, the impact of weaker consumer demand in the US and Japan on key Asian manufactured exports is probed using quarterly data for the former and 6-monthly data for the latter. An attempt is also made to see if the weakness has spilled over into the EU and if this is also translating itself into more sluggish shipments of Asian products. The knock-on effects on commodity shipments through weakened exports between G3 members as a result largely of the US economy's weakness are also considered. South Asian as well as East Asian and Southeast Asian countries are covered in this part of the analysis.

United States: Evidence of consumer demand contraction and implications for Asian exports of manufactures

US consumer demand accounts for approximately 70% of the \$14 trillion US economy and this represents a huge slice of world effective demand. The US consumer has in part fueled the Asian boom over the past 5 years by providing a strongly growing market for Asian manufactures. US retail sales are essential to growth in important labor-intensive manufactures as well as in more technology- and capital-intensive products. US import demand for garments is a bell-wether for how US consumer weakness is likely to impact developing Asia—particularly countries that rely heavily upon garments as their chief export product (such as Bangladesh, Cambodia, Lao PDR, Nepal, Pakistan, and Sri Lanka).

Clothing and footwear are sensitive to consumer sentiment and imports of these products account for almost all US consumption. Unlike durable consumer goods, purchases of garments and footwear are highly discretionary.⁶ Moreover, orders for clothing are placed frequently and must be met by just-in-time delivery so that a downturn in one month's orders will be reflected in the next month's shipments (Rosen 2002, pp. 180–182). If this is the case, examination of quarterly clothing shipments to the US over the course of 2007 and year-on-year growth rates in each quarter may be particularly revealing. Clothing

shipments are closely monitored by the US Department of Commerce, which has established an Office for Textiles and Apparel for the purpose of providing real-time data on the volume and value of imports from all world suppliers of textiles and garments.

For descriptive simplicity, data are presented for three Asian groupings: PRC, the Association of Southeast Asian Nations (ASEAN), and the South Asian Association for Regional Cooperation (SAARC)—combinations that encompass the vast bulk of clothing shipments from Asia to world markets, including the US. Volumes are measured in million square meter equivalents.

The overall picture that emerges is stark. Garment exports to the US from developing Asia, whether measured in volume or value terms, weakened steadily over the course of 2007. First quarter growth is robust, second quarter growth is about in line with overall US demand growth, but the third quarter slips and the fourth is flat (Figures 1.1.31 and 1.1.32). Exports from the PRC have grown more slowly in each successive quarter of 2007 and were virtually flat in the fourth. In contrast, ASEAN managed to increase its growth in the fourth quarter relative to earlier quarters by taking advantage of the constraints facing PRC shippers under US product-specific safeguards.⁷

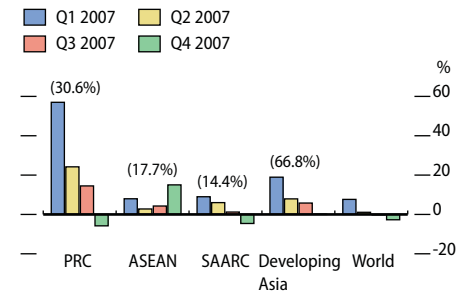
SAARC suppliers, which include garments giants such as Bangladesh, India, and Pakistan, failed to take advantage of the constraints on the PRC and actually saw their volume growth rates crumble after the second quarter, falling to one third of the previous quarter's growth in the third and then retreating absolutely in the fourth. In value terms, the third quarter's performance was half that of the previous quarter, and there was virtually no growth in the fourth quarter. World suppliers as a whole saw growth steadily erode as the year wore on; the impact of the subprime crisis and a loss of confidence are clearly indicated in the much slower growth in world shipments in the third quarter and the contraction in the fourth for both volumes and values.

If retail sales of garments can be taken as an indicator of consumer appetites more generally, the picture that emerges is one of deepening gloom—and gloom that is touching Asian suppliers.

A second example of recent trends in US consumer demand is that of footwear shipments—a product group that is complementary to clothing and would be expected to show similarity in patterns of retail sales and of import orders and deliveries. Imports of footwear from leading Asian suppliers, including the dominant PRC, and from the world as a whole are shown in Figure 1.1.33.

As in the case of garments, footwear for US consumption is almost all imported.⁸ Footwear is unregulated by safeguard quotas and is protected mainly by tariffs that average about 10% in the case of most Asian suppliers. Footwear imports unambiguously reflect a sharp contraction in consumer demand and retail sales in the fourth quarter of 2007 from which even the PRC is unable to escape. The quarterly pattern observed in US consumer demand and imports from Asia clearly reflects a sharp slowdown with shipments from all suppliers (including the PRC) falling by about 5% year on year. Indonesia, a fairly large exporter of shoes, takes a brutal hit during 2007 with annualized shipments contracting by 19%.

1.1.31 Growth in shipments of clothing to the United States (volume)



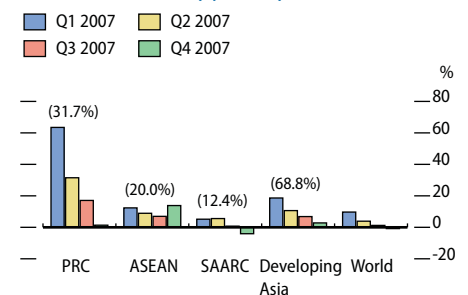
ASEAN = Association of Southeast Asian Nations; PRC = People's Republic of China; SAARC = South Asian Association for Regional Cooperation.

Note: Figure in parentheses indicates share in US clothing imports.

Source: United States International Trade Commission Dataweb, available: <http://www.dataweb.usitc.gov>, downloaded 28 February 2008.

[Click here for figure data](#)

1.1.32 Growth in shipments of clothing to the United States (\$, value)



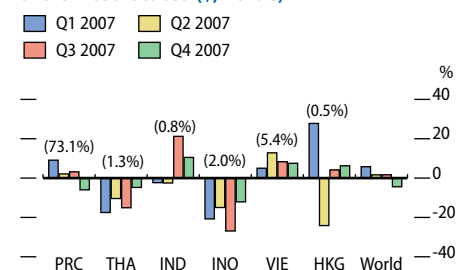
ASEAN = Association of Southeast Asian Nations; PRC = People's Republic of China; SAARC = South Asian Association for Regional Cooperation.

Note: Figure in parentheses indicates share in US clothing imports.

Source: United States International Trade Commission Dataweb, available: <http://www.dataweb.usitc.gov>, downloaded 28 February 2008.

[Click here for figure data](#)

1.1.33 Growth in shipments of footwear to the United States (\$, value)



HKG = Hong Kong, China; IND = India; INO = Indonesia; PRC = People's Republic of China; THA = Thailand; VIE = Viet Nam.

Note: Figure in parentheses indicates share in US footwear imports.

Source: United States International Trade Commission Dataweb, available: <http://www.dataweb.usitc.gov>, downloaded 28 February 2008.

[Click here for figure data](#)

A third example of a product group for which US consumption is heavily import dependent—toys, games, and sports equipment—is also worth examining. Imports and sales of these items are likely to be more strongly influenced by seasonal demand than clothing and footwear as they are extremely popular as gift items in the winter holiday season. Hence, one would expect third and fourth quarter imports to rise strongly relative to the first and second quarters. The growth of this product group is also likely to be strongly influenced by consumer sentiment and discretionary income. Again, as with footwear, the PRC is the dominant supplier of these items to the US import market, with a share of over 80% in 2006 and 2007 (Figure 1.1.34).

This product group is important for many other exporters in Asia. The pattern of growth over the course of 2007 clearly reflects a slowdown year on year as each successive quarter shows a reduced, albeit strongly positive, growth rate. The fourth quarter's outturn of single-digit growth after starting the first and second quarters with growth in excess of 30% is sobering—and for most Asian suppliers fourth quarter contraction has the same feel of export stagnation that is seen in clothing and footwear. Countries whose currencies strongly appreciated against the dollar in 2007, such as Korea and Thailand, have seen their growth rates fall the most.

A cursory examination of shipments of consumer durables does not show the patterns seen in more sensitive semi-durable goods for which US consumption is heavily import dependent, but this is likely to change if the downturn endures over the first half of 2008 or longer. Already reports of steep cuts in sales of automobiles in early 2008 are coming in, along with further evident weakness in consumer sentiment and in retail sales more generally.⁹

A broader look at the value of developing Asia's exports to the US, including mineral fuels, when deflated by the US import price index shows a clear pattern of deceleration in the second half of 2007 relative to the same period in 2006 (Figure 1.1.35).

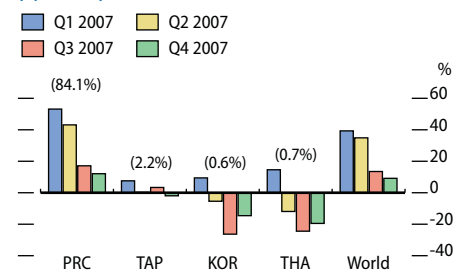
Japan's faltering recovery and impact of consumer anxiety on Asian exports

Japanese consumption is not as large as that of the US but the country is still one of the premier markets for exports of manufactured goods from the rest of Asia. It remains the second-largest national economy worldwide and still outweighs the PRC in terms of overall purchasing power with a real GDP of \$3.8 trillion versus \$1.9 trillion for the PRC in 2006 in 1990 constant US dollars, or \$4.4 trillion versus \$2.7 trillion in current dollars (UNSD 2008). Japan also has a higher consumption-to-GDP ratio than the PRC, although it is less import dependent. In the case of Japan, data are examined over two half-years in 2007 compared with the same periods in 2006 (that is, January–June and July–December).

Imports of clothing and accessories of clothing from all suppliers were growing at a healthy 4% in yen value terms in the first half of 2007 but then contracted in the second (Figure 1.1.36).

In particular, imports from the dominant supplier, the PRC, underwent a sharp reversal from growth to contraction in the second half. Imports from ASEAN also slowed in the second half relative to

1.1.34 Growth in shipments of toys, games, and sports equipment to the United States (\$, value)



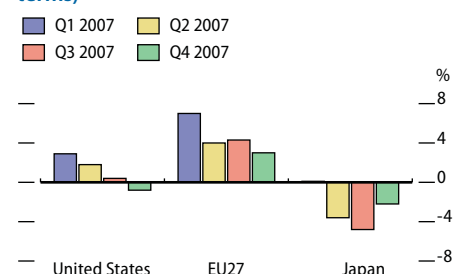
KOR = Republic of Korea; PRC = People's Republic of China; TAP = Taipei, China; THA = Thailand.

Note: Figure in parentheses indicates share in US imports for the indicated product.

Source: United States International Trade Commission Dataweb, available: dataweb.usitc.gov, downloaded 28 February 2008.

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1.1.35 G3 total import growth, 2007 (real terms)

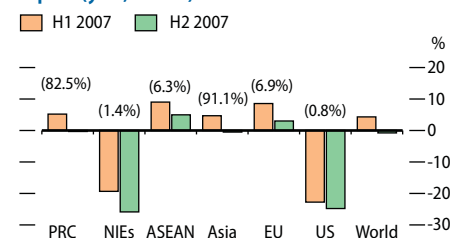


Note: European Union (EU) 27 excludes intra-EU trade.

Sources: United States International Trade Commission Dataweb, available: dataweb.usitc.gov; Japan Ministry of Finance, available: www.customs.go.jp; Eurostat, available: epp.eurostat.ec.europa.eu; all downloaded 28 February 2008.

[Click here for figure data](#)

1.1.36 Growth in shipments of clothing to Japan (yen, value)



ASEAN = Association of Southeast Asian Nations; EU = European Union; NIEs = newly industrialized economies; PRC = People's Republic of China; US = United States.

Notes: Figure in parentheses indicates share in Japanese imports for clothing. Asia is as defined by the Ministry of Finance, Japan.

Source: Ministry of Finance, Trade Statistics, News Release, various issues, available: <http://www.customs.go.jp>; downloaded 23 February 2008.

[Click here for figure data](#)

the first but remained in positive territory. Imports from the newly industrialized economies (NIEs) of Hong Kong, China; Korea; Singapore; and Taipei, China experienced very sharp reductions of 19% in the first half and almost 26% in the second. Thus, led by the PRC, the whole of Asia experienced a switch to contraction in the second half and this ensured that imports from all suppliers declined. Perhaps surprisingly, given developments in the foreign exchange markets, imports to Japan from the EU remained positive while those from the US were down sharply, by over 20% in both the first and second half. Conversion of these imports into US dollars flattens out growth over the two periods to an average of 0.5% but still leaves imports from the PRC in negative territory in the second half (Figure 1.1.37).

This impression of weakness in consumer purchases appears to apply as broadly to Japan as to the US. Japanese imports of computers and computer parts (Figure 1.1.38) fell in both half-years (and by double-digits in the second).

Electrical machinery growth also weakened as the year progressed with growth of about 10% in the first half, declining to about 6% in the second.

The pattern of growth over the 4 quarters varies according to whether one uses yen or US dollars. Looking at Japan's general merchandise imports from developing Asia, on the basis of growth in yen values, the impression of weaker rather than stronger growth in the fourth quarter is reinforced. This is likely to be reflected in weaker export growth in developing Asia at the start of 2008.

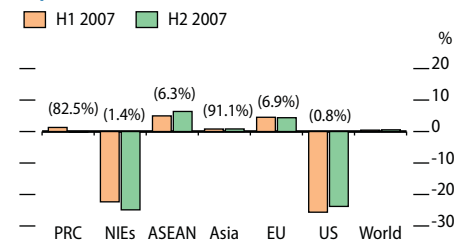
EU Trade: A last bastion of G3 demand for Asian exports—or the beginning of the end for the Asian export boom?

The availability of data limits the extent to which the impact of demand changes in the EU on developing Asia can be assessed. However, the data that run through the third quarter of 2007 indicate that consumer demand in the EU held up rather well compared with the US market. For example, clothing imports from developing Asia continued to grow by about the same pace in the third quarter as the first half of 2007 (Figure 1.1.39). Growth in the euro value of imports of clothing showed slower growth for the PRC in the third quarter but still ran at double-digit rates. In contrast, growth from ASEAN and SAARC (as groups) was negative over the first 3 quarters of 2007. The complex systems of preferential trade that the EU maintains explain this performance.¹⁰ The individual performances by Asian suppliers, aside from the PRC, are influenced by the varying extent to which they enjoy preferential access to that market.

Looking at general imports (Figure 1.1.40), it appears that demand was strong in the fourth quarter but this may mask the underlying situation. Unfortunately, no data on volumes were available as of March 2008. Another way to assess the situation is to examine export data from developing Asian sources. Again these are very limited but as the figures indicate, early 2008 data suggest that growth is decelerating in most cases relative to 2007 (Figure 1.1.41).

The impact of the slowdown in the G3 on their trade is likely to become more severe as the slowdown deepens. Preliminary data for 2008 are compared with annual data for 2007 in the cases of the US and

1.1.37 Growth in shipments of clothing to Japan (\$, value)



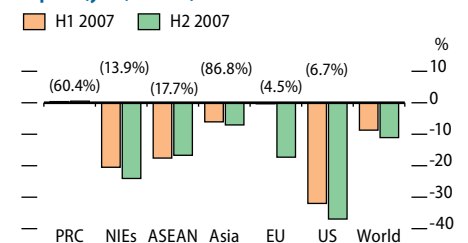
ASEAN = Association of Southeast Asian Nations; EU = European Union; NIEs = newly industrialized economies; PRC = People's Republic of China; US = United States.

Notes: Figure in parentheses indicates share in Japanese imports for clothing. Asia is as defined by the Ministry of Finance, Japan.

Source: Ministry of Finance, Trade Statistics, News Release, various issues, available: <http://www.customs.go.jp>; downloaded 23 February 2008.

[Click here for figure data](#)

1.1.38 Growth in shipments of computers to Japan (yen, value)



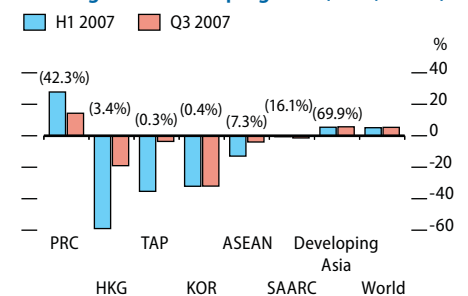
ASEAN = Association of Southeast Asian Nations; EU = European Union; NIEs = newly industrialized economies; PRC = People's Republic of China; US = United States.

Notes: Figure in parentheses indicates share in Japanese imports for computers. Asia is as defined by the Ministry of Finance, Japan.

Source: Ministry of Finance, Trade Statistics, News Release, various issues, available: <http://www.customs.go.jp>, downloaded 23 February 2008.

[Click here for figure data](#)

1.1.39 Growth in European Union imports of clothing from developing Asia (euro, value)



ASEAN = Association of Southeast Asian Nations; HKG = Hong Kong, China; KOR = Republic of Korea; PRC = People's Republic of China; SAARC = South Asian Association for Regional Cooperation; TAP = Taipei, China.

Notes: Figure in parentheses indicates share in EU imports for clothing. EU excludes intra-EU trade.

Sources: EmergingTextiles.com, EU Clothing Imports in First Half 2007 and EU Clothing Imports in Third Quarter 2007.

[Click here for figure data](#)

Japan, and they show that the slowdown is indeed reducing the growth of exports between the two largest national economies in the world. Imports of the US and Japan from the EU in 2008 are showing signs of weakness compared with annual imports in 2007. The growth rates for shipments from the EU slip from 6.4% to 4.2% in the US and from 9.4% to 4.6% in Japan.¹¹

This section has until now focused on the G3 as a source of demand for developing Asia's exports. Conversely though, robust growth in developing Asia may provide a cushion as a source of demand for G3 exports. Equally, it is possible that strong final demand in Asia may benefit intra-Asian exports. In the next section, the role of the PRC in propagating the external downturn is examined through its role in generating intraregional trade in final consumer and investment goods.

Is the PRC uncoupling from developing Asia?

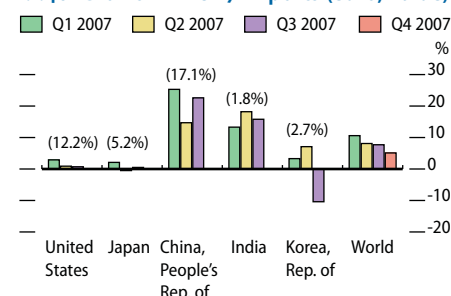
The results from the economic models presented above indicate that intraregional trade linkages are likely to transmit a G3 demand slowdown within Asia. In particular, the results confirm an important role of the PRC in intraregional trade and linking that trade with global markets. As illustrated in ADB (2007a, 2007b), the increasing importance of intraregional trade is attributed mainly to the parts and components trade, with the PRC functioning as an assembly hub for final products in Asian production networks. Recent studies by Cui and Syed (2007) and Albaladejo and Lall (2004), however, suggest that trade patterns in Asia are now changing.

In particular, the PRC's demand for imports of intermediate products from Asian economies has been declining as a share of its imports, and the domestic content of its exports has risen. If this is indeed true, it would imply that the PRC is shifting from being an export hub for the rest of Asia and is deepening backward linkages domestically. Such a structural shift would seem to imply that the PRC would be even more exposed to an economic slowdown in the G3, and that other economies in East and Southeast Asia may be more sheltered. The data presented here, however, suggest that these shifts may be more apparent than real.

Over the past 5 years, the PRC's trade surplus has grown over fivefold in US dollar terms and it has also risen hugely as a share of its GDP. The rise in the trade surplus over the past 3 years stems from a slowdown in import growth relative to export growth. Import growth declined from more than 35% a year in 2004 to less than 20% a year by mid-2007 while export growth decelerated from 34% to 27% over the same period. Does this dramatic slowing of import growth suggest substitution toward intermediate goods in the PRC's production of exports?

Looking at intraregional trade balances, after 4 years of being in deficit with the remainder of Asia, the PRC has been running surpluses since early 2006. Cui and Syed (2007) believe that the slowdown in the PRC's import growth reflects important structural changes. Their thesis is that large investments and technological upgrading have boosted domestic production capacity, especially for intermediate products, leading to a decline in the import content of exports. These trends would seem most apparent for home electrical appliances, ordinary machinery, and high-tech products.

1.1.40 Growth in EU 27 imports (euro, value)

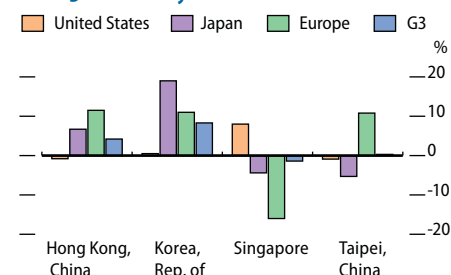


Notes: Figure in parentheses indicates market share in total EU imports. EU excludes intra-EU trade.

Sources: EmergingTextiles.com, EU Clothing Imports in First Half 2007 and EU Clothing Imports in Third Quarter 2007.

[Click here for figure data](#)

1.1.41 Growth of selected Asian exports to the G3 in January 2008



Note: For Hong Kong, China, Europe comprises Germany, Netherlands, and United Kingdom; for Korea and Singapore—the EU 27; and for Taipei, China—France, Germany, Italy, and United Kingdom.

Source: CEIC Data Company Ltd., downloaded 7 March 2008.

[Click here for figure data](#)

But there is no consensus on these points. Some pundits (as for example Gilboy 2004, Athukorala 2007) have observed that the slowdown in the PRC's import growth may be a reflection of temporary overinvestment in certain sectors and is likely to be short-lived. They argue that supply-side complementarities between the PRC and its East and Southeast Asian neighbors remain significant and that the likelihood of export crowding-out by domestic producers in the PRC tends to be vastly exaggerated.¹²

A closer look at the data shows that, overall, the share of parts imports in the PRC import basket is still increasing. Moreover, export data do not suggest a growing role for the PRC as an intermediate parts supplier. The share of parts in total manufacturing exports did gradually rise over 1992–2002 but has since stabilized at around 15%. In contrast, the share of parts in total manufacturing imports has risen steadily, more than doubling in the past 15 years. In 2006, imports of parts accounted for almost 37% of total manufacturing imports, up from 16% in 1992 and 29% in 2000 (Figure 1.1.42).

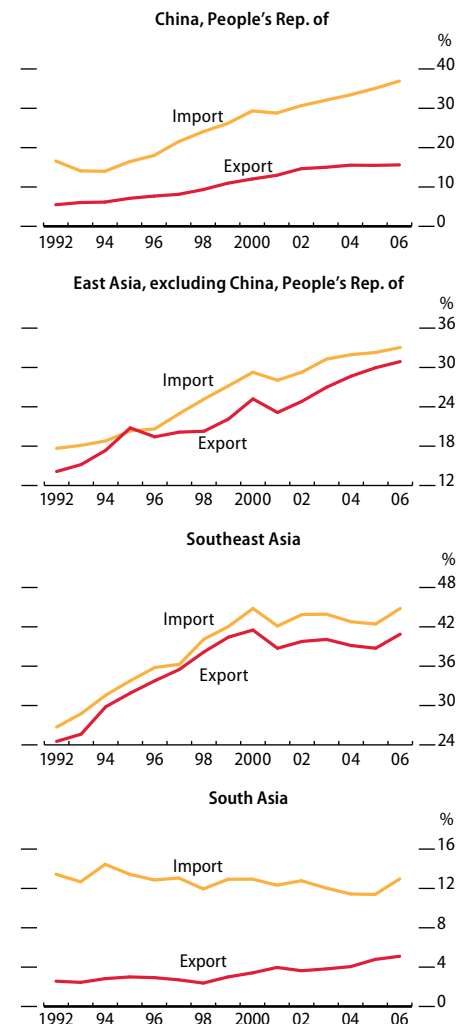
In East Asian economies, the share of parts in total manufacturing exports has grown strongly, nearly doubling between 1992 and 2006, to 33%. The share of parts in total manufacturing imports has also risen. These patterns suggest growing specialization in intermediate goods production, with a high degree of vertical integration among these economies. For Southeast Asian economies, the shares of parts in total manufacturing exports and imports have also steadily risen. Malaysia, Philippines, and Singapore stand out as being heavily specialized in parts trade. Only Thailand gives any sign of a decline in such trade. The establishment of Thailand as a hub for the automotive industry would appear to have curbed its cross-border parts trade. The share of parts exports declined from 30% in 2000 to 21% in 2006, and the import share from 35% to 27% over this period.

In South Asia, too (albeit from a small base), intermediate goods trade is on the rise. The share of parts in total exports has increased from 2% in 1998 to around 6% in 2006. The share of parts imports has been relatively stable at around 12% over the past 15 years.

The largely unskilled labor-intensive manufacturing industry is the only sector in which trade in parts/intermediate products is in decline. In the PRC, such a decline strongly reflects a reduction in intra-industry trade in textiles (ADB 2007a, p. 90). The share of fabric imports in total manufacturing imports in the PRC has declined significantly over the past 15 years, from almost 7% in 1992 to only 1% in 2006, mirroring a huge investment in textile machinery and production capacity in the textile and clothing industries there in anticipation of the PRC's membership in the World Trade Organization (WTO) (ADB 2007a, p. 93).

In Figure 1.1.43 the composition of Asia's exports is shown for parts and components for different geographic groupings within developing Asia. These data confirm the importance of parts trade within the region: the export share of parts rises within the region and the PRC becomes an important export destination for parts from, particularly, East and Southeast Asia. Importantly, the underlying data do not provide any strong indication that other Asian final goods exports to the PRC are rising strongly.

1.1.42 Share of parts and components in total manufacturing trade



Note: The five-digit industries from UNCOMTRADE are used to separate parts and components from final manufacturing products. Classifications used to separate parts and components from final products are based on lists provided by Athukorala (2006). The lists contain 225 categories at the five-digit SITC level.

Source: United Nations Comtrade database, DESA/UNSD, downloaded 28 January 2008.

[Click here for figure data](#)

The reliance of industrial production in the PRC on imported parts and components has risen over the past decade (Figure 1.1.44). The share of parts imports in gross industrial output rose from only 1.7% in 1992 to almost 6% in 2006. To date, PRC industrial investment, and that of multinational enterprises in particular, has not been involved significantly with parts production. Naughton (2007) observes that foreign-invested enterprises are overwhelmingly concentrated in the final assembly stage of production, which is the most labor-intensive layer in production processes spread over many countries. Basic research, product design, and physical capital- and human capital-intensive stages of the production process tend to be carried out in the home countries of multinational enterprises or in other Asian countries that are in a more advanced stage of industrial development than the PRC.¹³ A slight decline in the share of parts imports in gross industrial output over the past few years is likely to be a reflection of reduced import content for the garment industry. The import value of fabric to gross output in that industry has continuously declined, to 10% in 2006 from 26% in 2000.¹⁴

In summary, the data show that the PRC has not become a significant producer or exporter of parts and components. In contrast, parts trade in other subregions (East Asia, Southeast Asia, and South Asia) is generally on an upward trajectory, with rising shares for exports and imports. The parts share of PRC imports has also risen. The idea that the PRC has been able to replace imported supplies with domestic components is not supported by these trends. The claim that the PRC now provides an important source of demand in final goods markets for other Asian countries also sits ill with the data. The base share of final demand is small (ADB 2007a, p. 95) and virtually all growth in intraregional trade in recent years has been attributable to parts and components. Therefore, although the characteristics of intra-Asian trade may have started to change, it will be some time yet before they fundamentally alter the nature of the transmission of external shocks.

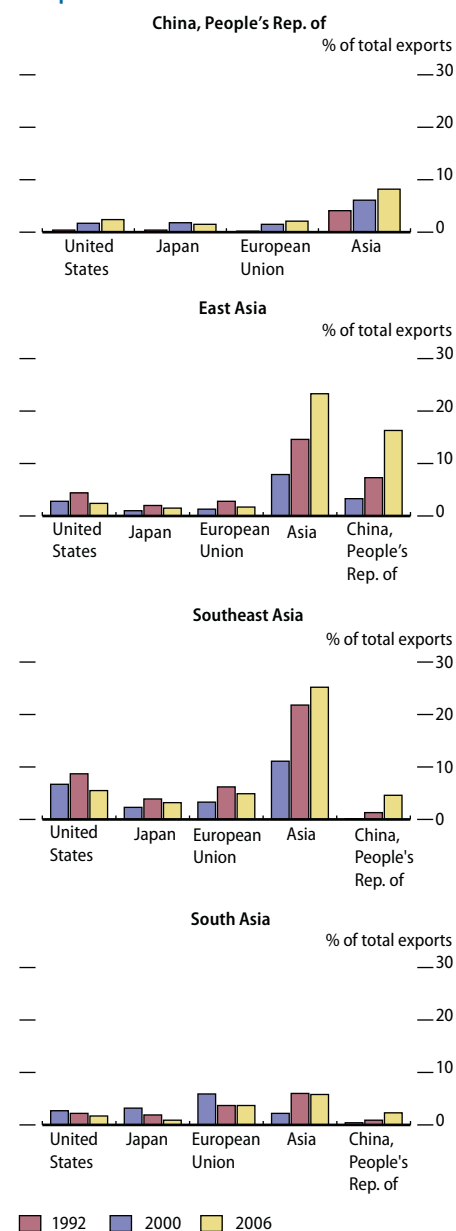
So far, the center of focus has been on the transmission of the slowdown in the G3 to developing Asia through its exports and vertically integrated trade channels, particularly within East and Southeast Asia. But there are other possible channels through which impacts may be felt. In the next section, the potential for financial contagion is examined.

Financial integration and contagion

Each global slowdown is different. Current difficulties have followed an extraordinary period for global financial markets—tremendous growth, deepening integration, and rapid financial innovation. The potential for financial contagion in an increasingly borderless world of international capital movements has clearly risen.

McKinsey's annual report, *Mapping global capital markets* (McKinsey Global Institute 2008) observes that at the end of 2006, the major economies of developing Asia held assets to the value of \$14.2 trillion, equivalent to 250% of combined GDP. Developing Asia's financial asset holdings are dominated by the PRC, which possesses a bit over a half of them, with Korea and India together accounting for 40%. In the PRC, financial assets are over 300% of GDP, whereas in India the corresponding ratio is just over 200%. Although the PRC's financial

1.1.43 Asian exports of parts and components to different destinations



Notes: East Asia excludes the People's Republic of China and Mongolia. South Asia comprises India and Pakistan. Southeast Asia excludes Cambodia, Myanmar, and Viet Nam. Asia is as defined in the United Nations Comtrade database.

Source: United Nations Comtrade database, DESA/UNSD, downloaded 28 January 2008.

[Click here for figure data](#)

system is still bank dominated, asset distribution in other markets is more evenly balanced among equities, debt, and deposits. However, in some countries such as India, Indonesia, and Philippines, government has a large profile in debt markets, with only a small private sector presence. In 1990–2006, the stock of financial assets in developing Asia grew at an average rate of 15.5% a year, easily outrunning growth of nominal income.

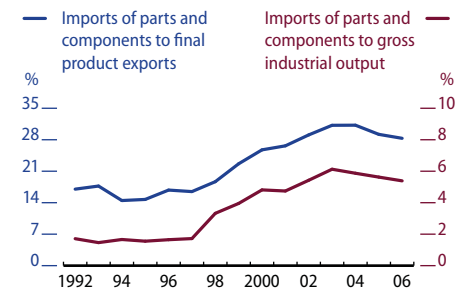
Financial deepening in developing Asia has occurred during a period in which the “home bias” in financial asset investment has been weakening. In 1990, cross-border capital flows amounted to just 5.2% of global GDP. By 2006, this figure had more than tripled to 17.2%. As a share of total global assets, financial investments overseas have increased from 28.9% of total assets in 1995 to 44.6% by 2006 (Figure 1.1.45). Yet, though cross-border capital flows have been growing much faster than trade, trade flows still dominate in absolute size. In 2006, total cross-border capital flows amounted to 62.1% of global imports.

For developing Asia, gross capital inflows in 2006 were a shade below \$300 billion, equivalent to 4.6% of GDP or 11.6% of its total exports. Inflows have climbed steeply since 2001 when they were just \$39 billion, but have also more than doubled from their precrisis peak of \$125 billion in 1996. In addition, developing Asia is also a large net lender to the rest of the world, with net capital outflows from East Asia alone reaching \$539 billion by 2006. Notably, the PRC was the world’s single largest exporter of capital that year. Data from IMF’s Coordinated Portfolio Investment Survey suggests that while the share of East Asia’s cross-border capital investments in other East Asian countries has grown quickly and that the share of investments in the US has declined, this picture changes if the definition of East Asia is widened to include Japan. Japan still invests heavily in the US and invests little in East Asia. Moreover, a major source of portfolio investment in East Asia is the US. Kim and Lee (forthcoming) estimate that in 2006 the US accounted for about 38% of the total portfolio liabilities of East Asia (excluding Japan), little changed from its 37% share in 2001.

Cross-border capital flows exhibit a pronounced upward trend, but with periodic sharp breaks from trend. In the past decade, flows contracted in absolute value in 1997–1998 and in 2001–2002. Recent reversals coincided with the Asian crisis of 1997–98 and with the bursting of the dot-com bubble and the US recession of 2001. Although from a much smaller base, a contraction also occurred in the early 1990s when there was a global recession. The most volatile component of cross-border capital flows has been cross-border lending and deposits, with foreign direct investment being the most stable. Surprisingly perhaps, cross-border investments in equity markets have been quite stable, with investments in debt securities being comparatively volatile (Figure 1.1.46).

The rapid expansion of global capital markets and the even faster growth of cross-border capital flows suggest that the potential for the financial transmission of global shocks is likely to have increased. Direct evidence on this point from Asia is fragmentary. Kim and Lee (forthcoming) show that East and Southeast Asian equity markets now track the US equity market more closely than before the Asian crisis and that within East and Southeast Asia, markets are also more closely synchronized with each other than a decade ago (Figure 1.1.47). Chai and

1.1.44 Import content ratios

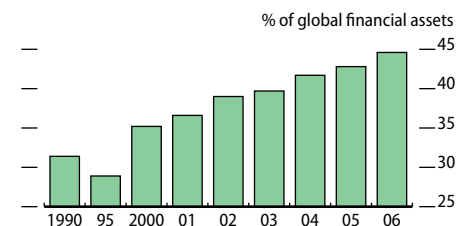


Note: The five-digit industries from UNCOMTRADE are used to separate parts and components and final manufacturing products. Classifications used to separate parts and components are based on lists provided by Athukorala (2006). The lists contain 225 categories at the five-digit SITC level.

Sources: United Nations Comtrade database, DESA/UNSD; CEIC Data Company Ltd.; both downloaded 14 February 2008.

[Click here for figure data](#)

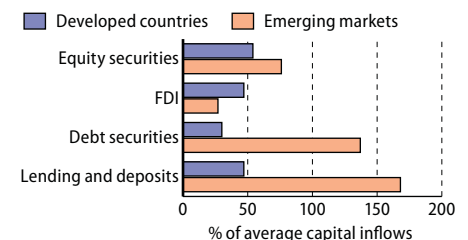
1.1.45 Global foreign investment assets



Source: McKinsey Global Institute (2008), available: www.mckinsey.com, downloaded 17 March 2008.

[Click here for figure data](#)

1.1.46 Mean absolute deviation of capital inflows, 1996–2006



Note: Measured as deviation from data filtered with Hodrick-Prescott filter to account for the time series trend; based on sample of 34 emerging and 26 developed economies.

Source: McKinsey Global Institute (2008), Exhibit 2.16, available: www.mckinsey.com, downloaded 17 March 2008.

[Click here for figure data](#)

Ree (2005) note that although regional factors have played an increasingly important role in explaining equity market movements in East Asia, markets in the region have closer ties with the US than with one another. Another measure of financial integration—the covered interest rate differential—does not show much change in 2000–2007, but suggests closer integration of East Asian markets with the US than with Japan (Kim and Lee forthcoming).

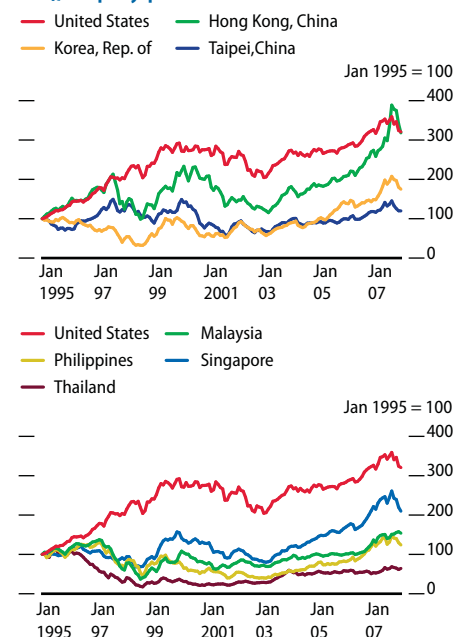
Kim and Lee (forthcoming) also look at the extent to which East Asian economies engage in “risk sharing” with each other and with the rest of the world. In circumstances where risk sharing among countries is high—shocks in one country are dispersed and are partially absorbed by others—close financial integration can be expected to align consumption paths across countries. The empirical evidence points to significant risk sharing between East Asia and the global economy (suggesting that in response to a shock to global consumption, consumption in East Asia would change by between 30–50%) but not within East Asia.

Given Asia’s presence and growing participation in international financial markets, it would be surprising if a global slowdown were not to make itself felt through asset market adjustments. Credit spreads have widened for Asian borrowers in offshore markets and this should deter debt issuance. Equity markets in Asia have also moved closely in step with those of the US, and the erosion of wealth can be expected to lead to some belt-tightening by households. Investors may also find it more difficult to raise capital in volatile domestic equity markets. Cross-border lending might also be expected to slow and even dip, if previous episodes of financial distress provide a reliable indication. But where interest rates are expected to rise and there is an expectation that domestic currencies will appreciate, this may attract capital inflows. Also, some Asian debt may look like a good bet alongside fast degrading debt in mature markets.

Evidence on these points is still fragmentary. But data from the Institute for International Finance (2008) show that both equity and syndicated loan issuance by “Emerging Asia” held up well comparing the September to February period 2006–2007 with the same period in 2007–2008, but that bond issuance fell sharply, by 31%. Developing Asia’s dependence on the offshore funding market is, however, small.

There is little hint of significant vulnerability within Asia’s bank-dominated financial systems. Despite close financial coupling, the direct exposure of banks in developing Asia to US subprime mortgage debt or to other “unsafe” assets is believed to be small. The region’s banks are, in general, reasonably well capitalized and profitable and appear not to have indulged in leveraged investment activities on a large scale. Recent data on real loan growth show that it is increasing in many countries, including Indonesia, Korea, and Singapore (Figure 1.1.48). Only in countries where there is significant domestic monetary tightening, such as the PRC, is there evidence that real loan growth is decelerating. These data do not suggest that a credit crunch is imminent. Nevertheless, in some countries banks may be exposed to risks of rising bad debts, especially where there is significant lending to support investment in inflated equity or property markets. Currency mismatches on bank balance sheets have recently surfaced as a source of risk in a few economies.

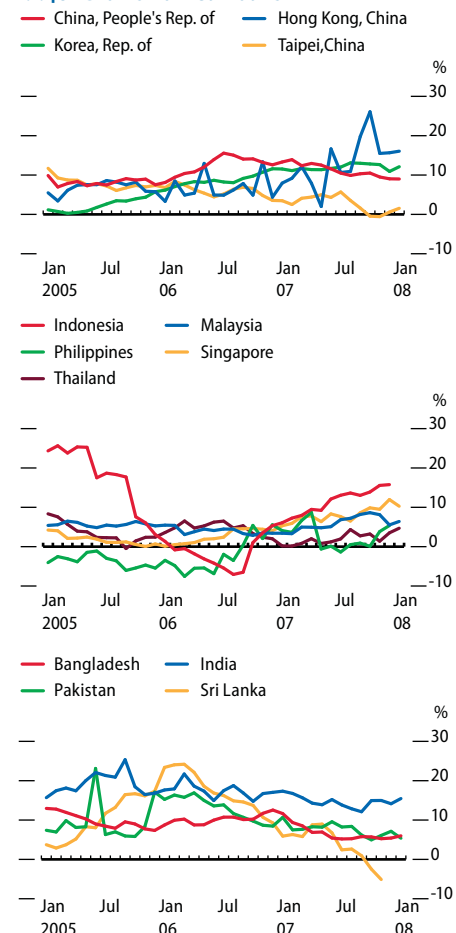
1.1.47 Equity price indexes



Source: Datastream, downloaded 25 March 2008.

[Click here for figure data](#)

1.1.48 Growth of real loans



Sources: International Monetary Fund, *International Financial Statistics* online; CEIC Data Company Ltd.; both downloaded 26 March 2008.

[Click here for figure data](#)

Global financial turbulence may even have a silver lining for some large surplus-savings countries in developing Asia. A reduction in net private capital inflows, as forecast by the Institute for International Finance (2008), may ease pressures on domestic liquidity. Financial trauma in more mature markets has also created a gap between the global demand for equity capital and its ready availability. This offers investment opportunities for countries with foreign exchange assets in excess of their reserve needs.

Summary

Evidence suggesting that Asia has “uncoupled” from the global economy is scant. The relationships embedded in large empirical models of the global economy, such as the Oxford Economics model (Box 1.1.2 above), are broadly confirmed by fresh evidence drawing on recent high-frequency time-series analysis of the links between retail demand in the G3 economies and exports in developing Asia (see *The uncoupling hypothesis: New evidence from G3 retail sales and Asian exports*, above). Both suggest that developing Asia’s exports do respond quickly and in some cases strongly to variations in G3 demand. Precise impacts differ depending on the source of the demand shock and trade structure. Close inspection of data for cyclically sensitive manufacturing exports confirms slowing across developing Asia in precisely those sectors that would be expected to feel the effects of a global downturn first. Evidence from durable goods exports and from the EU will have to await the release of data.

The PRC’s role in the transmission and buffering of shocks could be pivotal. Yet the evidence marshaled above (*Is the PRC uncoupling from developing Asia?*) suggests that strong growth of domestic demand in the PRC is unlikely to provide a buffer for other countries because their export presence in the PRC’s internal final goods market is still limited. Moreover, through their ties along vertically integrated supply chains, East and Southeast Asian economies will be hit by any slowing in demand for the PRC’s exports to G3 markets.

Developing Asia’s ties to global financial markets have greatly strengthened in the past decade. The stock of financial assets as a proportion of GDP in developing Asia has risen quickly, as has cross-border ownership of assets and liabilities. Despite the unmistakable trend toward stronger financial coupling, the impacts of global credit market difficulties on developing Asia are expected to be limited. Domestic banking systems, which still play a significant intermediation role, generally appear well positioned to weather the global storm.

Finally, the point bears repeating: though developing Asia’s economy is not immune to the vicissitudes of global demand, its longer-run growth trajectory will be much more a function of structural and supply-side dynamics. To maintain momentum, countries will have to address and overcome a variety of constraints (see Part 3 of *ADO 2008*). In the short run, the impact of the global slowdown is likely to be modest: even a highly unfavorable global scenario that dents growth in developing Asia by more than forecast in the *ADO 2008* baseline should not leave lasting scars. The main risks to future growth lie elsewhere: in reversals of market access and of trade liberalization, and in the failure to meet domestic challenges.

Reasons to be nervous: Commodity prices and inflation

Food and fuel are core elements in Asian household budgets. Rising prices pose serious economic challenges and risk spilling over into more general inflation pressures. In early 2008, prices of a raft of commodities have reached all-time highs in real terms. Figure 1.1.49 shows the path of real oil prices over the last 27 years. Commodity food price indexes are now also testing new heights (Figure 1.1.50). High food prices raise particular concerns about the circumstances of the urban poor and food-deficit, poor rural households. Rising rice prices are of particular concern in developing Asia with countries such as Pakistan and Philippines being major net importers (Figure 1.1.51).

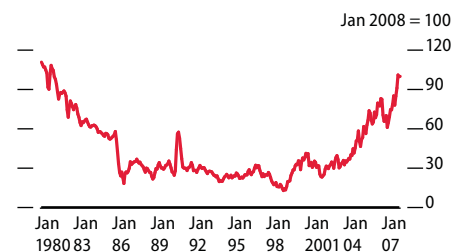
Though some of the factors influencing prices such as geopolitical events or weather-related impacts are likely to fade, there are also strong structural factors—both on the demand and the supply side—that are pushing up prices of food and fuel and these have some mutually reinforcing effects (Boxes 1.1.4 and 1.1.5). Oil prices have consistently risen by an average of about \$10 per barrel annually in nominal US dollar terms since 2002 bringing its average price in the year ending in February 2008 to \$95 per barrel. Rice prices in US dollars per metric ton, again in nominal US dollar terms, roughly doubled between December 2002 and December 2007 (from \$188 to \$372) but in early 2008 have exceeded \$500 per metric ton.¹⁵ Though it is unlikely that price rises will be sustained secularly, the outlook for the next 2 years is for continuing upward pressure. There is also a risk that cost inflation may lead to demands for upward adjustment of money wages or increased fiscal outlays to subsidize food and fuel consumption. The subsequent monetization of the fiscal costs coupled with accelerating wage increases are potential triggers for an inflation spiral of prices and costs.

Inflation pressures, stoked by rising food and fuel prices, are building in much of developing Asia. Headline CPI inflation rates accelerated in 26 of Asia's developing economies in 2007 relative to 2006, remained constant in one, and decelerated in 17—for the bulk of the populace in the region CPI inflation rates have gone up. There is the prospect of accelerating inflation in 2008, despite administrative restraints that hold recorded numbers in check (Table 1.1.3).

Food prices make up a significant part of the weights used in the calculation of headline inflation and food price indexes show a strong positive correlation with the CPI indexes across developing member countries for which data are available (Figure 1.1.52). Food accounts for 59% of the CPI weights in Bangladesh, 57% in India, 55% in the Philippines, 33% in the PRC, and 42% in Viet Nam.

Empirical studies of the relationship between inflation and poverty and income inequality tend to support the view that poverty incidence and reduced shares of the bottom quintile in the distribution of household income are associated with high inflation (Blank and Blinder 1986, Cardoso 1992, Datt and Ravillon 1996, and Romer and Romer 1998). Without a doubt, rising food prices hurt the urban poor. It forces them to spend more of their income on food and less on other essentials such as education and health (Son forthcoming).

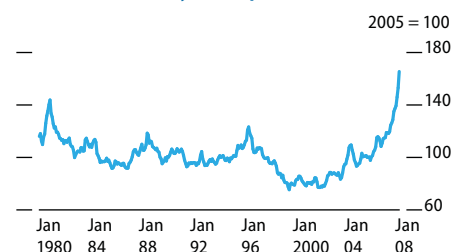
1.1.49 Brent crude oil price



Note: Prices are in real terms, deflated by industrial countries' consumer price index.

Sources: International Monetary Fund, *Primary Commodity Prices*, available: www.imf.org; *International Financial Statistics* online database; both downloaded 14 March 2008.
[Click here for figure data](#)

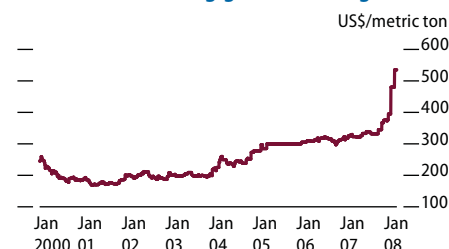
1.1.50 Commodity food price index



Note: Comprises cereals, vegetable oils, meat, seafood, sugar, bananas, and oranges.

Source: International Monetary Fund, *Primary Commodity Prices*, available: www.imf.org, downloaded 18 March 2008.
[Click here for figure data](#)

1.1.51 Rice, Thai long grain 100% B grade



Source: Datastream, downloaded 31 March 2008.

[Click here for figure data](#)

1.1.4 Structural factors behind high oil prices

Structural factors are driving oil prices higher in world markets. First is the fact that production from the Organization of the Petroleum Exporting Countries (OPEC), and non-OPEC production must rise even to meet short-term forecasts of demand.

The International Energy Agency (2008) sees demand rising by 1.7 million barrels a day in 2008 with most of the added demand coming from the People's Republic of China, India, and the oil-producing countries of the Middle East themselves.

The reasons underlying the difficulty in supply keeping up with demand are complex but have to do with domestic political constraints within the OPEC countries and the fact that non-OPEC production has peaked and is set to decline.

Alternative fuels such as unconventional sources of oil (tar sands), biofuels, and natural gas are difficult to develop and involve large investments and lags of up to 5 years between investment and production.

Rapid growth and urbanization mean that demand for

transportation services is growing rapidly and despite the development of hybrid engines using combinations of fuel, there is no meaningful short-term substitute for oil-based fuels for transportation services on air, land, or sea.

In addition, speculative demand in oil futures may also be playing a role in the recent price spikes. The rising price of oil is closely associated with the price of natural gas as can be seen in sharp increases in fertilizer prices. The price of diammonium phosphate—a fertilizer produced from feedstock of natural gas—has risen from \$260 per ton in 2006 (period average) to \$828 in February 2008.

Higher costs of energy inputs also affect electricity costs for use of pump irrigation systems, tractor and harvester/thresher fuel costs, and the cost of transporting inputs and outputs related to agricultural production.

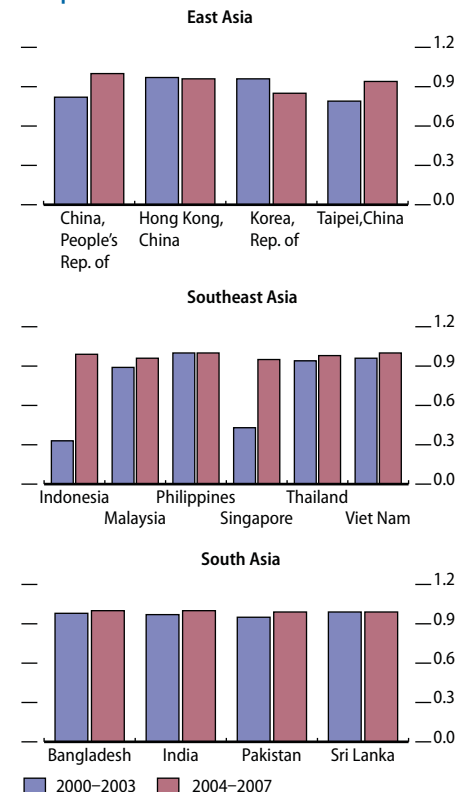
Econometric analysis has shown that food and oil prices move closely together through time in such a way that a rise in oil prices has a statistically significant positive impact on food prices (Imai, Gaiha, and Thapa 2008).

1.1.3 Inflation trends in developing Asia (% per year)

	2003–2007 Actual	2008 Forecast		2003–2007 Actual	2008 Forecast
Central Asia					
Armenia	3.9	5.5	Kyrgyz Republic	5.4	12.0
Azerbaijan	8.7	13.0	Tajikistan	10.8	17.0
Georgia	7.4	9.5	Turkmenistan	7.4	9.0
Kazakhstan	8.2	17.4	Uzbekistan	6.8	10.9
East Asia					
China, People's Rep. of	2.6	5.5	Mongolia	8.0	10.5
Hong Kong, China	0.4	3.4	Taipei, China	1.2	2.3
Korea, Rep. of	2.9	3.4			
South Asia					
Afghanistan	12.9	10.2	Maldives	3.5	6.0
Bangladesh	6.2	9.0	Nepal	5.5	7.0
Bhutan	4.1	4.5	Pakistan	6.5	8.0
India	5.2	4.5	Sri Lanka	10.2	16.2
Southeast Asia					
Cambodia	4.3	5.5	Philippines	5.2	4.0
Indonesia	8.6	6.8	Singapore	1.1	5.0
Lao People's Dem. Rep.	8.9	5.0	Thailand	3.2	4.0
Malaysia	2.2	2.7	Viet Nam	7.0	18.3
Myanmar	20.4	-			
The Pacific					
Cook Islands	2.2	3.0	Papua New Guinea	4.7	5.2
Fiji Islands	3.3	4.6	Samoa	5.6	5.1
Kiribati	0.5	3.5	Solomon Islands	7.9	7.0
Marshall Islands, Rep. of	2.3	3.4	Timor-Leste, Dem. Rep. of	3.2	7.0
Micronesia, Fed. States of	2.9	3.5	Tonga	8.9	5.3
Nauru	2.8	3.0	Tuvalu	3.2	3.5
Palau, Rep. of	3.6	3.5	Vanuatu	2.0	3.0

Source: Asian Development Outlook database.

1.1.52 Correlation of main CPI to its food components



Source: CEIC Data Company Ltd., downloaded 14 March 2008.

[Click here for figure data](#)

1.1.5 Structural factors driving food prices

What are the structural factors underlying the surge in food prices, aside from the direct impact of high and rising oil prices?

Von Braun (2007) cites the following: (i) demand that is driven by high economic growth and urbanization, particularly in India and the People's Republic of China, and associated changes in diets that require more grain to produce the same amount of calories for consumption; (ii) supply constraints arising from competition for agricultural land and its conversion, increasing scarcity of fresh water; and migration of labor from agricultural to nonagricultural activities; (iii) direct competition for key food crops for nonfood demand (such as biofuels); (iv) underinvestment in agricultural technologies and infrastructure that have contributed to slow growth of yields per hectare of agricultural land; and (v) climate change, which is increasing the incidence of drought and flooding that hit agricultural production (though

this last point has been strongly challenged by other commentators).

The structural explanation for rising prices of cereals is evident in the case of rice—global rice stocks have fallen and are expected to reach 25 year lows at just 70 million tons this year, down from 150 million tons in 2000 (USDA 2008).

Offsets of course are likely on the supply side but only if relative prices are allowed to provide the correct signals to farmers. The strength of supply-side responses may also depend on exogenous variables such as rainfall over the medium term.

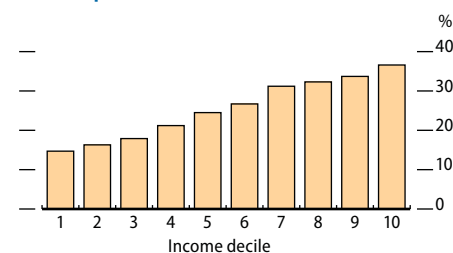
Trade policies currently greatly distort international price signals in agriculture and lessen the likelihood of rapid and efficient supply responses. Rice prices are of overwhelming importance in developing Asia because well over 50% of its population relies on rice as a staple of consumption, and nearly 70% of agricultural land is given over, at least seasonally, to rice production.

The relationship between food prices and rice prices in particular and the incomes of poor rural households is complicated by the fact that many marginal farmers produce rice. The impact largely depends upon whether households are net buyers or net sellers of foodstuffs or can source rice consumption directly from their own production and stocks. The ability of rural households to afford food may be positively influenced by higher farmgate prices for their outputs so that selling more homegrown rice makes them better off as they can sell high-quality rice and buy lower-quality rice or other substitute foodstuffs. However, data taken from expenditure surveys of rural households in India show that the lowest income decile's consumption of homegrown rice is less than 20% of its total consumption, so that people in that decile may well be worse off when food prices increase (Figure 1.1.53).

Precisely because of the potential social hardships posed by higher food prices, governments throughout developing Asia are considering various measures to restrain price increases and secure supplies. Import duties on food and cereals are being temporarily cut in some countries and in others exports are being taxed or indeed restricted to boost domestic supplies. Net food importers have been prepared to pay premium prices to secure supplies of staples such as rice. In a number of countries, such as the PRC, administrative price controls on foodstuffs have been introduced, after a sustained period of price liberalization (Box 1.1.6).

The fiscal implications of subsidies on food, fuel and, in some countries in developing Asia, on closely related inputs into food production such as fertilizer and electric power consumption for irrigation pumps, threshing machinery, and tractors are worrisome. For example, in Indonesia fuel subsidies alone ate up 12% of the central government budget in 2007 and it is estimated that the budgetary cost of fuel and electric power subsidies with oil prices at \$100 per barrel would rise to almost \$26 billion in 2008 (Kong and Ramayandi 2008).¹⁶ In India,

1.1.53 Share of home-grown in total rice consumption, India



Note: Per capita averages were defined using only households consuming rice, with 1 the lowest income decile and 10 the highest.

Source: Staff estimates based on data from National Sample Survey Organisation, Socio-economic Survey, Round 61, Schedule 1, 2004/05.

[Click here for figure data](#)

1.1.6 Subsidies and policies related to pricing of food, fuel, and power in developing Asia

Bangladesh

- The Government will distribute a cash subsidy of Tk7.5 billion to farmers for procurement of diesel for irrigation in the peak *boro* season.

People's Republic of China

- Pump prices for gasoline, diesel, and jet fuel were raised by 10% in November 2007.
- In early March 2008, a CNY189.28 million subsidy was provided to students of universities managed by the central Government, equivalent to CNY20 per person per month in March–June.
- Local governments are to allocate subsidies to the colleges that they manage according to the same criteria.
- On 12 March 2008, more funds were allocated to college students from financially vulnerable homes as a temporary food subsidy.
- The target is to provide CNY20 each month to all college students in the country, and an additional CNY20 to students coming from financially vulnerable homes (about 20% of the total).
- The central government budget earmarked for agriculture, farmers, and rural areas reached CNY562.5 billion (\$79.2 billion) in 2008, CNY130.7 billion more than in 2007, including:
 - ◊ CNY48.2 billion for production materials purchases
 - ◊ CNY4 billion for farm tools
 - ◊ CNY7.07 billion for seeds.
- The Government promised to further increase financial support for agricultural production on 26 March 2008.
- In March 2008, Sinopec received CNY12.3 billion (\$1.7 billion) in government subsidies to compensate for losses incurred through government price controls, CNY4.9 billion of which will be allotted for 2007 losses and CNY7.4 billion for first-quarter 2008 losses. This is the third subsidy payment to Sinopec, after CNY5 billion in 2007 and CNY10 billion in 2005.
- The Government has frozen the prices of energy, transport, and water, and announced that producers of essential food items, such as meat, grain, eggs, and cooking oil, must seek approval before raising prices.

India

- The Government has long imposed price ceilings on a range of goods.
- It stockpiles food staples to ease supply constraints, i.e., buys foodgrains at guaranteed prices from farmers for distribution to the poor at subsidized rates through state-run shops.
- Gasoline prices were raised by Rs2 and diesel by Re1 on 14 February 2008.
- The Government sought parliamentary approval on 12 March 2008 for additional spending of Rs189 billion to enhance food and fertilizer subsidies, and issue oil bonds, including Rs38 billion for fertilizers, Rs58.24 billion for food, and Rs92.97 billion for securities for oil companies.
- The FY2007 subsidy is now estimated at Rs480 billion, higher than the budgeted Rs300 billion.

Indonesia

- The Government may have to nearly triple its planned 2008 fuel subsidy spending to around Rp130 trillion (\$14.1 billion).
- The original budget allocation was Rp45.8 trillion for oil subsidies, assuming oil prices were \$65 per barrel.
- The subsidy will be funded through the domestic bond market and privatization of state-owned enterprises.
- There is an explicit subsidy for food prices, with the cost to government expected to climb to Rp19.8 trillion (\$2.2 billion) in 2008 from Rp7.2 trillion (\$0.8 billion) estimated earlier.

Korea

- The Government is studying ways to limit increases in heating bills.

Malaysia

- The authorities spent RM35 billion–40 billion in 2007 subsidizing gasoline and natural gas costs.
- As of 25 March 2008, they indicated that they would keep fuel prices on hold.
- A policy to address subsidies will be announced later.

Philippines

- The cost of subsidizing rice sold by the National Food Authority could reach P21.7 billion in 2008, with an import cost of P29.40 per kilo but a selling price of P18.50 per kilo.
- The cost of importing rice in 2008 is estimated to equal the collection of value-added tax on fuel.
- The Department of Energy reduced tariffs on crude and petroleum product imports to 1% from 2% starting 1 April 2008.
- The Government is proposing to give the National Power Corporation a subsidy to help cap electricity prices.

Singapore

- The Government plans to give cash and rebates to needy citizens.

Taipei, China

- The authorities have imposed ceilings on gasoline and diesel prices after inflation climbed in November 2007 to a 13-year high.
- But Formosa Petrochemical Corp., one of two major fuel suppliers, unilaterally raised gas and diesel prices by about 10% on 1 April 2008.

Thailand

- In March 2008, the Government revived the diesel subsidy at B0.90 per liter for 6 months.

Viet Nam

- Diesel and fuel oil traders are partly subsidized.
- The Government still owes these businesses about D2 trillion (\$126 million) in subsidies for recent losses, despite payment of about D10.3 trillion.
- Fuel prices were raised on 25 February 2008, with gasoline prices up by 11.5% to D14,500 from D13,000 per liter and diesel and kerosene up by 36% to D13,900.

Source: Various news articles.

the new fiscal budget for 2008/09 is assumed to run a deficit equivalent to 3.1% of GDP, though this omits the state budget deficits as well as the cost of fertilizer and fuel subsidies, which are thought to be substantial.

Food subsidies are also costly. Using data from a rural household expenditure survey, estimates can be made of the cost of rice and wheat subsidies in rural India (Tables 1.1.4 and 1.1.5). Together, rice and wheat subsidies cost Rs23.5 billion in 2004/05.¹⁷ The amount of the outlay in the central government budget expenditure in 2007/08 to maintain the same level of subsidy will without a doubt be far greater as rice and wheat prices are now considerably higher.

The supply response of farmers globally and in developing Asia will eventually relieve the pressure, but only if markets are allowed to work and weather conditions and energy prices, which have a critical influence on fertilizer costs, accommodate the response. Efforts to accelerate technical progress and improve productivity through infrastructure, especially irrigation systems, and institutional support through credit markets and extension services, will also be important.

Movements of primary commodity prices are also thought to have important macroeconomic effects. They are leading to a dramatic shift in the commodity or barter terms of trade—in favor of oil and cereal and other raw material exporters and against those exporters of manufactured goods that also rely heavily on commodity imports (such as Korea, Pakistan, and Sri Lanka). The G3 countries that are large importers of mineral fuels have also experienced terms of trade reversals as a result of rising commodity prices. Table 1.1.6 shows which countries are net food and fuel importers and exporters and provides an indication of which countries may gain—and which stand to lose.

On balance, only Indonesia and Kazakhstan appear unambiguously to benefit from recent price rises as net food and oil exporters, and Indonesia only marginally so. Even though several Asian countries are net exporters of food, the oil bills they face are more than swamping the positive effects from net food export gains. Malaysia has net positive balance-of-payments effects from the movement in prices as its net oil exports vastly exceed its net food imports.

Trade price indexes for a selection of countries in developing Asia are shown in Figures 1.1.54 and 1.1.55. Constructing these indexes for a broader sample of countries was not possible due to data limitations. These data suggest that significant transshipment centers have seen a much more modest recent decline in their terms of trade, as they are cushioned from any adverse movements against domestic exports. Thus in Singapore, with about a 3% decline in 2007 (Figure 1.1.54) and Hong Kong, China, with about a 4% loss (Figure 1.1.55), the changes are modest. In contrast, large commodity-dependent East Asian economies are suffering far more serious consequences. Korea has seen an almost 50% deterioration since 2002, again with a sharp decline in mid-2007 that has likely worsened. Taipei, China shows a slightly more moderate decline of around 20% over the past 3 years.

Persistence of high and rising commodity and energy prices may force some tightening in monetary and fiscal policy in order to avoid inflation consequences even as income growth decelerates in the coming year.

Though few reliable data are as yet available, the likely deterioration

1.1.4 Household expenditure survey, 2004/05: Rice

Rice price—PDS (Rs per kilo)	4.75
Rice price—other sources (Rs per kilo)	10.00
Effective rice subsidy (Rs per kilo)	5.25
Total PDS rice consumed (kilograms)	3,580,310,327
Total effective rice subsidy (Rs billion)	18.80

PDS = Public Distribution System.

Source: Staff estimates based on data from National Sample Survey Organisation, Socio-economic Survey, Round 61, Schedule 1, 2004/05.

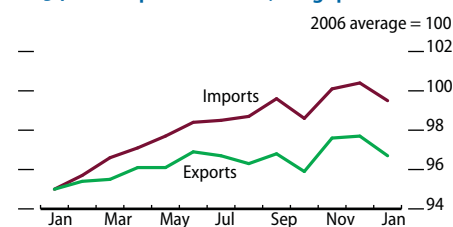
1.1.5 Household expenditure survey, 2004/05: Wheat

Wheat price—PDS (Rs per kilo)	4.70
Wheat price — other sources (Rs per kilo)	8.00
Effective wheat subsidy (Rs per kilo)	3.30
Total PDS wheat consumed (kilograms)	1,432,984,588
Total effective wheat subsidy (Rs billion)	4.73

PDS = Public Distribution System.

Source: Staff estimates based on data from National Sample Survey Organisation, Socio-economic Survey, Round 61, Schedule 1, 2004/05.

1.1.54 Trade price indexes, Singapore



Source: Singstat, *Monthly Digest of Statistics Singapore*, available: www.singstat.gov.sg, downloaded 7 March 2008. [Click here for figure data](#)

1.1.6 Net food and fuel exports

	Net food exporter	Net food exports, 2007 (\$ million)	Net oil exporter	Net oil exports, 2007 (\$ million)
Bangladesh	Yes	1,055.6	No	-2,111.0
China, People's Rep. of	Yes	19,265.1	No	-84,707.3
Hong Kong, China	No	-6,718.6	No	-10,492.2
India	Yes	2,677.9	No	-38,522.6
Indonesia	Yes	3.6	Yes	272.9
Kazakhstan	Yes	1,050.7	Yes	28,435.0
Korea, Rep. of	No	-10,995.0	No	-71,872.7
Malaysia	No	-2,770.7	Yes	12,154.6
Pakistan	No	-797.5	No	-6,963.3
Philippines	No	-662.7	No	-9,662.0
Singapore	No	-2,240.2	No	-2,418.4
Taipei, China ^a	No	-2,778.6	No	-24,304.0

^a Taipei, China data are for January–October only.

Source: CEIC Data Company Ltd., downloaded 14 March 2008.

in the terms of trade in those economies in developing Asia that are reliant on food and fuel imports and that are exporters of labor-intensive manufactured goods—Cambodia, Nepal, Pakistan, and Sri Lanka—are likely to be severe and may add further downward pressure on income growth just as the rise in import prices puts further upward pressure on the CPI. India, in contrast, has a favorable export basket featuring iron ore, precious gems, and foodstuffs.

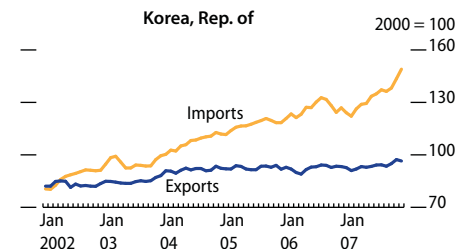
Southeast Asian economies that export a mixture of commodities including oil and gas along with manufactures are likely to be less exposed to terms of trade losses. The impact on the PRC is uncertain but is likely to be negative as well.

In summary, inflation pressures are mounting throughout the region (Table 1.1.3 above). Surges in food, fuel, and raw material prices are a result of both structural and cyclical forces, as well as unanticipated shocks. These are pushing up costs to firms and households and may soon elicit demands for higher wages. If costs escalate, firms will eventually have to pass them on in higher prices. Appropriate macroeconomic responses to accelerating inflation are likely to include tighter monetary policy and some exchange rate appreciation. Resisting appreciation by tracking global interest rates down would only aggravate inflation pressures. Though governments may be tempted to resist commodity price increases through administrative measures, these are likely to come with a high fiscal price tag, which may add to future inflation. Artificial restraints on prices and inflation today that blunt market incentives are only likely to lead to higher prices in the future. Carefully targeted direct income support for the poor, within strict budgetary limits, might better alleviate stresses, and at much lower cost.

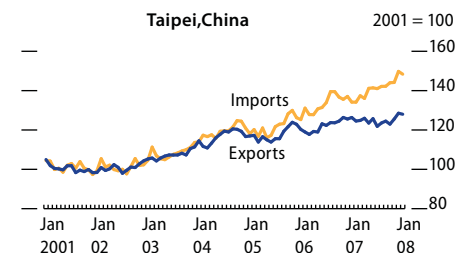
1.1.55 Unit value indexes



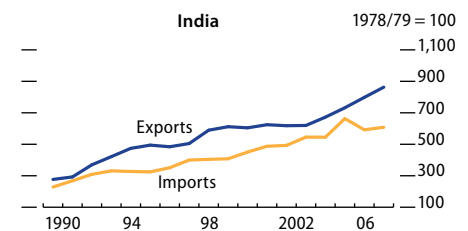
Source: Census and Statistics Department, available: www.censtatd.gov.hk, downloaded 7 March 2008.



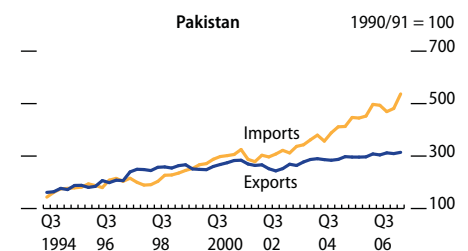
Source: Korean Statistical Information Service, available: www.kosis.kr, downloaded 14 March 2008.



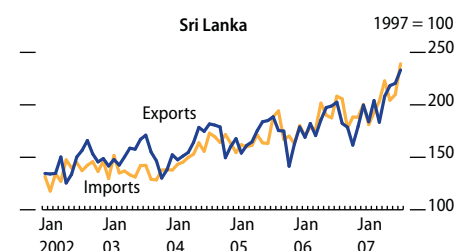
Source: CEIC Data Company Ltd., downloaded 14 March 2008.



Source: CEIC Data Company Ltd., downloaded 14 March 2008.



Source: CEIC Data Company Ltd., downloaded 14 March 2008.



Source: CEIC Data Company Ltd., downloaded 14 March 2008.

[Click here for figure data](#)

Endnotes

- 1 Available: www.newyorkfed.org/newsevents/speeches/2008/gei080306.html.
- 2 Available: www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD000000000218642.pdf.
- 3 Available: www.rieti.go.jp/en/columns/s08_0001.html.
- 4 Developing Asia in this chapter comprises all developing member economies of the Asian Development Bank except Taipei,China, for which no comparable data are available. The eurozone comprises Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain.
- 5 In 2006, the PRC accounted for almost 50% of Hong Kong, China's total exports; 28% of Taipei,China's; and 21% of Korea's; but accounted for less than 10% of the total exports of Southeast Asia: 9.8% from Philippines, 9.7% from Singapore, 9.0% from Thailand, 7.7% from Indonesia, and 7.2% from Malaysia.
- 6 Consumer durables are long-lived goods for final consumption, the services of which can be enjoyed repeatedly over the course of at least 1 year. Nondurable consumer goods are items that are consumed once only such as beverages, food, and tobacco. Clothing and footwear are not treated as durables even though they last for years (Black 2002), perhaps reflecting the disposable nature of used shoes and clothing and their frequent purchase as seasons and fashions change.
- 7 For a more detailed examination of developments in garment trade in the categories for which the PRC is constrained under product-specific safeguards, see James (2008).
- 8 It is estimated that imports of shoes account for 99% of US sales and that the PRC provides 87.5% of imports by volume. High tariffs are equivalent to 40% of the retail price of some lower-cost imported shoes and are cited as onerous for low-income consumers by the sponsors of the Affordable Footwear Initiative Act of 2007 (see Hong Kong, China, Trade Development Council 8 November 2007, available: <http://marketinfo.tdctrade.com/>).
- 9 US general imports from the world actually grew faster in the fourth quarter than in previous quarters of 2007, reflecting seasonal effects of the holiday period and the spiking of the price of the largest category of imports—mineral fuels. Asia, however, experienced a slowing of growth in the third and fourth quarters relative to the first and second even without seasonal adjustments. Once mineral fuels are subtracted, overall quarterly growth was virtually flat in the second and third quarters and rose marginally (about 0.7%) in the fourth. One may expect the pattern in the eurozone to be similar to that of the US for the world (discussed subsequently).
- 10 See James (forthcoming).
- 11 Sources are United States International Trade Commission Dataweb, available: <http://dataweb.usitc.gov/scripts/REPORT.asp> and for Japan, Ministry of Finance, Trade Statistics, News Release, 30 January 2008 and 28 February 2008, available: <http://www.customs.go.jp>.
- 12 Even in clothing exports, the fear of the PRC is overblown (James 2008).
- 13 As pointed out in Athukorala (2007) and Dean and Tam (2005), the typical notebook computer made in a Taipei,China-owned factory in the PRC has processing chips made by Intel in Malaysia, an operating system made by Microsoft, a CD display screen sourced from Taipei,China or Korea, and hard-disk drives sourced from Japan. Domestic value added is only one third of the value of the output.
- 14 The import value of fabric are derived from HS codes: 5111, 5112, 5113, 5208, 5209, 5210, 5211, 5212, 5309, 5310, 5311, 5407, 5408, 5512, 5513, 5514, 5515, 5516, 6001, 6002, 6003, 6004, 6005, and 6006.
- 15 Futures prices for rice have been reported to be as high as \$745 per ton.
- 16 The increase would bring the total budgetary cost of fuel and electric power subsidies to \$25.9 billion as opposed to a budget line item of "only" \$8.3 billion, assuming an exchange rate of Rp9,100/\$1 (Kong and Ramayandi 2008, pp. 16-17).
- 17 The total subsidy value for rice and wheat is calculated at Rs23.5 billion, i.e., Rs18.8 billion for rice and Rs4.73 billion for wheat.

References

- Albaladejo, M. and S. Lall. 2004. "China's Competitiveness Performance: A Threat to East Asian Manufacturing Exports?" *World Development*, Vol. 32, No. 9: 1441-66.
- Asian Development Bank (ADB). 2007a. *Asian Development Outlook 2007*. Manila.
- . 2007b. *Asian Development Outlook Update 2007*. Manila.
- Athukorala, P.C. 2006. "Product Fragmentation and Trade Patterns in East Asia." *Asian Economic Papers*, Vol. 4, No. 3: 1-27.
- . 2007. "The Rise of China and East Asian Export Performance: Is the Crowding-out Fear Warranted?" Working Papers in Trade and Development No. 2007/10, Division of Economics, Research School of Pacific and Asian Studies, Australian National University, Canberra.
- Black, J. 2002. *Oxford Dictionary of Economics* (2nd Edition). New York: Oxford University Press.
- Blank, R. and A. Blinder. 1986. "Macroeconomics, Income Distribution and Poverty." In S. Danziger and D. Weinberg (eds.), *Fighting Poverty: What Works and What Doesn't*, pp. 180-208. Cambridge, Massachusetts: Harvard University Press.
- Cardoso, E. 1992. "Inflation and Poverty." NBER Working Paper No. 4006, National Bureau of Economic Research, Cambridge, Massachusetts.
- Chai, H. and Y. Ree. 2005. "Financial Integration and Financial Efficiency in East Asia." Unpublished.
- Cui, L. and M. Syed. 2007. "The Shifting Structure of China's Trade and Production." IMF Working Paper WP/07/214, International Monetary Fund, Washington DC.
- Datt, G. and M. Ravillon. 1996. "Why Have Some Indian States Done Better Than Others at Reducing Rural Poverty?" Policy Research Working Paper 1594, World Bank, Washington, DC.
- Dean, J. and P.-W. Tam. 2005. "The Lap Top Trail." *Wall Street Journal*, 9 June.
- Gilboy, G.J. 2004. "The Myth Behind China's Miracle." *Foreign Affairs*, Vol. 83, No. 4: 33-48.
- Imai, K., R. Gaiha, and G. Thapa. 2008. "Food and Oil Prices." Economics Discussion Paper Series EDP-0801, The University of Manchester, United Kingdom.
- Institute for International Finance. 2008. "Capital Flows to Emerging Market Economies." Washington, DC.
- International Energy Agency. 2008. "Oil Market Report." Geneva, February.
- International Monetary Fund (IMF). 2007. "Decoupling the Train? Spillovers and Cycles in the Global Economy." Chapter 4 in *World Economic Outlook* (April). Washington, DC.
- James, W. 2008. "Asian Textile and Apparel Trade: Moving Forward with Regional Integration." ERD Working Paper Series No. 111, Economics and Research Department, Asian Development Bank, Manila.
- . Forthcoming. "Extra-EU Imports of Clothing and EU Preferential Trade Policies in the Post-Quota Era: the Position of Asian Suppliers in the Second Largest World Market for Clothing Imports." ERD Technical Note, Economics and Research Department, Asian Development Bank, Manila.
- Kim, S. and J.-W. Lee. Forthcoming. "Real and Financial Integration in East Asia." OREI Discussion Paper, Office of Regional Economic Integration, Asian Development Bank, Manila.
- Kong, T. and A. Ramayandi. 2008. "Survey of Recent Developments." *Bulletin of Indonesian Economic Studies*, Vol. 44, No. 1 (April): 7-32.
- McKinsey Global Institute. 2008. *Mapping Global Capital Markets: Fourth Annual Report*. San Francisco, California.

- Naughton, B. 2007. *China's Economy: Transition and Growth*. Cambridge, Massachusetts: MIT Press.
- Romer, C. and D. Romer. 1998. "Monetary Policy and the Well-Being of the Poor." NBER Working Paper No. 6793, National Bureau of Economic Research, Cambridge, Massachusetts.
- Rosen, E.I. 2002. *Making Sweatshops: The Globalization of the U.S. Apparel Industry*. Berkeley: University of California Press.
- Son, H.H. Forthcoming. "Impact of Price Changes on Standard of Living and Inequality." ERD Technical Note, Economics and Research Department, Asian Development Bank, Manila.
- United Nations Statistics Division (UNSD). 2008. National Accounts Main Aggregates Database. Available: <http://unstats.un.org/unsd/snaama/Introduction.asp>.
- US Department of Agriculture (USDA). 2008. *Production, Supply and Distribution* online. Available: www.fas.usda.gov/psdonline.
- von Braun, J. 2007. "The World Food Situation: New Driving Forces and Required Actions." Food Policy Report No. 18, International Food Policy Research Institute, Washington, DC.



Part 2

Workers in Asia

Young Asians: A squandered talent

Introduction

The number of developing Asia's workers has risen steeply in recent years as a tide of young people has entered the labor force. The trend has been most prominent in northeast Asia—comprising People's Republic of China (PRC); Hong Kong, China; Republic of Korea; and Mongolia—where the proportion of the labor force to the total population is expected to peak at 72% in 2010, up from 57% in the 1970s (UN ESCAP 2007). The high share of young people in the total population—also known as the “youth bulge”—provides a unique opportunity for enhanced long-run growth or the “demographic dividend.”¹ The dividend can occur in two phases: first, when young people are productively employed, they can lift *per capita* income; second, as they grow older, accumulate assets, and invest, they can generate higher *national* income (IMF 2006). If young workers embody higher skills and knowledge levels as a consequence of earlier investments in human capital, this will boost productivity too.

However, an economy has to redeem its demographic dividend within the short time span of a single generation, and doing this is by no means automatic. It depends on the policy environment and on institutions (Bloom et al. 2006). If these enabling factors are not in place, the demographic dividend can turn out to be a demographic curse. But when enabling factors are present, favorable demography can exert significant leverage on growth. Indeed, the remarkable growth performance of East and Southeast Asia owes much to the successful exploitation of this dividend (Bloom and Canning 2004). In accounting terms, two fifths of the actual growth in output per effective consumer can be traced to favorable demographic shifts in East and Southeast Asia (IMF 2006). But other regions, such as Latin America, have largely wasted their demographic dividend. Weak governance, inward-looking policies, and macroeconomic instability there curbed the investment and growth the young could have produced.

The youth bulge will begin to shrink in Asia as a whole around 2010,

This chapter was written by Shikha Jha of the Economics and Research Department, ADB, Manila. It draws on background papers prepared by S. Mahendra Dev (India) and Niall O'Higgins (Indonesia, Philippines, and Thailand), consultants.

and by 2040 the share of young people in the total population will be about 14%, down from 20% in 2005 (UN 2007). Before the bulge begins to disappear, and the rising dependency of the nonproductive youth and elderly populations on young people checks per capita income growth, it is vital that economies create productive and sustainable jobs for the young. Failure to do this will not only crimp growth now, it will also undermine an economy's ability to support a larger dependent population in the future. Other stresses are also likely to break through. If the young find that they have few economic opportunities and little to look forward to, this is likely to aggravate social problems and could undercut political support for reform programs (Box 2.1.1).

The importance of youth employment in the developing world has been brought into prominence in recent years by, among others, the International Labour Organization and the World Bank (see, for example, ILO 2008 and World Bank 2006a). These studies have taken a broad and largely aggregate view across countries. The contribution of this chapter of *Asian Development Outlook 2008* is to provide a micro-level perspective

2.1.1 Youth unemployment, employment, and poverty in Asia

Young people form a quarter of the working age population but more than half the unemployed on the planet. The Asia-Pacific region hosts almost half the latter group. Globally, unemployment among young people rose between 1996 and 2006 but its distribution was uneven (Box figure 1). The impact was most dramatic in Southeast Asia, which was hit hard by the financial crisis of 1997–98. Young men and women were equally affected.

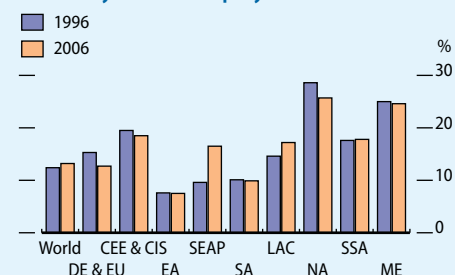
In developing Asia as a whole, only about 60% of young men and 40% of young women are employed. A large proportion of them face poor working conditions in informal and insecure jobs, and although \$1-a-day poverty among employed young people has declined across the world, it remains high in South Asia at 37%, compared with the world average of 22.7% in 2005 (Box figure 2).

The economic consequences of youth unemployment may not just be limited to the individuals concerned but extend to the economy at large.

Among individuals, long-term unemployment can lead to chronic poverty and result in intergenerational transmission of the scourge. At the aggregate economy level, this can result in loss of productivity and growth. Those who cannot find a job to their satisfaction may be discouraged from actively looking for work, and the longer the period of unemployment, the higher the loss of knowledge, skills, and future productive capacity.

Long-term unemployment may also deter young people from forming families; may generate frustration, low self-esteem, and other psychological problems; may make them vulnerable to drugs, disease, and crime; and, potentially, could cause social unrest.

1 World youth unemployment rates



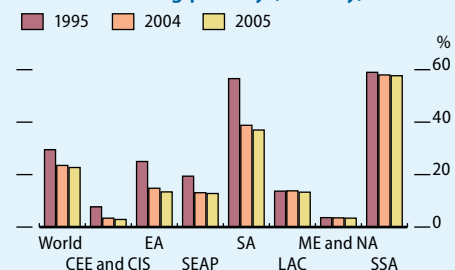
CEE & CIS = Central and eastern Europe (non-EU) and Commonwealth of Independent States; DE & EU = Developed Economies and European Union; EA = East Asia; LAC = Latin America and the Caribbean; ME = Middle East; NA = North Africa; SA = South Asia; SEAP = Southeast Asia and the Pacific; SSA = Sub-Saharan Africa.

Note: Regional groupings for both figures follow the definition of the International Labour Organization, available: <http://www.ilo.org>.

Source: International Labour Office. 2007.

[Click here for figure data](#)

2 Youth working poverty (\$1 a day)



Source: International Labour Office. 2006.

[Click here for figure data](#)

on issues, set in particular country contexts. The analysis provides new estimates of the dimensions of youth employment and unemployment in India, Indonesia, Philippines, and Thailand, and traces their evolution over the last decade.

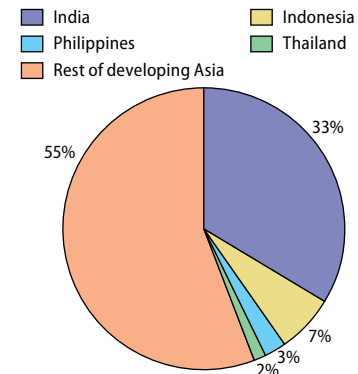
Together these four countries account for close to half the young population in developing Asia—33% from India, and 12% from Indonesia, Philippines, and Thailand combined (Figure 2.1.1). While capturing some of the diversity in country demography, experiences, and circumstances that exist in developing Asia, all these countries face the imminent prospect of a declining share of young people in their population (Figure 2.1.2). The descent has already begun and the opportunity to redeem the dividend will soon be moving to a close in Indonesia and Thailand. The opportunity is expected to peak at around 2010 in the other two countries.

The rest of this chapter is structured as follows. The economic context of the perspective is presented in section 2, *Country context*. The following two sections present a statistical analysis of the situation of young people. In section 3, *Work and joblessness*, several labor market outcome indicators are estimated, including jobless rates, waiting time in the job market, and the opportunity cost of job search. The analysis shows that young people are disadvantaged vis-à-vis adults, and young women are disadvantaged relative to young men. In the past decade, unemployment and jobless rates among young people have increased in all the four countries. The opportunity cost in terms of loss of earnings while searching for a job has increased over time, reflecting a more difficult job market for young people. These are worrying trends. Moreover, weaker and marginalized sections of young populations are being left behind. In particular, those with low levels of education are most at risk.

Section 4, *Structure and quality of employment*, looks at the conditions of those who have found employment. Agriculture—characterized by low productivity—has emerged as the employer of last resort for the young, especially teenagers. Opportunities for young people are rapidly growing in services and, to a lesser extent, in manufacturing. Encouragingly, employment has become more formalized, particularly for young workers. At the same time, however, poor and uneducated young people are being pushed more into low-end manufacturing and services jobs in the informal sector. It would seem that young workers, and particularly young women, have borne the brunt of the structural change since the 1990s. The young also continue to stay disproportionately behind adults in earnings.

Section 5, *Policy conclusions*, discusses possible avenues for addressing the market and institutional failures identified above that bedevil labor markets for young people. The current emphasis on boosting the quality of labor supply for higher-end and mid-level jobs is important (see the chapter *Asia's skills crisis*). But the need for policies to improve the prospects of the large numbers of young people struggling in the job market is stronger than ever. More flexible regulatory frameworks; suitable education, skills training, and counseling; and public-private partnerships would enhance the opportunities for underprivileged new job seekers.

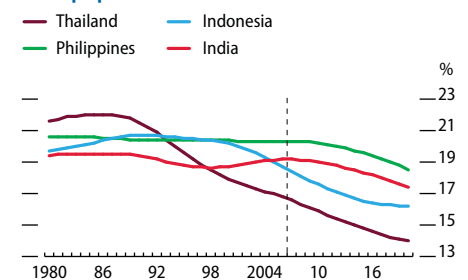
2.1.1 Total youth population aged 15–24



Source: International Labour Organization, *Key Indicators of the Labour Market (KILM)* database (5th edition), available: <http://www.ilo.org>, downloaded 9 January 2008.

[Click here for figure data](#)

2.1.2 Youth population as a share of the total population



Source: International Labour Organization, *Labour Statistics Database*, available: <http://laborsta.ilo.org>, downloaded 9 January 2008.

[Click here for figure data](#)

Country context

Although the general rule holds, that creating jobs for young people requires sustained economic growth, the experiences of India, Indonesia, Philippines, and Thailand are divergent with regard to the education system itself.

Viewing the countries in economic terms, it is well known that India has emerged from several decades of “lost growth” after independence to become one of the world’s strongest-growing economies. A high investment rate, exceeding 38% of GDP in 2007, augurs well for continued expansion. The 11th Five-Year Plan focuses on “inclusive growth” for a wider distribution of its benefits.

Of the three Southeast Asian countries, Indonesia and Thailand (the most directly affected by the financial crisis) have moved to lower growth trajectories and have endured permanent losses in income. They have also suffered huge changes in economic structure: industrialization, for example, has gone into reverse; industrial labor productivity has been virtually stagnant since the crisis; and national unemployment rates (i.e., the share of the unemployed in the labor force) have moved and stayed higher. In Indonesia, growth has slowed to an average of 4.9% in 2001–2006 compared with 7.8% a decade earlier. Investment has seen some recovery in recent years in Indonesia, standing at 23.2% of GDP in 2007, but its effects are yet to be felt.

Thailand’s postcrisis growth has slowed markedly both relative to precrisis rates and to longer-run trends. Its investment rates tumbled following the crisis and are only now beginning to climb again, having reached 26.8% in 2007. Nevertheless, growth is once more expanding and, despite political disturbances, Thailand has maintained its status as a middle-income country.

The Philippines has had a much weaker growth record than either Indonesia or Thailand but was comparatively sheltered from the crisis. In recent years, its growth performance has strengthened, but investment rates remain very low, at 14.7% in 2007. Growth and investment are increasingly concentrated in non-labor-intensive services, and there is little evidence of growth of a dynamic industry sector.

In addition to a favorable economic climate, strengthening the job outcomes for young people requires improvements in education systems, since they have such a critical influence on employment skills and hence employment. In the short run, higher education and high-quality education improve the immediate job prospects of young people. A better educated and more skilled workforce promotes long-run economic growth and the general employment prospects of young people.

In this regard, Indonesia and Thailand are performing relatively well, in a context of rising education enrollment. The Philippines, though, is less fortunate, as it has a serious problem of school dropouts, particularly in rural areas (World Bank 2003). Moreover, its elementary school participation fell from 97% to 84% between 1999/2000 and 2005/06, following the reduction of education spending as a share of GDP from 4% to 2.4% during 1998–2005 (World Bank 2007a). India, too, is struggling educationally: although 40% of its population is under 18, 25% of its young workers are illiterate and 30% have incomplete elementary education. Government schools—the mainstay of education for poor

children—suffer from a shortfall in buildings and education materials, lack of accountability, and widespread teacher absenteeism. One result is that in nine Indian states, more than 30% of village children attend private schools, where teachers are more accountable (Pratham 2008).

Central government spending on education also varies widely among the four countries: it comes to only 4% of central government expenditure in India, but is as high as 21% in Thailand (Figure 2.1.3). However, based on broad national accounts data, these numbers may underestimate the real level of spending on education. For example, adding state-level education spending to that of the central Government in India improves the figures to 12.8% of total government expenditure and 3.8% of GDP in 2004/05 (Government of India 2007). Similarly, including the subnational data for Indonesia, Arze del Granado et al. (2007) show a more accurate assessment of total education spending, which has been increasing in recent years: in 2006, it was estimated at 16.9% of government expenditure and 3.8% of GDP.

Notwithstanding the size of public spending, to a greater or lesser degree the education systems in the four countries suffer from weaknesses such as outdated curricula, poor education quality, low enrollment and high dropout rates, uneven regional pattern of education participation, limited avenues for vocational training and skills development, and weak education infrastructure.

All four countries boast national youth programs. However, these are relatively few or have had limited success. Lack of impact evaluation of their implementation is the key issue. Absence of labor-market information systems, mismatches among regions in demand for and supply of different skills types, inadequate rural–urban transportation linkages, and inadequacy of urban wages to cover the cost of risk from migration are common to all the countries. Given such failures, the private sector shies away from investment that could support job creation.

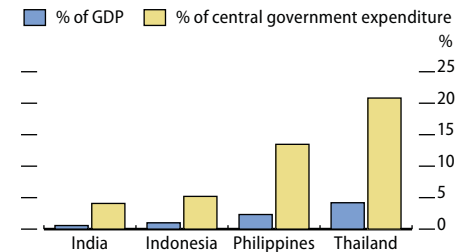
Another common factor is that young people are disadvantaged in their search for work compared with adults (Figure 2.1.4). But trends diverge sharply across the four countries. India and the Philippines appear to have maintained a stable ratio of youth to adult unemployment. In Indonesia the ratio is falling whereas in Thailand it is increasing. It would seem that since the crisis, the lower growth trajectory in Thailand has made the school-to-work transition more difficult for young people, whereas the moderate improvement in the relative position of young people in Indonesia reflects perhaps a return to farm and off-farm work, which absorbs excess labor.

Work and joblessness

Labor force survey data

The latest labor force survey data from each country are used to analyze the profile of their young populations. Labor force surveys are nationwide investigations of households conducted by the national statistical agency of each country. The surveys cover work-related, demographic, and socioeconomic characteristics of the population and are primarily geared to providing information on labor conditions in the country.

2.1.3 Central government education spending, 2007

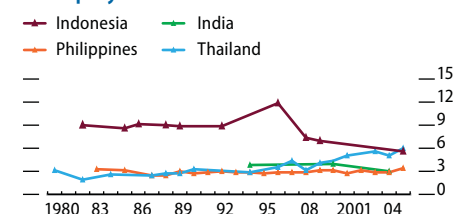


Note: Based on government estimates for the year 2007.

Sources: Ministry of Finance, India, available: <http://finmin.nic.in>; Ministry of Finance, Indonesia, available: <http://www.fiskal.depkeu.go.id>; Bank Indonesia, available: <http://www.bi.go.id/web/en>; Department of Budget and Management, Philippines, available: <http://www.dbm.gov.ph>; National Statistical Coordination Board, Philippines, available: <http://www.nscb.gov.ph>; Ministry of Finance, Thailand, available: <http://www.mof.go.th>; Bank of Thailand, available: <http://www.bot.or.th>.

[Click here for figure data](#)

2.1.4 Ratio of youth unemployment to adult unemployment rate



Source: International Labour Organization, *Key Indicators of the Labour Market* (KILM) database (5th edition), available: <http://www.ilo.org>, downloaded 9 January 2008.

[Click here for figure data](#)

Using sophisticated random sampling techniques (with national censuses as sampling frames), unbiased estimates of the national structure of employment, unemployment, education attainment, and wages are calculated. For each country two sampling periods are used, 10–15 years apart, one in the 1990s and the other in the early years of this century: India (1993/94 and 2004/05), Indonesia (1994 and 2006), Philippines (1991 and 2006), and Thailand (1995 and 2005). Sample sizes are large and range from about 140,000 people in the Philippines in 1991 to about 600,000 in India in 2004.

Before the results are given, several potential weaknesses of the data should be elucidated. The labor force survey data capture statistics of sample households, hence the results may be subject to sampling errors. The sampling in each country is undertaken at different frequencies and durations. In the annual (or less than annual) surveys, the timing of the survey may impact the results, especially for young people, since the “seasonal” component of youth behavior is particularly strong (compared with older age groups), as, for example, if the labor force survey is undertaken during a school holiday. Similar effects could arise if the survey is carried out during a harvest period or tourist season.

The questionnaires used in the labor force surveys not only differ among countries, but also change over time within each country. To maintain comparability, all questions and variable definitions were mapped carefully against each other using applicable and related International Labour Organization (ILO) definitions. There were also considerable changes in industrial and occupational classifications, but as most of these are based on different versions of the International Standard Industrial Classification of all Economic Activities and International Standard Classification of Occupations, a concordance was made to link the datasets. These results should be read with these caveats in mind. Given the differences across countries between the two sampling periods, the comparisons should be seen in qualitative terms, and in relative rather than absolute magnitudes.

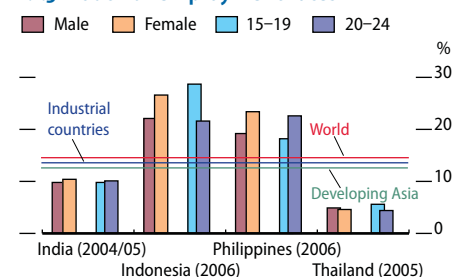
Youth unemployment

Figure 2.1.5 presents estimates of male and female unemployment rates for the four countries based on their latest labor force survey, and compares those rates with averages for developing Asia, industrial countries and the world. It would seem that while youth unemployment rates in developing Asia are high (11.3%), they are marginally below broad averages for industrial economies (12.7%), and for the world (13.2%) as of 2006. But in Indonesia and the Philippines the unemployment rates for young men and more so for women, are far higher than those averages. On this indicator, the young people of India and Thailand fare better.

Unemployment versus joblessness

Commentators have questioned the adequacy of the youth unemployment rate as an indicator of youth labor market conditions (for example, Rees 1986, Bowers et al. 1999, Ryan 2001, Fares et al. 2006, ILO 2006, World Bank 2006b, O’Higgins forthcoming). A lower unemployment rate, for instance, may stem from a contraction in the labor force participation rather than from an increase in employment. Specifically, attention has

2.1.5 Youth unemployment rates



Note: World and regional groupings based on International Labour Organization definition. Developing Asia comprises East, Southeast, and South Asia.

Sources: Staff estimates based on data from labor force surveys; International Labour Office (2007).

[Click here for figure data](#)

begun to focus on discouraged young workers who are excluded from youth unemployment statistics, that is, young people who are neither in education nor employment and who are not actively searching for work. Young people who become discouraged when jobs are difficult to find may drop out of the labor force. (This group includes all those who are not in education or employment.) In other words, young people who are not engaged in a “useful” or “productive” activity—so-called jobless youth.

In this chapter, the jobless rate is defined as the percentage of all young people who are neither in education nor employment. This is a useful indicator because it takes account of discouraged young people, who are the most in need of support in terms of education, training, and counseling to minimize the risks of them becoming entirely detached from the labor market. The jobless rate gives a sense of the size of youth labor market problems in relation to the youth population as a whole.

It is perfectly possible for youth unemployment rates to be very high but, if labor force participation is very low, to affect only a very small proportion of the young. Using the jobless rate as an indicator also reduces the problems of comparison over time and among countries, as the definitional requirements are much less strict than for the unemployment rate. The jobless rate may be bigger (or smaller) than the unemployment rate according to whether the proportion of the inactive population that does not participate in education is greater (or less) than the proportion of the active population that is unemployed.

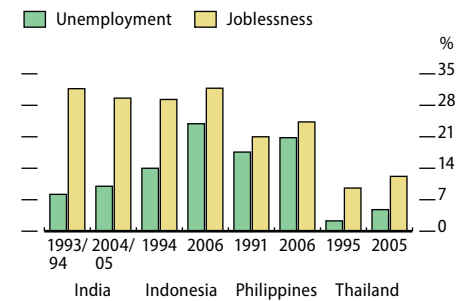
As evident from Figure 2.1.6, unemployment rates do indeed gloss over the presence of large numbers of discouraged workers in all the four Asian countries. Rates of joblessness are much higher than conventionally defined rates of unemployment. The difference is particularly stark for India, where rapid economic growth has not translated into equivalent job creation. Though youth joblessness has declined there, the reduction has been marginal. As explained later, the decline appears to have come mainly from a reduction in joblessness among young women. In the three Southeast Asian countries, joblessness among young people has worsened, and has recently been highest in Indonesia. Thailand has maintained the lowest youth jobless rate among the four countries.

The jobless rate also gives a rather different picture regarding the relative position of different categories of young people. This is discussed in the following sections.

Young women versus young men

Young women normally face significantly more difficult labor market conditions than young men. This is captured by their greater jobless rates (Figure 2.1.7). Although the difference is less severe in Southeast Asia than in India, jobless rates have risen among men and women. In contrast, young Indian women—though still highly disadvantaged in comparison with men—have enjoyed a fall in joblessness as the country tapped into their rising potential, especially in urban areas. For instance, nearly 50% of young software workers in 2004/05 were women. Cultural perceptions of gender roles influence women’s opportunities to plan a career. A wide literacy gap between boys and girls is partly responsible for higher joblessness among the latter. In Asia, parents, particularly in low-income

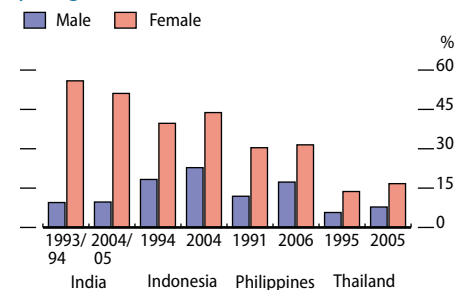
2.1.6 Youth unemployment versus joblessness



Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

2.1.7 Jobless rates for young men versus young women



Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

families, prefer to send sons to school first and poor young girls are often left with the option of getting married, resulting in a movement from one poor household to another. Rigid working arrangements also affect female labor supply.

Urban versus rural young people

Relatively more urban young people used to be jobless than their rural counterparts in the 1990s. But the early years of this decade have brought a reversal in the pattern in three of the four countries. Joblessness is now usually higher among the young in rural areas than in urban areas (Figure 2.1.8). The Philippines is an exception where internal migration is an essential element of rural livelihood strategies and rural transformation, not just a way to escape rural areas (Quisumbing and McNiven 2005). Family networks in the countryside support large flows of migrants attracted by prospects of better education and higher wages in the towns and cities of the Philippines, where 75–80% of first-time migrants live with relatives and acquaintances.

Young adults versus teenagers

Joblessness is much higher among young adults (aged 20–24) than teenagers (aged 15–19) (Figure 2.1.9). This is most probably because of the higher proportion of teenagers who are still in full-time education. Both these age groups in Indonesia, Philippines, and Thailand experienced an increase in joblessness following the financial crisis. Job-hopping by young adults is one cause of their higher joblessness.

The inexperience of young workers is reflected in the lack of satisfaction in their initial job choices. For example, Topel and Ward (1992) find that a typical young man changes jobs seven times in the first 10 years of his career, and that transition to a higher-wage job stabilizes employment. Similarly, Neal (1999) finds that the probability of high-school graduate boys leaving their first job in a given career is 70% for workers with fewer than 7 years of experience. Once they exceed this period, the probability drops to 45%.

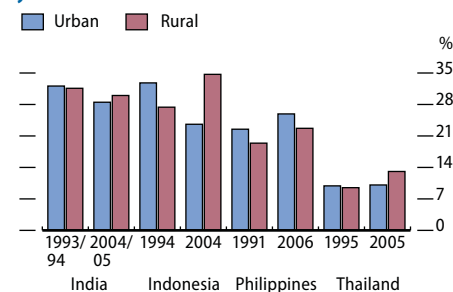
Educated versus uneducated

As the less educated grow older, their jobless rate climbs higher than that of the more educated. On the whole, there is an inverse relationship between education level and joblessness for those aged 25–34 (Figure 2.1.10). The most marked effects are for those with a tertiary level of education and those who have not completed even the most elementary level. The relationship is strongest in Thailand, where those without any education are five times as likely to be jobless as those with a bachelor's degree (or higher).

School-to-work transition and opportunity cost of waiting for a job

For those who have finished school, the transition to work takes time. Before finding a job, young people have to wait for an appropriate opening, because of their limited skills and their inexperience. The duration of transition indicator of the Organisation for Economic Co-operation and Development is the difference between the median ages of school-leaving and entry into employment, and these can be

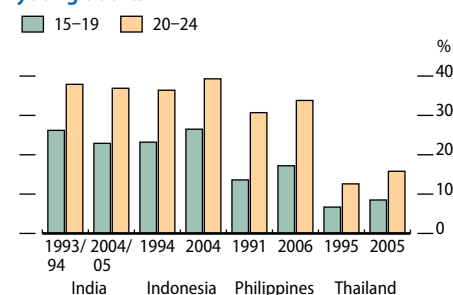
2.1.8 Jobless rates for rural versus urban youths



Source: Staff estimates based on data from labor force surveys.

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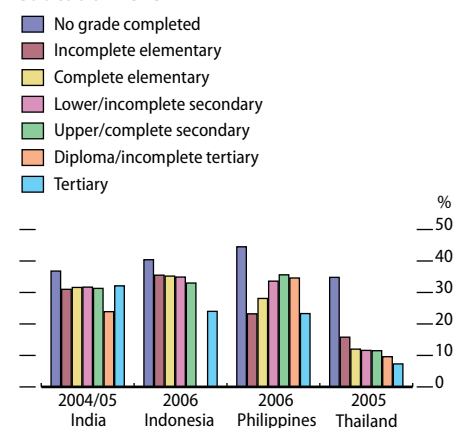
2.1.9 Jobless rates for teenagers versus young adults



Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

2.1.10 Jobless rates of people aged 25–34 by education level



Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

calculated from labor force survey data (Figure 2.1.11).² A lower difference does not mean that the typical young person takes less time to find a job but that the incidence of joblessness is much lower. A comparison of data between the two data time points shows that the number of schooling years has generally increased, culminating in average school-leaving ages of 17–19 years. The age at which young people start finding jobs has either increased or remained around the same, at 20–22 years. As a result, the estimated duration of waiting time in the job market varies between 1 and 5 years across the four countries. This is despite the fact that labor forces have generally received more education over the past 10 or 15 years, and more so in the case of younger workers.

As young people leaving school typically do not immediately find employment, joblessness increases. However, high joblessness need not always be a sign of labor market difficulties if flows into and out of work are high and spells of unemployment short. But equally, low joblessness does not rule out problems. If flows are low and spells are long, low joblessness may be associated with chronic problems (Ryan 2001).

Remaining unemployed while searching for a job results in a loss of earnings. This loss can be calculated as the product of the median length of waiting time in the job market and the real median wage for young workers. This loss is calculated for young workers with 0–5 years of experience and those with 3–6 years of experience (Table 2.1.1). The loss has increased over time, reflecting the higher opportunity cost of searching for a job. The comparatively high losses for more experienced young people in India and less experienced ones in the Philippines echo changes in the median wages.

Structure and quality of employment

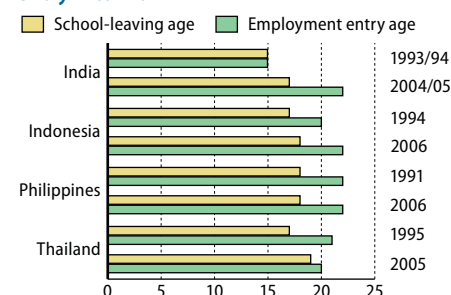
Finding decent and productive jobs is a formidable challenge for workers in general, but it is a particularly serious challenge for younger workers, and especially for young women. The difference between young male and female employment ratios in India is the highest among the four countries, at around 30 percentage points (Figure 2.1.12), though the gap is large in Indonesia and the Philippines as well. Underemployment, commonly defined as underutilization of labor time of workers—for example, due to seasonality in work or availability for alternative work—is also of acute concern as is the quality of jobs that the young do. Of total workers, about 5% in India, some 20% in the Philippines, and 3.5% in Thailand are reportedly underemployed.

Sector distribution of young workers

An idea of where the potential for future youth employment may lie is given by current patterns and trends in the structure of youth employment. Over the past 15 years, youth employment has in general shifted from agriculture toward manufacturing and services (Figures 2.1.13a–c). As incomes rise, it is natural to expect a decrease in the contribution of agriculture to GDP and hence to employment. But despite the retreat from agriculture, the sector remains a significant employer of young workers.

Slow agricultural productivity growth contributes to the problems

2.1.11 Median age for school-leavers and entry into work



Notes: School-leaving age: The age at which, for the first time, the ratio of the number of students to the population at that particular age falls below 0.5. Employment entry age: The age at which, for the first time, the ratio of the number of employed to the population at that particular age climbs above 0.5.

Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

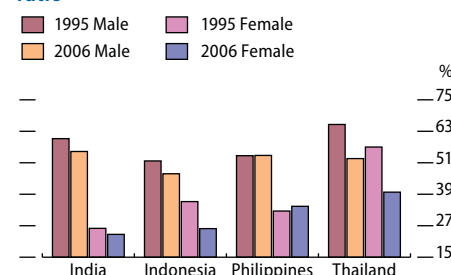
2.1.1 Annual increase in estimated cost of job search for youth (%)

Years of experience	India 1993–2004	Indonesia 1994–2006	Philippines 1991–2006
0–5	1.84	0.40	8.09
3–6	2.84	0.40	6.78

Notes: Cost of job search = median wage x average length of job search

Source: Staff estimates based on data from labor force surveys.

2.1.12 Youth employment to population ratio



Source: International Labour Organization, *Key Indicators of the Labour Market* database (5th edition), available: <http://www.ilo.org>, downloaded 9 January 2008.

[Click here for figure data](#)

faced by young workers. Teenagers in particular are dependent on agricultural employment. This is most probably a consequence of lower education participation in rural areas as well as lower skills requirements for agricultural occupations. High levels of teenage participation in the sector probably also reflects slower job and income growth in the urban sector following Asia's financial crisis as well as the "return to the land" survival strategy that some young migrants were compelled to follow.

Industrial and services sectors seem to employ a larger share of young workers in their prime age (20–29 years). In India and Thailand, industrial employment accounts for a higher proportion of total youth employment in the 2000s than in the 1990s. But in Indonesia and the Philippines, the movement out of agriculture has generally been toward services rather than industry. It is notable that in both countries, growth of the industry sector has been hobbled by stagnant productivity (ADB 2007a, p. 274).

In all four countries, employment opportunities for young workers have grown most rapidly in services (Figure 2.1.13c). The sector has drawn labor out of agriculture, but in Indonesia and the Philippines, the share of services has grown at the expense of industry, too. Though segments of services employment are highly productive, most jobs in the services sector are confined to low-wage, traditional occupations such as those in retail sales, low-end real estate, hotels, and restaurants. The quality of these jobs is a matter of concern. More than half of youth employment in these four countries, especially in services, is informal, characterized by low wages, long hours, poor working conditions, and lack of job security.

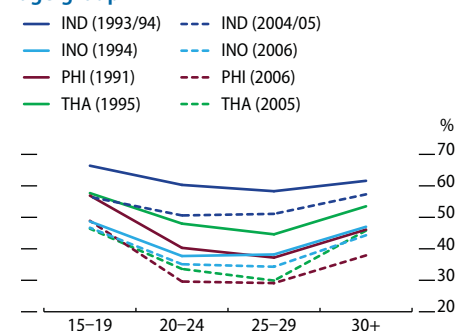
Incidence of informal employment

The incidence of informal sector employment is an important indicator of job quality. Typically, its importance rises during growth slowdowns as self-employment rises. Conventionally, "informal sector" or "informal economy" employment captures employment that is not registered for legal purposes.³ This covers employment not just in firms that are not registered for tax purposes, but also "unregistered" employment in registered firms.

In many lower-income countries, a pragmatic approach to measurement is adopted, principally on the basis of firm size and, to some extent, the employment relation. In this chapter, informal sector employment covers the self-employed, as well as unpaid and paid family workers, and casual (seasonal, nonpermanent, or nonregular) workers. Formal sector workers are all regular salaried and wage workers.

Figure 2.1.14 depicts data on the incidence of informal employment by age and gender. Because of definitional differences, not too much weight should be placed on the cross-country comparison of absolute numbers. At a broad level, informal employment is generally higher among women than men. In general, both adult and young workers are becoming more formalized. But the trend is more noticeable for the latter. This trend could be explained by the preference of formal sector employers for young workers who tend to be relatively more educated, cheaper, and more flexible than adult workers.

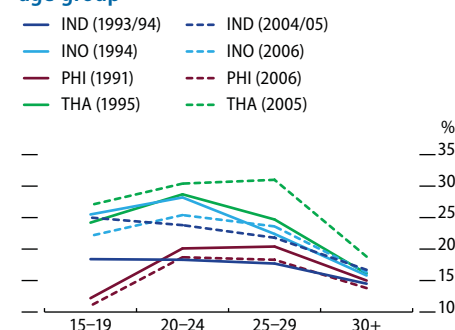
2.1.13a Youth employment in agriculture by age group



Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

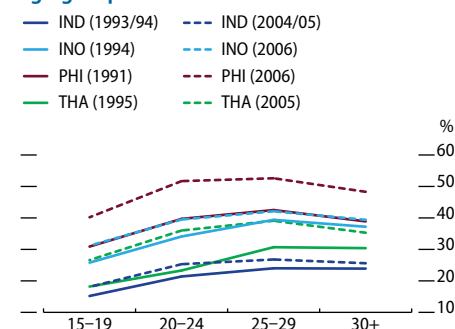
2.1.13b Youth employment in industry by age group



Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

2.1.13c Youth employment in services by age group



Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

Vulnerability in jobs

Though employment of any kind generates income, it does not always guarantee an escape from poverty. Young people without a job or on low wages remain at risk of poverty (Figure 2.1.15). ILO estimates that in 2007, 6–8 out of 10 workers in Asia were in vulnerable employment, without formal employment arrangements or social security protection. Extreme working poverty is a serious problem. The majority of young people are in the informal sector and engaged in casual jobs. Paid and self-employed workers who earn less than \$2 a day and unpaid family workers account for a significant proportion of young workers. In 2005, approximately 25% of the world's young population were living below the \$2-a-day poverty line (ILO 2006). Those who cannot find formal sector jobs and face the prospect of extended spells of unemployment often find self-employment or “forced entrepreneurship” as the only option of a survival strategy. Such workers are often poorly educated. Though entrepreneurship can be associated with independence, with flexibility of work hours, and with better job satisfaction, this is rarely the case for young informal workers.

Education, skills, experience, and wages

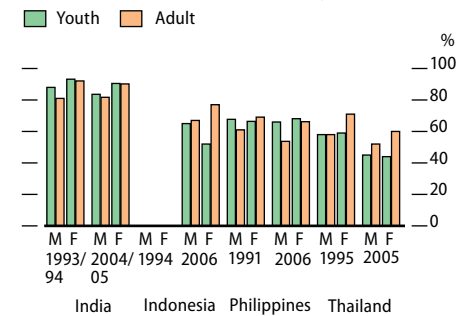
Young people often reach working age without acquiring basic skills, including literacy and numeracy, which are vital to improve their employment prospects. A large number of children unable to afford the cost of supplies, uniforms, and other expenses drop out of primary school every year, and often take up work to supplement family income. Several studies have identified the disproportionately high direct and indirect costs of education for low-income households as the main cause of early school-leaving (for example, World Bank 2003, Sziraczki and Reerink 2004).

Lack of education is a major reason why the poor in developing Asia often end up in informal sector jobs with pitiable working conditions. Education is a key determinant of decent employment opportunities for young people and an important factor influencing the long-run growth potential of the economy. But a large gap exists between education achievements of the poor and the nonpoor. Poverty creates barriers to education opportunities that can improve long-term income prospects. Traditional practice, culture, and institutions such as caste, community networks, the language spoken at home, or the education of parents often determine the type of school attended by children.

This in turn, may typecast them into low-paying traditional occupations. Munshi and Rosenzweig (2006) observe such dynamic economic inefficiency among low-caste working boys in India. These boys were deprived of higher returns from rapidly rising salaries in white-collar jobs merely by having studied in a local-language school and not an English-medium school, binding them to the local-language network. Lack of access to finance and meager wealth also prevent lower-class children from joining more expensive English-medium schools.

Even among people with low education achievement, those who receive vocational training are likely to register lower joblessness rates. But the education systems do not adequately prepare young people for labor market entry. Vocational preparation is often postponed to senior secondary school. Labor market-oriented tertiary education accounts

2.1.14 Share of informal employment



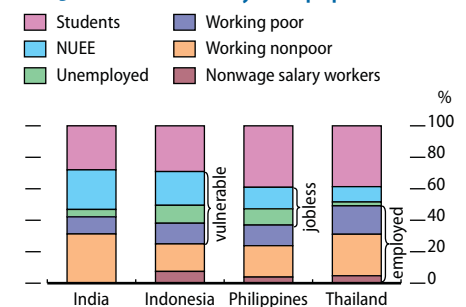
M = male; F = female.

Note: The number of casual workers in Thailand cannot be determined due to lack of disaggregated data.

Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

2.1.15 Classification of youth population



NUUE = Not unemployed, employed, or in education.

Note: For Indonesia, Philippines, and Thailand, working poor and working nonpoor only covers wage and salaried workers.

Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

for only 25% of technical and vocational education-related enrollments (Adams 2007). Many technical and vocational education and training (TVET) institutions focus exclusively on traditionally male skills areas. The system of TVET is fragmented and supply driven. In India, only 1.4% of young people receive formal vocational training, 3.7% nonformal training, and 3.4% other training (TeamLease Services 2007). The Indonesian system suffers from a fragmented and supply-driven TVET system, and the Government has recently begun to develop a national qualifications framework, a keystone to the reform of the system. Generally, inadequate training leads to a mismatch in skills of young workers and the needs in the labor market. Skill shortages also constitute a key constraint to the operation and growth of businesses. In India, for example, only 30% of IT graduates are employable in the IT sector (TeamLease Services 2007).

An examination of returns to education for youths and adults throws some light on the growing difficulties that the young face. In Figure 2.1.16, nominal median wage rates in the four countries are plotted for young and older workers classified by education. Wages have increased over time. While median wages for young workers are generally below their adult counterparts for the same levels of education, there is not much difference in wage by age for those with only up to primary or middle schooling. However, as the levels of education rise beyond this, the gap between youth and adult wages widens. This may depict returns to the longer experience of adults at higher levels of education.

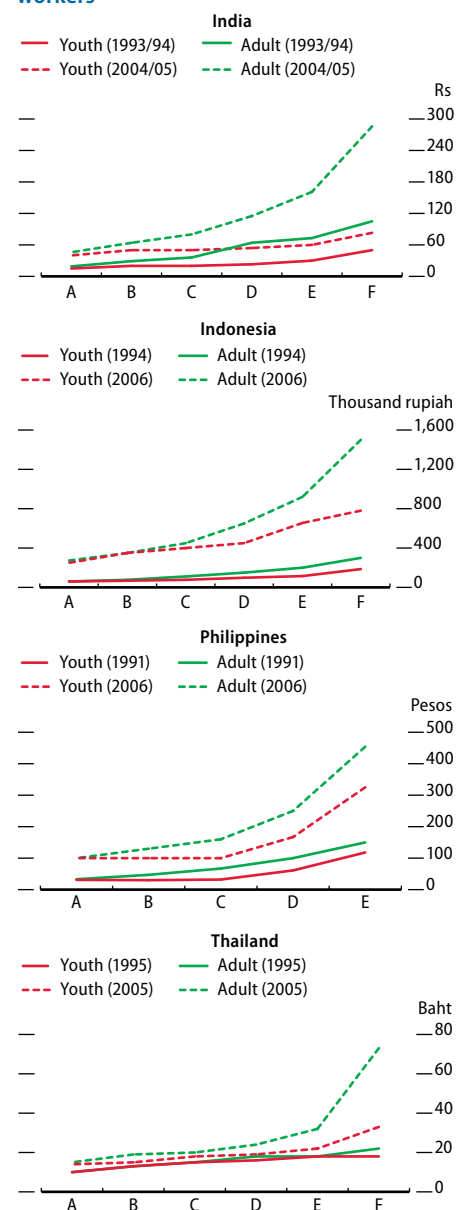
The data for Indonesia and Thailand also show that the median wages of young people and adults were almost identical for all levels of education in the 1990s, and in the Philippines the difference was small. The gaps that opened up in the subsequent decade may have been caused by the fact that young workers of all education levels bore the brunt of joblessness during the crisis and as a consequence lost valuable years of experience. Or it could mean that young workers accepted lower-paid jobs that did not equip them with the experience or skills commensurate with their education levels.

Another possible explanation for the widening gap is that the demand for general and occupation-specific skills has been rising in new jobs, which require teamwork and creativity (Lerman 1997). As employers come to attach greater importance to skills, they place lower weight on demographic characteristics such as race, gender, family background, or place of residence but reward well-educated and trained workers with higher wages. Higher wages and returns to education may have encouraged young people to stay in the education system longer.

Certainly, years of education have risen across the four countries. Expanded availability of more qualified workers relative to new jobs appropriate for their level of education may in turn have led to the employment of overqualified people in comparatively low-skilled tasks. Figure 2.1.17 confirms that in all four countries, the proportion of young employed people with education above middle school has shot up and those with only elementary education or less has fallen.

A comparison between young women and men shows that, except in Thailand, a gender bias exists in returns to higher education. Men and boys receive higher median wages than girls and women for given

2.1.16 Median wages of youth and adult workers



A = less than primary; B = primary; C = middle; D = secondary; E = higher secondary; F = postsecondary.

Note: Daily wages for India and the Philippines, monthly wages for Indonesia, and hourly wages for Thailand.

Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

levels of education (Figure 2.1.18). This bias is most pronounced in India, followed by Indonesia and the Philippines. But the gap has narrowed between the two sampling periods, especially in Indonesia and the Philippines.

Policy conclusions

Box 2.1.2 presents the major findings of this chapter and identifies policy approaches for addressing the issues in four selected countries of developing Asia, namely, India, Indonesia, Philippines, and Thailand. Policies promoting youth employment can be classified into those that aid employment generation in general and those that are particularly targeted at young people. The former category includes macroeconomic policies and labor market regulations. The latter covers education policies as well as guidance and training for the young. (International migration offers an alternative for those facing poor employment prospects at home, dealt with in the chapter *Asian workers on the move*.)

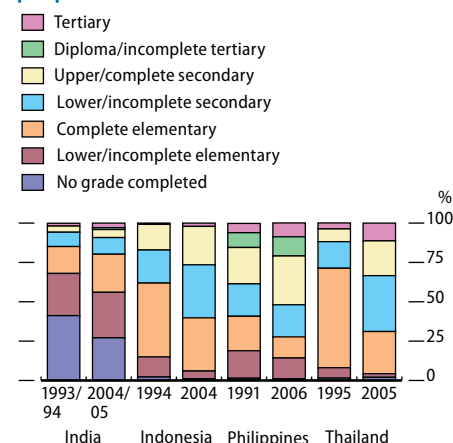
It is axiomatic that any strategy to facilitate productive youth employment must be centered on a strategy for growth and job creation as a whole. Even in periods of high levels of economic expansion, formal job growth has lagged. To an extent, this is natural and indeed beneficial, as it reflects rising levels of labor productivity and real wages. But declining responsiveness of newly created jobs to growth in the four countries suggests that countries have to “run faster” than they used to, in order to create the same number of new jobs. As the private sector is responsible for about 90% of jobs created in most developing economies, constraints on business hurt workers, especially young workers (Pierre and Scarpetta 2007). These constraints need to be looked at in their country context, and blanket recommendations, beyond easing those constraints, are not particularly helpful.

Firms can expand and create formal jobs if it is easy to do business. A study on India by the World Bank highlighted inadequate infrastructure, lack of access to finance, and product and factor market distortions as the major constraints to business (World Bank 2004). Different local regulatory requirements and differences in the implementation of national regulations cause substantial differences in the ease of doing business among Indian cities (World Bank 2007b). In the Philippines, low investment rates reflect a variety of problems including inadequate infrastructure, poor governance and corruption, and market failures that keep the industrial base narrow (ADB 2007b). Firms in Indonesia cite macroeconomic instability, economic and regulatory policy uncertainty, and corruption as primary constraints to business, followed by taxation, cost of financing, and labor issues (ADB 2005). Thailand is a best practice economy for starting a business and ranks high at 15 out of 178 economies in ease of doing business. But its ranking drops to 49 for employing workers, largely due to the cost of firing, which amounts to 54 weeks of wages (World Bank 2007c).

Labor market regulation

An important set of factors that influences employment opportunities are labor market regulations, which include employment protection

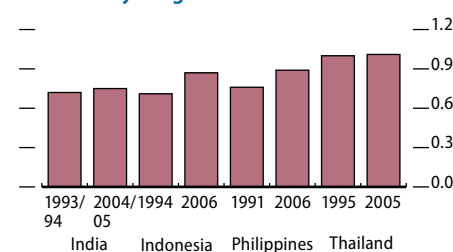
2.1.17 Education profile of employed young people



Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

2.1.18 Ratio of median wages of young women to young men



Source: Staff estimates based on data from labor force surveys.

[Click here for figure data](#)

2.1.2 Key findings

- **An appropriate policy and institutional atmosphere is required to create productive and decent employment opportunities for young people, whose share in the total population may soon fall from its peak in developing Asia.** Labor force survey data from India, Indonesia, Philippines, and Thailand show that uneducated youth and those with little work experience are the most vulnerable to high unemployment, informality, and low pay. They are the first to lose jobs in cyclical downturns. The young have suffered disproportionately in Indonesia and Thailand, where the Asian financial crisis destroyed jobs and recovery has been protracted. If young people are productively employed, they can generate higher growth and yield a “demographic dividend.”
- **Joblessness has increased, and competition from adults has become tougher.** Youth are at a disadvantage compared to adults, young women to young men, and rural youth to urban youth. In anticipation of higher returns to education, young people are spending longer years studying. But they face stiff competition from adults for limited job opportunities—youth employment elasticity of growth is low in India and negative in Indonesia and Thailand (Kapsos 2006). Manufacturing and services are absorbing larger numbers of youth in their prime age (20–29 years). Though some parts of services sector employment are highly productive, most are of poor quality. More than half the young workers are in the informal sector. Growth of formal sector employment remains constrained by a restrictive business environment, limited access to finance, and rigid labor regulations.
- **Transition from school to work has become difficult and costly, and returns to education have fallen for the young.** Low-quality education for poor students creates a vicious dynamic of low enrollment, high dropout rates, and low education attainment, which is often transmitted across generations. Training facilities that would allow the young to acquire the skills relevant to market needs are substandard. Lack of education drives the poor and the young toward low-productivity, services jobs. For the same levels of education, the gap between youth and adult wages has widened over time, and among young workers a gender bias persists in wages. This is partly due to higher demand among employers for an increased premium for experience. Yet a faster rise in the supply of educated youth than of employment opportunities has led to overqualification in employment.
- **A multipronged approach is needed to address Asia’s youth-employment demand and supply constraints beyond the labor market.** Easing obstacles for entrepreneurs is the key to creating more jobs. Sound economic management, an enabling business climate, and a flexible labor market will provide incentives for formal sector job creation. An improved system of education and targeted training can enhance the ability of workers, especially girls and the poorly educated.

legislation and minimum wages. These particular aspects of regulation are likely to affect young people more than other groups. Since, by virtue of their age, they are either new or recent labor market entrants, young people are more likely to be affected by employment protection legislation in as much as this impedes new hires. Similarly, they will likely be disproportionately represented among the low paid, and so may be more affected than other groups by minimum wage legislation. Other kinds of regulation, such as those on workplace health and safety, have a more age-neutral effect on workers of different ages.

In principle, minimum wages, required notice of separation, restrictions on hours of work, and severance payments could all help young workers. In principle, too, they could help employers, if they raise productivity, cut back on labor turnover, and reduce absenteeism. In practice, however, the issues are not so straightforward and the design of policy is difficult. The effects of both minimum wages and employment protection legislation are likely to be small simply because of the extensive informal sectors operating in the four countries.

A first and basic issue is about how easily labor markets lend themselves to regulation and the capacity for implementing regulations.

In countries with large informal sectors, such as the four countries under consideration in this chapter, enforcement of minimum wages has proven problematic. Between 11% and 31% of young employees and the self-employed in Indonesia reported earning less than the statutory minimum wage in 2002 (Sziraczki and Reerink 2004). In India, average daily earnings of casual workers in 2004/05 were 84% below the minimum wage (Mazumdar 2008).

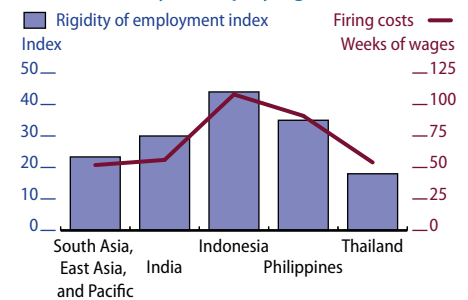
Even if the implementation of minimum wage legislation is possible and coverage widened, it may not actually improve outcomes at an aggregate level. Looking at a broad cross section of countries, Neumark and Wascher (2007) observe small or negative employment effects of minimum wages—estimates of teenage employment elasticity with respect to the minimum wage range from below -1 to above 0. If minimum wage regulations raise marginal costs, they will come at the expense of jobs. Murgai and Ravallion (2005) find that a guaranteed minimum wage policy in rural India brings limited poverty reduction, costing 3.7% of GDP to support the program through the year (with 90% wage cost and 10% nonwage cost). An untargeted rural transfer of the wage cost would have a much greater poverty impact.

Another well-known problem with regulations that protect workers who already have jobs is that they may work against job seekers or “outsiders,” reducing their employment opportunities and perpetuating disadvantage. Several developing countries provide a relatively high standard of protection to workers in the organized sector at the cost of those in the unorganized or informal economy (Pierre and Scarpetta 2007). Labor protection in India is inversely related to growth in manufacturing, employment, elasticity of labor demand, and entry of new firms, and has possibly benefited the rich more than the poor (Ahsan and Pagés 2007, Besley and Burgess 2004, Hasan et al. 2003, Kochar et al. 2006). Sugiyarto (2005) observes that labor market regulations have partly been responsible for slower employment growth in Indonesia. He finds that increases in real minimum wages exceeded productivity growth after the Asian crisis.

Economic and political instability harms mainly small enterprises, the major drivers of new job creation in developing countries. Figure 2.1.19 presents indicators of difficulties that firms face in employing workers. Businesses in the four countries face generally more severe conditions than in most of Asia. In Indonesia, a firm has to pay 2 years of pay on severance. India and Thailand also require more than 1 year of salary. If the costs of regulation cannot be absorbed by employers or offset by productivity gains, they are also likely to push economic activity underground or to encourage employers to find other ways of evading regulations. In India and the Philippines, for example, short-term employment contracts are often used to reduce benefit entitlements. So if there is a large pool of unemployed workers, as is the case for many low-skilled occupations, employers prefer to turn over workers quickly.

Tackling the disadvantages that young people face in the labor market through regulation seems likely to run into problems. Writing the rules is one thing; enforcing them is something completely different. And even if statutory regulations can be implemented honestly, a wide variety of evidence suggests that they may do unintended harm to those whom they

2.1.19 Difficulty in employing workers



Notes: The rigidity of employment index captures the difficulty of hiring a new worker, the restrictions on expanding or contracting the number of working hours, and the difficulty and expense of dismissing a worker. Firing costs are those entailed in making a worker redundant, expressed in weeks of wages. Higher values indicate more rigid regulations.

Source: World Bank, *Doing Business 2008* database, available: <http://www.doingbusiness.org>, downloaded 19 March 2008.

[Click here for figure data](#)

were intended to protect. Examining government regulations in the area of employment and social security laws, *Doing Business 2008* finds that young people and women lose out from rigid employment laws (World Bank 2007c). One way to increase prospects for youth employment is to allow for more flexible contracts that provide, for example, a trade-off between wages and length of service, along with a safety net for those who cannot find work (Basu and Maertens 2007).

Education and training

An alternative route to combating the constraints that the young face in the labor market is to invest in their human capital. A compelling attraction of this approach is that the gains of education and knowledge for the current generation (especially for girls) are likely to be transmitted to their children, promising enduring benefits across society. Investing in education of the young is about much more than hardware and building schools. Relevant and stimulating curricula are needed as are knowledgeable and passionate teachers. Equality of opportunity demands that the incentives faced by poor families are tipped in favor of education, given the high opportunity costs of keeping boys and girls of poor and disadvantaged families in school. In many countries, girls may need larger moral and financial support than boys. Policies that encourage school completion and early school-leavers to return to school should also target socially excluded and marginalized students from ethnic, tribal, and backward classes, since children from these groups frequently have a higher incidence of early dropout and are subsequently at risk of persistent unemployment or low-paid work.

Conditional cash transfer systems, which have been used to great effect in Latin America to promote education participation among low-income households, are one way of providing incentives for continuation of studies that merit serious attention. These systems provide cash transfers to households, conditional on school attendance by children and are based on means testing to determine eligibility. In Asia, successful examples of similar programs are Bangladesh's Food for Education initiative and India's Mid-day Meal scheme, both introduced during the 1990s to improve school participation through provision of meals to children, provided that they attend school.

The design of appropriate programs must of course take into account context and circumstances—"one size fits all" fits hardly anyone. In India and the Philippines, the emphasis needs to be on those at the bottom of the scale who receive little or no formal education, whereas in Indonesia and Thailand the attention may more fruitfully be aimed at maintaining enrollment beyond early childhood.

Other aspects of education reforms that would help build a productive labor force include standardization of curricula of national education systems across regions and schools, promotion of better achievements in general education, a good certification process, placement services by schools for faster school-to-work transition, and vocation-oriented secondary and tertiary education to generate a qualitative improvement in learning achievements. Closer partnership between industry and universities can help design tertiary curricula suitable for industry's needs.

Skills training

Beyond school, it is important to address the problem of mismatch between the skills of young workers and the emerging needs of the market. Young people who are unable to find jobs on the basis of schooling alone would benefit from appropriate skills-training programs. This is more likely to benefit those leaving the schooling system early and with low levels of achievement. India, for example, is revamping its youth employment programs through a new skills development initiative. Thailand, whose competitiveness was traditionally based on cheap labor, will need to shift weight and invest in a knowledge and skills base.

A “dual system” with work-based apprenticeship and classroom instruction has been tried in some developing countries. Germany offers a good example, through an education and training system that does well in promoting youth employment. Its ratio of youth to adult unemployment rates is about one to one, an achievement that is quite unusual even among industrial countries. Developing Asia could learn from specific design features of the German system. A critical ingredient is the strong involvement of employers in the provision of training, which ensures its labor market relevance. The German system guarantees equitable access to places, and its high (and recognized) quality means that participation does not carry the stigma associated with vocational education in many other countries (World Bank 2006b). In developing Asia, however, systems would have to be geared to ensure the inclusion of young people who are vulnerable to marginalization and exclusion. This may require meeting other basic needs, such as shelter and food, for which young trainees could help pay in kind.

The Philippines tries to overcome the above problem of access and equity by implementing a Ladderized Education Program and Training for Work Scholarship Project under its Technical and Vocational Education and Training system. The former provides flexible entry and exit in the education system and job opportunities at every exit, while the latter directly intervenes in the provision of training for highly needed skills. But as this system is not as deeply rooted in the business sector as Germany’s dual training approach, efforts to widen its acceptance within industry and services should be strengthened.

Active labor market policies or programs

Active labor market policies include measures such as job training and search assistance, remedial education, and direct job creation to help young people who are not employed or working in the informal economy find decent formal employment (for example, Betcherman et al. 2007). These policies largely fulfill a remedial role in correcting malfunctions in the education system and in labor markets. The main options usually involve skills training, support for youth business start-ups, and a combination of support services.

Employers place heavy demands on workers during recruitment, putting young workers, who have little or no experience, at a clear disadvantage. Labor market-based training, often combined with wage subsidy, is the most effective form of intervention for young people (O’Higgins 2001). Youth training programs have been quite successful in East and Southeast Asia. For example, in the Philippines, the

Working Youth Centers implemented by the Department of Labor and Employment have had a positive impact on the employment and wage prospects of participants (Stavreska 2006). But in India, an estimated 82.5 million youth need vocational training, which would cost 10% of GDP and generate additional income equivalent to 60% of GDP for current unemployable youth (TeamLease Services 2007).

Programs promoting business start-ups for young people are fairly common in East Asia. All six programs reviewed by Stavreska (2006) have had positive impacts. These include the Young Professional Entrepreneur Development program in Indonesia and the Farm Youth Development Program in the Philippines. The broader analysis of Betcherman et al. (2007) finds highly positive effects for such programs, although they lack potential for scaling up. India's Training of Rural Youth for Self-Employment scheme provides basic technical and entrepreneurial skills to the rural poor aged 18–35 years for self- or wage employment. At least 40% of the beneficiaries have to be women. The scheme has been only partly successful, because it is not well integrated with an overall strategy for self-employment, and the training fails to address the capacity or aptitudes of the trainees or the market demand for a particular skill (Mitra 2007).

Betcherman et al. (2007) find that guidance and counseling programs targeted toward economically disadvantaged young people are more successful than programs aimed at young people as a whole. Gender counseling, training, and placement services for young women combined with awareness creation for employers through mass media can help remove constraints faced by young women in the labor force. O'Higgins (2001) suggests that the quality of active labor market programs is likely to be higher if stakeholders are involved in their design and implementation.

Endnotes

- 1 Young men and women aged 15–24 are usually considered as “young people,” “youth,” and “the young,” interchangeably in this chapter; those aged 25 and above, “adults.” This follows internationally accepted definitions. In analyzing individual country data, however, other age groups, as available, are used.
- 2 See, for example, Quintini and Martin (2006). Note that the “duration of school to work transition” indicator calculated from cross-section data does not tell very much about the actual length of time it takes for young people to find work on leaving school for reasons discussed in O'Higgins (forthcoming). However, it does provide a relative indicator for comparison over time and across countries.
- 3 There has been much discussion of the definition of the informal sector. In official terms, the most important document is the Resolution on Informal Sector Employment agreed at the Fifteenth International Conference of Labour Statisticians in 1993 (ILO 1993). The resolution opts for the term employment in the “informal economy” since informal employment is not separate from regular employment. See also Henley et al. (2006) for a recent discussion.

References

- Adams, A.V. 2007. "The Role of Youth Skills Development in the Transition to Work: A Global Review." HDNCRY No. 5, Human Development Network Children and Youth Department, World Bank, Washington, DC.
- Ahsan, A. and C. Pagés. 2007. "Are All Labor Regulations Equal? Assessing the Effects of Job Security, Labor Dispute and Contract Labor Laws in India." Policy Research Working Paper No. 4259, World Bank, Washington, DC.
- Arze del Granado, F.J., W. Fengler, A. Ragatz, and E. Yavuz. 2007. "Investing in Indonesia's Education: Allocation, Equity and Efficiency of Public Expenditure." Policy Research Working Paper No. 4329, World Bank, Washington, DC.
- Asian Development Bank (ADB). 2005. *The Road to Recovery: Improving the Investment Climate in Indonesia*. Manila.
- . 2007a. *Asian Development Outlook 2007*. Manila.
- . 2007b. "Philippines: Critical Development Constraints." Country Diagnostics Studies, Economics and Research Department, Manila.
- Basu, K. and A. Maertens. 2007. "The Pattern and Causes of Economic Growth in India." *Oxford Review of Economic Policy*, Vol. 23, No. 2: 143-167.
- Besley, T. and R. Burgess. 2004. "Can Labor Regulation Hinder Economic Performance?" Evidence from India. *Quarterly Journal of Economics*, Vol. 119, No. 1: 91-134.
- Betcherman, G., M. Godfrey, S. Puerto, F. Rother, and A. Stavreska. 2007. "Global Inventory of Interventions to Support Young Workers: Synthesis Report." World Bank, Washington, DC.
- Bloom, D.E. and D. Canning. 2004. "Global Demographic Change: Dimensions and Economic Significance." NBER Working Paper No. 10817, National Bureau of Economic Research, Cambridge, Massachusetts.
- Bloom, D.E., D. Canning, L. Hu, Y. Liu, A. Mahal, and W. Yip. 2006. "Why Has China's Economy Taken Off Faster than India's?" Paper presented at the Pan Asia 2006 Conference, Stanford Center for International Development, 3 June.
- Bowers, N., A. Sonnet, and L. Bardone. 1999. "Giving Young People a Good Start: the Experience of OECD Countries." In *Preparing Youth for the 21st Century: The Transition from Education to the Labour Market*. Paris: Organisation for Economic Co-operation and Development.
- Fares, J., C.E. Montenegro, and P.F. Orazem. 2006. "How are Youth Faring in the Labor Market? Evidence from Around the World." Policy Research Working Paper No. 4071, World Bank Washington, DC.
- Government of India. 2007. "Selected Educational Statistics 2004-05." Ministry of Human Resources Development, New Delhi.
- Hasan, R., D. Mitra, and K. V. Ramaswamy. 2003. "Trade Reforms, Labor Regulations and Labor-Demand Elasticities: Empirical Evidence from India." NBER Working Paper No. 9879, National Bureau of Economic Research, Cambridge, Massachusetts.
- Henley, A., G.R. Arabsheibani, and F.G. Carneiro. 2006. "On Defining and Measuring the Informal Sector." Policy Research Working Paper No. 3866, World Bank, Washington, DC.
- International Labour Office (ILO). 1993. "Resolution concerning statistics of employment in the informal sector, adopted by the Fifteenth International Conference of Labour Statisticians." Geneva, January.
- . 2006. *Global Employment Trends for Youth*. Geneva.
- . 2007. "Youth Unemployment." Chapter 9 in *Key Indicators of the Labour Market*. Geneva.
- . 2008. *Global Employment Trends*. Geneva.

- International Monetary Fund (IMF). 2006. "What is the Demographic Dividend?" *Finance and Development*, Vol. 43, No. 3 (September). Washington, DC.
- Kapsos, S. 2006. "Employment intensity of growth: Trends and macroeconomic determinants." Chapter 4 in J. Felipe and R. Hasan (eds.), *Labor Markets in Asia: Issues and Perspectives*. London: Palgrave Macmillan for the Asian Development Bank.
- Kochar, K., U. Kumar, R. Rajan, A. Subramanian, and I. Tokatlidis. 2006. "India's Pattern of Development: What Happened, What Follows?" Working Paper No. WP/06/22, International Monetary Fund, Washington, DC.
- Lerman, R.I. 1997. "Meritocracy without Rising Inequality? Wage Rate Differences are Widening by Education and Narrowing by Gender and Race." *Economic Restructuring and the Job Market Series*, No. 2, The Urban Institute, Washington, DC.
- Mazumdar, D. 2008. "Dissecting India's Unorganised Sector." *Economic and Political Weekly*, Vol. 43, No. 6, 9–15 February.
- Mitra, A. 2007. "India: Non-formal Education." Country profile commissioned for the Education for All Global Monitoring Report 2008, Education for All by 2015: Will We Make It?, United Nations Educational, Scientific, and Cultural Organization, Paris.
- Munshi, K. and Rosenzweig, M. 2006. "Traditional Institutions Meet the Modern World: Caste, Gender and Schooling Choice in a Globalizing Economy." *American Economic Review*, Vol. 96, No. 4: 1225–1252.
- Murgai, R. and M. Ravallion. 2005. "Is a Guaranteed Wage a Good Anti-poverty Policy?" Policy Research Working Paper No. 3640, World Bank, Washington, DC.
- Neal, D. 1999. "The Complexity of Job Mobility Among Young Men." *Journal of Labor Economics*, Vol. 17, No. 2: 237–261.
- Neumark, D. and W. Wascher. 2007. "Minimum Wages, Earned Income Tax Credit, and Employment: Evidence from the Post-Welfare Reform Era." NBER Working Paper No. 12915, National Bureau of Economic Research, Cambridge, Massachusetts.
- O'Higgins, N. 2001. *Youth Unemployment and Employment Policy: A Global Perspective*. Geneva: International Labour Organization.
- . Forthcoming. "Guide to the School-to-Work Transition in Developing and Transition Countries." Paper presented at the IZA/World Bank Conference on Employment and Development, Rabat, Morocco, 5–6 May 2008.
- Pierre, G. and S. Scarpetta. 2007. "How Labor Market Policies Can Combine Workers' Protection with Job Creation: A Partial Review of Some Key Issues and Policy Options." SP Discussion Paper No. 0716, Social Protection and Labor, World Bank, Washington, DC.
- Pratham. 2008. "Annual Status of Education Report (Rural) 2007." Mumbai.
- Quintini, G. and S. Martin. 2006. "Starting Well or Losing Their Way? The Position of Youth in the Labour Market in OECD Countries." *Social, Employment and Migration Working Papers* No. 39, Organisation for Economic Co-operation and Development, Paris.
- Quisumbing, A.R., and S. McNiven. 2005. "Migration and the Rural-Urban Continuum: Evidence from the Rural Philippines." Discussion Paper No. 197, Food Consumption and Nutrition Division of the International Food Policy Research Institute, Washington, DC.
- Rees, A. 1986. "An Essay on Youth Joblessness." *Journal of Economic Literature*, Vol. 24, No. 2: 613–628.
- Ryan, P. 2001. "The School-to-Work Transition: A Cross-National Perspective." *Journal of Economic Literature*, Vol. 39, No. 1: 34–92.

- Stavreska, A. 2006. "Interventions to Support Young Workers in South, East Asia and the Pacific." Regional Report for the Youth Employment Inventory, World Bank, Washington, DC.
- Sugiyarto, G. 2005. "Creating Better and More Jobs in Indonesia: A Blueprint for Policy Action." ERD Policy Brief No. 43, Economics and Research Department, Asian Development Bank, Manila.
- Sziraczki, G. and A. Reerink. 2004. "Report of Survey on the School-to-Work Transition in Indonesia." GENPROM Working Paper No. 14, Series on Gender in the Life Cycle, Gender Promotion Programme, International Labour Office, Geneva.
- TeamLease Services. "India Labour Report 2007." Bangalore.
- Topel, R.H. and M.P. Ward. 1992. "Job Mobility and the Careers of Young Men." *Quarterly Journal of Economics*, Vol. 107, No. 2: 439-479.
- United Nations (UN). 2007. *World Youth Report 2007: Young People's Transition to Adulthood: Progress and Challenges*. New York.
- United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP). 2007. "Asia-Pacific's Demographic Dividend—A Once in a Lifetime Opportunity." A backgrounder in *Economic and Social Survey of Asia and the Pacific 2007, Surging Ahead in Uncertain Times*. Bangkok.
- World Bank. 2003. "Out-of-School Children and Youth in the Philippines: Issues and Opportunities." Report No. 23132-PH, Washington, DC.
- . 2004. "Country Strategy for India." Washington, DC.
- . 2006a. *World Development Report 2007: Development and the Next Generation*. Washington, DC.
- . 2006b. "Fiscal Efficiency and Vocational Education in the EU8 Countries." Washington, DC.
- . 2007a. "Country Assistance Strategy Progress Report for the Republic of the Philippines." Report No. 485-PH, Washington, DC.
- . 2007b. *Doing Business in South Asia*. Washington, DC.
- . 2007c. *Doing Business 2008*. Washington, DC.

Asia's skills crisis

Introduction

Developing Asia has a serious skills gap, as well illustrated by the topic's growing frequency in news headlines. The *Financial Times* in early 2008 suggested that Asia's growing skills shortages may compel multinational companies operating in the region to pay Western-level salaries within 5 years to skilled scientists, information and communications technology (ICT) specialists, and engineers—a staggering claim once one considers the enormous income gap between the two regions. A few days later *The Economist* highlighted an unfolding crisis in the Indian army of a shortage of 11,000 officers, almost a quarter of requirements—at first glance, a puzzling situation in a country with a billion-plus population and a large pool of unemployed youth. But a closer inspection reveals that there is no puzzle: India has only a small pool of well-educated young workers, and salary offers from the country's booming private sector are often higher than those from the armed forces.

Ironically, developing Asia, home to over two fifths of the global population, is—in a relatively new phenomenon—suffering from a shortage of qualified workers. This is not limited to a few hot spots, but is prevalent enough to present a genuine risk to the region's long-run growth. Asia lacks a wide class of occupational skills relevant to a modern economy, and areas that are critical to growth are seeing large and growing mismatches between the skills that employers need and the skills that employees have. Such imbalances are particularly evident among professional groups, including accountants, airline pilots, business managers, engineers, lawyers, medical doctors, scientists, and software specialists.

The dearth of skills is manifesting itself in a variety of ways: productivity losses and idle capital; rising wage costs; increased turnover of sought-after workers; and higher placement and training costs for new workers. Business efficiency suffers as a result, and if problems are sufficiently widespread, whole industries and even entire economies may suffer.

Asia's skills gap has been widened by increasingly fierce global competition for skills, stimulated both by technological change and by a steady reduction in barriers to immigration. (See the chapter *Asian workers on the move*, also in Part 2.) Highly qualified professionals

in particular have benefited from these trends as industrial countries welcome them with open arms. Although this “brain drain” is hardly new to the region, the skills shortage confronting it has added a new, more urgent dimension to this trend.

This chapter is organized as follows. The next section, *Anatomy of a crisis*, looks at the causes, consequences, and likely future trends in developing Asia’s scarcity of skills. The shortfall stems from Asia’s economic success, which has fueled the demand for new skills-intensive goods and services. If not resolved, it may turn into an economywide bottleneck, seriously holding back growth. The largely structural nature of the problem precludes any “quick fix.”

Shortages at the sharp end sifts through survey data of employer perceptions of skills shortages in the region. It is, after all, corporate Asia that suffers the most—and so is most knowledgeable. These perceptions confirm that lack of qualified workers is indeed a large and growing business constraint across Asia and all industries. They also show that the scarcity is more pronounced for higher-skills levels, emphasizing that it is the skills that are in short supply, not workers.

Next, *Skills shortages in four Asian countries* looks at the experiences of the People’s Republic of China (PRC), India, Malaysia, and Thailand—two giants and two middle-income economies. With its combination of explosive economic growth and an education system that can fail to provide the types of workers that the economy now needs, the PRC epitomizes Asia’s talent crisis. In India, a looming shortage of talent is being fueled by the remarkable export success of the country’s ICT sector. In both Malaysia and Thailand, the failure of the education system to produce enough skilled people is seriously hampering the countries’ progression to higher value-added industries and activities.

The final section, *Easing the bottleneck*, looks at policy options, including short-term measures, such as greater openness to skilled foreign workers. More fundamentally though, stronger education systems need to be constructed, which is inevitably a long-term process. Allowing a greater role for the private sector must be an integral part of any changes to the education system, but governments will continue to play a key role. This section also contains some real-world examples of policies that help mitigate skills shortages.

Anatomy of a crisis

“Skill” is a nebulous concept and difficult to define tightly. Shah and Burke (2005) propose that “a skill is an ability to perform a productive task at a certain level of competence.” Skills are akin to the stock of knowledge and experience necessary to perform a productive task. Persons who lack them may be unable to carry out specific tasks, or will be less productive at them. By definition, skills shortages occur when supply fails to keep pace with demand.

Causes

Developing Asia’s rapid income growth has spawned demand for totally new goods and services. As incomes rise, consumers typically seek what they could not afford before—financial and legal services, for example,

and better health care. And Asia's deepening integration in the global economy has gone hand in hand with growing sophistication in the goods it produces and then sells abroad (ADB 2007a), which requires a larger pool of skills.

The emerging skills gap is largely a symptom of Asia's economic success. The acute shortage of airline pilots in the PRC, for example, is a direct consequence of the explosive growth in the demand for air travel in that country, itself a function of fast-climbing incomes. Other factors are at play, too, including a steady convergence toward international norms and practices for environmental standards, corporate governance, and financial regulation. This "upgrading" raises the demand for professional managers and specialists.

Supply-side factors are also operative. Above all, most education systems have not geared themselves to emerging needs and are exacerbating mismatches. The region's universities have to do more than produce high numbers of graduates—they have to turn out graduates who can perform the functions and tasks required by rapidly modernizing economies.

Consequences

The immediate symptoms of the skills gap include hard-to-fill vacancies, high staff turnover, and wage inflation, and reflect a natural response when demand for particular skills lags their supply. Take the example of the ICT industry. Firms will compete vigorously to attract and retain scarce systems analysts and software developers. This bids up wages, and ICT professionals can increasingly "hop" between firms for a higher salary. Furthermore, firms may find it increasingly difficult to fill vacant positions, settling for fewer and less-experienced professionals than they need. If this process goes on too long, it may crimp business and investment plans, leading to a fall in productivity, efficiency, and competitiveness at the firm level.

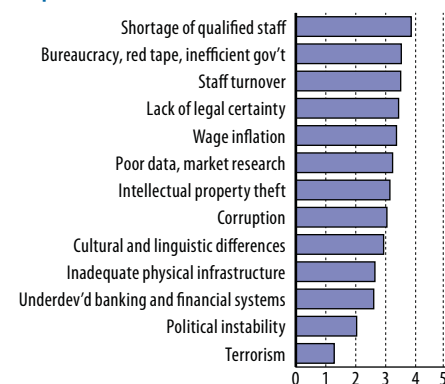
Firms can sometimes get around any shortfall in skills by investing more in local workers and developing skills themselves. For example, when Microsoft outsourced part of its web-based technical support to one of its joint ventures in the PRC, it hired 10 native-English speakers from the US to teach local workers about US e-mail protocol and writing style (McKinsey Global Institute 2005). However, many skills require long periods of more formal education. Nor is it likely that firms in tight markets for skills have any incentive to invest in job-hopping workers.

Although firms are in the front line of the skills shortage, the effects can extend to the economy as a whole. Skills constrictions can retard economic growth in just the same way as weak infrastructure. This is particularly true when they surface in the most dynamic sectors that might, for example, be important sources of foreign exchange (such as ICT in India), or that have important forward linkages to other sectors (such as accountancy, legal services, or airline transportation).

Future trends

Shortages of workers and skills are typical when growth accelerates. In order to meet the strong demand for goods and services at those times, firms may wish to have some workers in reserve, including skilled

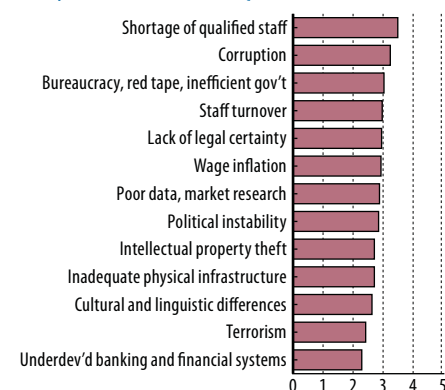
2.2.1 Top business concerns, People's Republic of China, Dec 2006–Jan 2007



1 = not an issue; 5 = serious issue.

Source: Staff estimates based on EIU (2007).

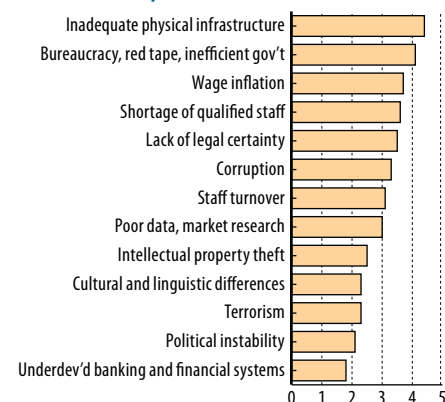
2.2.2 Top business concerns, Southeast Asia, Dec 2006–Jan 2007



1 = not an issue; 5 = serious issue.

Source: Staff estimates based on EIU (2007).

2.2.3 Top business concerns, India, Dec 2006–Jan 2007



1 = not an issue; 5 = serious issue.

Source: Staff estimates based on EIU (2007).

workers, accentuating the demand. It seems likely that exceptionally robust growth both in developing Asia and in the broader global economy in 2002–2007 exacerbated the situation. Yet there is a significant long-term component to the skills shortages that reflects the fast economic catch-up of the region and its rapid, ongoing structural transformation. In addition, most of Asia's education systems are ill-equipped to meet modern labor force requirements and many of them have for long been identified as possible bottlenecks on growth and economic modernization (ADB 2007b).

Looking ahead, the prospect of a transition toward older populations, which will begin in the PRC within the next few years and which is already well under way in the rest of East Asia, as well as of growing premiums on skills- and knowledge-based activities, suggest that the skills gap could become wider and more costly. Given the long lead times involved, policy makers would do well to consider solutions now.

Shortages at the sharp end

The previous sections have given a bird's-eye view of the skills gap in developing Asia. But how is the effect felt “on the ground,” where shortages above all represent a practical problem plaguing the everyday operations and investment plans of Asian companies? It is helpful to listen to the voice of corporate Asia to get a feel for the dimensions and depth of the impact. That voice suggests that it is the highly specialized, professional occupations that lie at the heart of Asia's skills shortage.

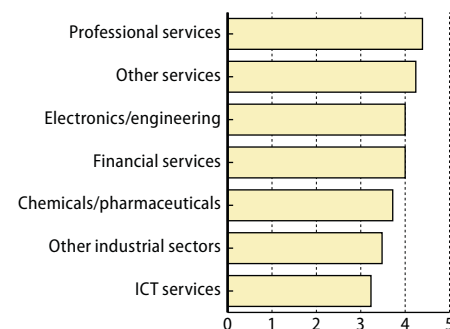
Three firm-level surveys that pick up this voice have been carried out in the last couple of years, two by the Economist Intelligence Unit (EIU) and one by the World Bank. The surveys had the broad aim of identifying the major obstacles to doing business in the region, and provide a partial—but revealing—profile.

Asia Business Outlook Survey 2007

The EIU carried out its first Asia Business Outlook Survey in December 2006 and January 2007. The survey aimed to identify companies' performance, business prospects, and key challenges. The respondents were senior executives of 241 member companies of the EIU's Corporate Network in Asia, in seven different industries: about 20% of respondents were in chemicals/pharmaceuticals; 20% in other services; 18% in other industrial sectors; 12% in financial services; 12% in professional services; 10% in ICT services; and 8% in electronics/engineering.

The respondents were asked to identify and rank their business concerns in three “regions” from a list of 13 major issues, ranging from terrorism to inadequate physical infrastructure to shortage of qualified staff. The regions were PRC, India, and Southeast Asia (Indonesia, Malaysia, Philippines, Singapore, Thailand, and Viet Nam). The survey results indicated that the last issue was the top business concern among the responding firms in the PRC and Southeast Asia, and the fourth-greatest concern in India (Figures 2.2.1, 2.2.2, and 2.2.3 above). Two issues relating to staff shortages, namely wage inflation and staff turnover, also ranked high in all three regions. These results are consistent with the view that finding and keeping qualified workers is a daunting challenge for corporate Asia.

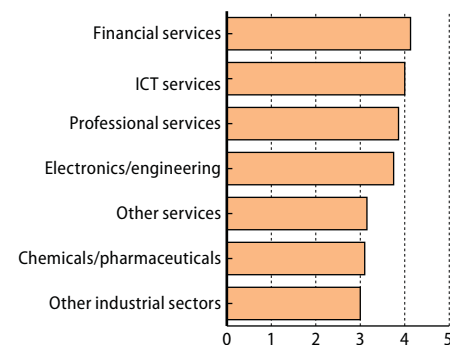
2.2.4 Shortage of qualified staff as an issue, People's Republic of China, Dec 2006–Jan 2007



1 = not an issue; 5 = serious issue.

Source: Staff estimates based on EIU (2007).

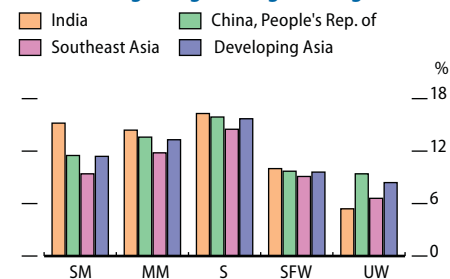
2.2.5 Shortage of qualified staff as an issue, Southeast Asia, Dec 2006–Jan 2007



1 = not an issue; 5 = serious issue.

Source: Staff estimates based on EIU (2007).

2.2.6 Average wage change during 2007



MM = middle managers; S = specialists (finance, ICT); SFW = skilled factory workers; SM = senior managers; UW = unskilled workers.

Source: EIU (2008).

Firms in the same seven industries in the PRC and Southeast Asia were asked whether shortages of qualified staff represented a serious business issue. The survey results showed that no industry was immune from these problems (Figures 2.2.4 and 2.2.5), suggesting that constraints cut across sectors as well as countries.

Asia Business Outlook Survey 2008

The EIU's second Asia Business Outlook Survey was conducted in December 2007. In addition to many of the earlier questions, this survey asked firms how much wages had risen during 2007 for different types of workers. A clear pattern emerged across all three regions: specialist workers experienced the biggest pay increase and unskilled workers the lowest (Figure 2.2.6). Overall, these data lend further support to the notion that Asia's labor gap is more pronounced in high-skill occupations. In addition to suggesting possible shortages, these findings are consistent with technological change that favors productivity gains by skilled workers.

Firms were also asked whether shortages of particular types of workers constituted a serious business constraint. Again, a clear pattern emerged (Figures 2.2.7, 2.2.8, and 2.2.9): staff shortages were a much bigger problem among senior managers, middle managers, and specialist professionals than among skilled factory workers and unskilled workers. The point bears repeating: Asia is suffering from a shortage of skills, not a shortage of workers.

World Bank Enterprise Surveys

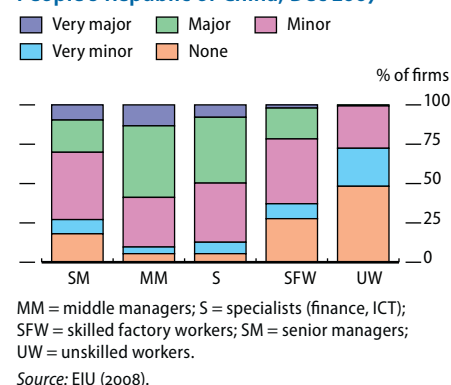
World Bank Enterprise Surveys (WBESs) collect firm-level data on the business environment, on various business obstacles as perceived by firms, and on some productivity measures. They are an integral component of the World Bank's Investment Climate Survey research program, which seeks to assess the investment climate and identify significant firm-level constraints to investment. The WBESs cover manufacturing firms mainly and certain services subsectors such as ICT and tourism. Sample sizes for recent WBESs range from 250 to 1,500 firms. First conducted in 2002, the surveys now cover slightly more than 100 countries, including PRC, India, Malaysia, and Thailand.

In the case of the PRC, separate WBESs were carried out for manufacturing and services, both in 2002. Manufacturing firms perceive inadequate skills and education of workers to be the fourth most serious obstacle to doing business, and services, third, out of 17 potential obstacles (Figures 2.2.10 and 2.2.11).

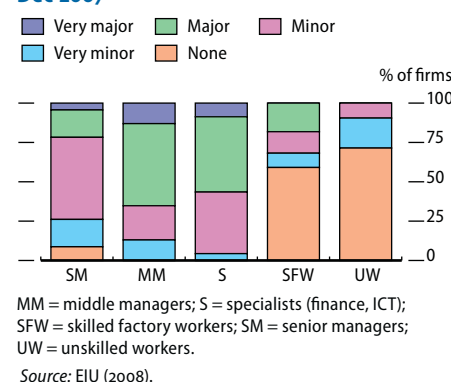
WBESs of Indian manufacturing firms were carried out in 2002 and 2005. The results suggest that, although skills shortages are a significant business constraint for manufacturing in India, it is a less pressing issue than in the PRC (Figures 2.2.12 and 2.2.13). The results of the 2006 WBES for India's ICT sector confirm that skills shortages are less severe in India than in the PRC, not only in manufacturing but also in services (Figure 2.2.14). These findings broadly corroborate those in the EIU surveys.

The 2006 WBES of India's ICT sector also provides some other information relevant to skills diagnostics. Over the period 2003–2006,

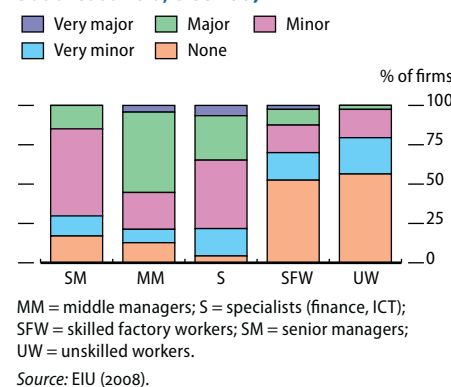
2.2.7 Staff shortage as a constraint, People's Republic of China, Dec 2007



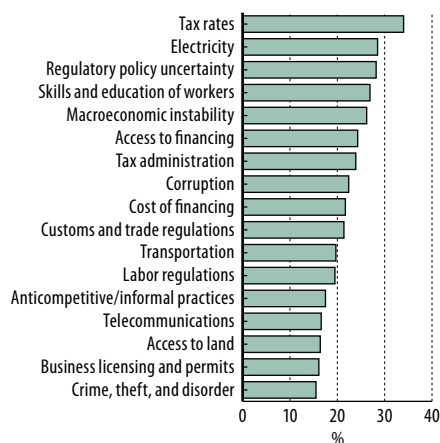
2.2.8 Staff shortage as a constraint, India, Dec 2007



2.2.9 Staff shortage as a constraint, Southeast Asia, Dec 2007



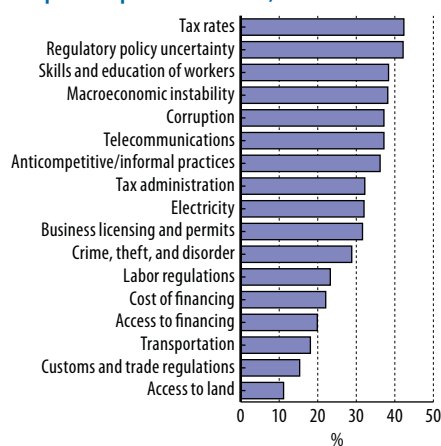
2.2.10 Share of firms perceiving an issue as a major or very severe obstacle in manufacturing, People's Republic of China, 2002



Source: Staff estimates based on World Bank (2002).

[Click here for figure data](#)

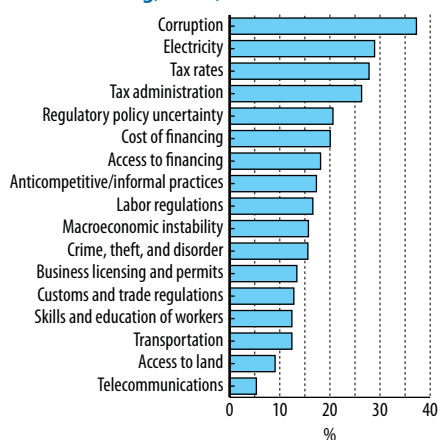
2.2.11 Share of firms perceiving an issue as a major or very severe obstacle in services, People's Republic of China, 2002



Source: Staff estimates based on World Bank (2002).

[Click here for figure data](#)

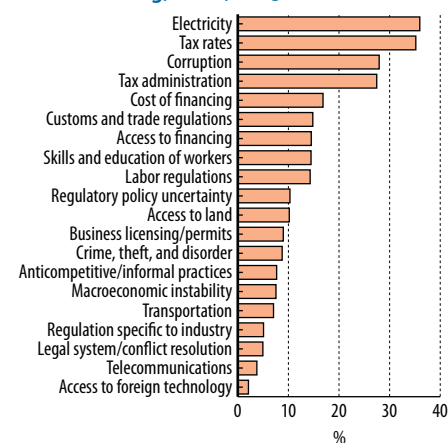
2.2.12 Share of firms perceiving an issue as a major or very severe obstacle in manufacturing, India, 2002



Source: Staff estimates based on World Bank (2002).

[Click here for figure data](#)

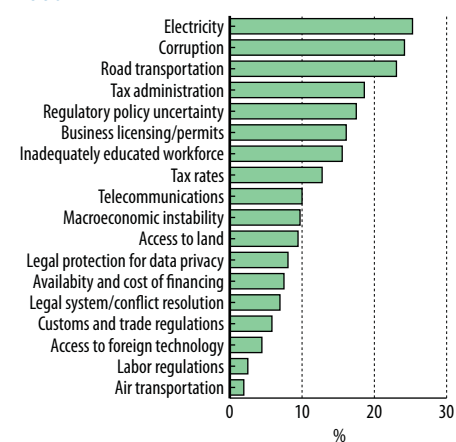
2.2.13 Share of firms perceiving an issue as a major or very severe obstacle in manufacturing, India, 2005



Source: Staff estimates based on World Bank (2005a).

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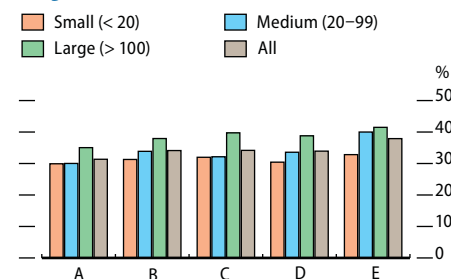
2.2.14 Share of firms perceiving an issue as a major or very severe obstacle in ICT, India, 2006



Source: Staff estimates based on World Bank (2006).

[Click here for figure data](#)

2.2.15 Average wage change in ICT, India, 2003–2006



A = basic computer skills; B = standard office software; C = industry specific software; D = hardware and maintenance; E = programming and application or system architecture.

Note: Number in parentheses indicates the number of workers in a firm.

Source: Staff estimates based on World Bank (2006).

[Click here for figure data](#)

nominal wages rose by 30% or more for all types of ICT workers, providing indirect evidence of a skills shortage in ICT (Figure 2.2.15). Survey results also indicate that Indian ICT firms are experiencing a widespread shortage of workers with the required skills (Figure 2.2.16). Yet as filling vacancies does not pose a major challenge for Indian ICT firms (Figure 2.2.17), the evidence of a skills shortage in this sector is mixed.

WBESs were carried out for manufacturing in Malaysia and Thailand in 2003 and 2004, respectively. Manufacturers in Malaysia pointed to inadequate skills and education of workers as the top business obstacle, while those in Thailand put it second. The results support the view that in both these middle-income developing countries a lack of skills is impeding the migration of industry into more technologically sophisticated industries (Figures 2.2.18 and 2.2.19).

WBES data also provide some information about whether skills shortages are limited to a few specific types of firms—e.g., large, foreign multinationals—or are of a more general nature. Survey respondents are classified in terms of foreign versus domestic ownership, size (as measured by number of employees), and whether they are exporters or not. The results of the 2002 WBES of PRC manufacturing suggest that skills constraints affect all types of firms (Figure 2.2.20).

Skills shortages in four Asian countries

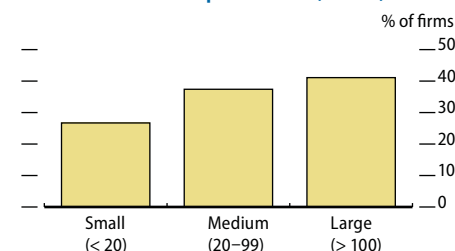
Skills shortages appear across developing Asia, and feature certain common drivers, such as globalization and technological progress. Nevertheless, there are also important differences. To see a more accurate picture of the challenges facing each country, it is helpful to look at experiences at this level. This section explores those of four regional countries—PRC, India, Malaysia, and Thailand. The PRC and India have been selected for closer scrutiny on the basis of their global and regional economic importance as well as their phenomenal growth and rapid integration into the world economy. Malaysia and Thailand offer examples of middle-income economies that are endeavoring to move further up the value chain.

People's Republic of China

Perhaps more than any other country, the PRC epitomizes developing Asia's skills crisis. Explosive economic growth, accompanied by rapid structural transformation and industrial technological upgrading, has fueled an unrelenting demand for skills. Demand for new services has added to this pressure. For example, income growth has led to surging demand for medical services, creating an acute shortage of doctors. According to *The Economist* (2007), the PRC had only around 4,000 general practitioners in 2007, but the Government's urban health care plan requires no less than 160,000. A burgeoning demand for legal services, financial services, and leisure is driving the demand for skilled professionals in those areas.

Blistering expansion of the corporate sector has been behind soaring investment, seen in factories, machines, and equipment, and in the professionals and specialists required to run them. The ability to compete successfully in markets abroad and to provide shareholder value requires

2.2.16 Share of ICT firms reporting shortage of workers with required skills, India, 2006

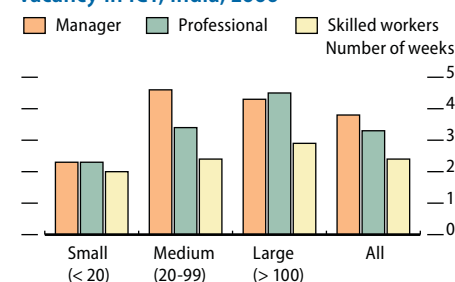


Note: Number in parentheses indicates the number of workers in a firm.

Source: Staff estimates based on World Bank (2006).

[Click here for figure data](#)

2.2.17 Weeks needed to fill most recent vacancy in ICT, India, 2006

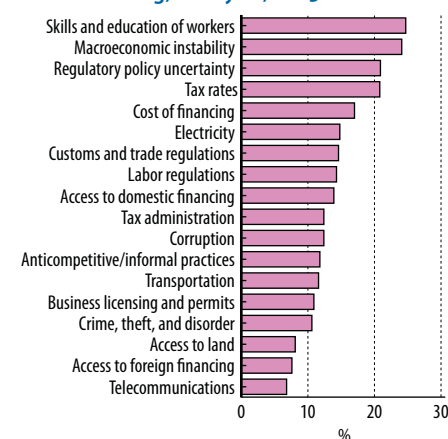


Note: Number in parentheses indicates the number of workers in a firm.

Source: Staff estimates based on World Bank (2006).

[Click here for figure data](#)

2.2.18 Share of firms perceiving an issue as a major or very severe obstacle in manufacturing, Malaysia, 2003



Source: World Bank (2005b).

[Click here for figure data](#)

that businesses, whether domestic or foreign owned, in the PRC meet demanding production, logistical, safety, and corporate governance standards, which requires a large pool of higher- and middle-level staff.

While the root cause of the PRC's skills crisis lies in the leap in demand for skills, the education system has failed to keep pace. The system's main problem has been one of failing to produce the right kind of graduates rather than too few of them. For example, in 2005, 3.1 million students graduated from its universities, compared with only 1.3 million in the US. In the same year, the PRC produced nearly 10 times as many engineering graduates as the US—over 600,000 versus only 70,000. One would expect this flow of graduates to be adding to the large stock of young professionals (9.6 million in 2003) with significant work experience. The catch is that only a small share of this seemingly abundant “talent pool” is, indeed, talented enough.

The McKinsey Global Institute (2005) provides an in-depth look at this failure of quality. According to its study, fewer than 10% of graduates who are candidates for jobs at foreign multinational companies have the right skills and qualifications to work there. Poor English is the main shortcoming, but others, such as engineering graduates who are well versed in theory but unequipped with practical problem-solving skills, is another. This matters not only for multinationals themselves but also now for the growing number of domestic companies that are trying to emulate and compete with multinationals and that harbor ambitions to become world-class companies.

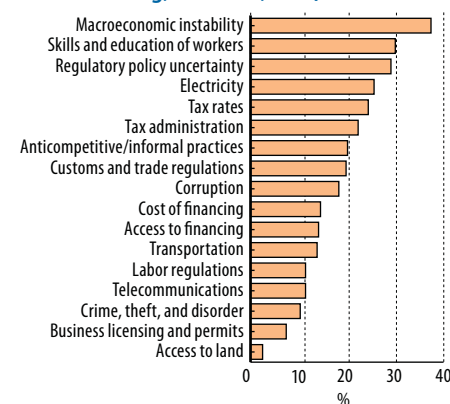
The combination of the sheer scale of the PRC's skills crisis and its largely structural nature suggests that it may constrain corporate ambitions for years to come. Skyrocketing demand for professional and managerial skills is likely to test the skills-producing capacity of even a world-class education system, and building such a system—or even a responsive one—is inevitably a long-term process for the PRC. In the meantime, the country's attempt to plug its skills gap using foreign workers is likely to have spillover effects, exacerbating skills shortages elsewhere in Asia. (Policy options for the four countries, and developing Asia generally, are given in the section *Easing the bottleneck*, below.)

India

Many of the same structural factors that are causing skills shortages in the PRC are also seen in this country: India's skills gap is a by-product of its economic success; of corporate governance changes (particularly the growing role of the private sector); and of globalization (especially foreign demand for ICT services).

But India's skills gap is also different. For one, it is expecting a demographic dividend whereas PRC is facing aging problems of rich-world proportions. In addition, some (admittedly tiny) segments of the Indian education system are better equipped to produce world-class professional workers. Networks for top establishments such as the Indian Institute of Management and the Indian Institute of Technology turn out world-class managerial and technological professionals that are in high demand both in India and abroad. Although there is a huge gulf between these two bodies and Indian universities in general, where the relevance and quality of education are still poor—and indeed, India's skills and

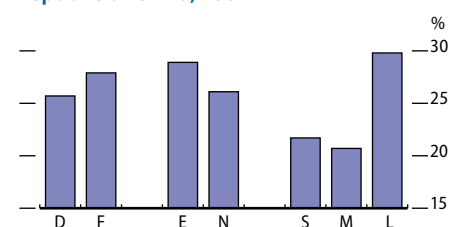
2.2.19 Share of firms perceiving an issue as a major or very severe obstacle in manufacturing, Thailand, 2004



Source: Staff estimates based on World Bank (2004).

[Click here for figure data](#)

2.2.20 Share of firms perceiving inadequate skills and education as a major or very severe obstacle in manufacturing, People's Republic of China, 2002



D = domestic; E = exporter; F = foreign; L = large (> 100); M = medium (20–99); N = nonexporter; S = small (< 20).

Note: Number in parentheses indicates the number of workers in a firm.

Source: Staff estimates based on World Bank (2002).

[Click here for figure data](#)

labor shortage problems can be traced back to failures in the delivery of adequate primary schooling—the country has the advantage of hands-on experience of designing institutions and curricula that meet the changing needs of the market.

India's success in training a pool of able, qualified engineers and managers with English-language skills has helped position India's ICT and business process outsourcing (BPO) industries as global leaders. The National Association of Software and Service Companies (NASSCOM) and McKinsey estimate that in 2005 the country accounted for 28% of ICT and BPO skilled workers among 28 low-cost countries with significant potential in the two industries. But to maintain its edge, India will require a 2.3 million-strong ICT and BPO workforce by 2010. Current projections suggest a likely deficit of 500,000 such workers, foreshadowing a possible contraction in global market share (NASSCOM-McKinsey 2005).

Though India has a few glittering, world-class education institutions, it also has many more higher education establishments that fail to equip students with the skills demanded by the market. Only 25% of engineering graduates and 10–15% of general graduates have the skills and qualifications for working in the ICT and BPO industries (NASSCOM-McKinsey 2005). From a microeconomic perspective, the skills gap matters because it may slow or prevent Indian ICT and BPO firms from moving into higher value-added segments and activities; from a macroeconomic perspective, it suggests that these two industries will be unable to keep up their frenetic pace of expansion. Ironically, they account for a much larger share of GDP (4.5%) than of the total labor force (0.15%) (ADB 2007a), yet it may well be constraints in the labor market that hold them back.

Malaysia and Thailand

Malaysia and Thailand are more advanced along the economic development curve than the PRC and India: they have higher income and productivity levels, and have already completed important phases of the transition to modern industrial and services economies. Equally, their pace of growth is more sedate. Yet the two Southeast Asian nations also suffer from skills shortages, partly because competition from cheaper locations (including the two giants) is compelling them to move further up the industrial technological ladder and into modern services activities. An important factor in their skills gaps is that neither country has invested adequately to ensure that education is relevant.

In Malaysia, the constraint is as much quantity as quality. Given its relatively small population and labor force, Malaysia has quite a large and complex economy. But it has been unable to supply skills to keep pace with demand because graduate numbers are low, and even among these people, few have the right blend of skills. Udomsaph and Zeufack (2006) observe that the enrollment and completion rate for higher education in Malaysia is substantially lower than in countries at similar income levels. The same study found that a university education brought about a 25% increase in hourly wages relative to a high school education, which is far higher than the wage premium in industrial countries. In another study, Thangavelu and Hu (2006) note that Malaysian graduates tend to have

weak skills in precisely those areas most needed by the type of knowledge-based economy to which Malaysia is directing its efforts to becoming.

Thailand does not suffer from this quantitative graduate shortfall. In fact, the tertiary education completion rate is slightly above the norm for countries at similar income levels. But there, too, serious quality problems mean that a large number of university graduates does not translate into an adequate supply of managerial and technical workers. According to Udomsaph and Zeufack (2006), no less than 60% of managers in Thailand rate the English language skills of their local professional workforce as poor, and 41% do so for ICT skills. Despite quality gaps, as in Malaysia university graduates can still command large wage premiums. The same study finds that university education led to a 35% increase in hourly wages relative to a high school education.

The tertiary education systems of both these middle-income countries have done a poor job at producing graduates with relevant skills. The experiences of both show that while structural change and technological progress can lead to skills shortages, causation can also be in the opposite direction. The experiences of Ireland in successfully addressing the skills gap in the context of large FDI inflows may be particularly relevant for these two countries (Box 2.2.1).

2.2.1 Aligning the tertiary education system with the needs of industry: Policy lessons from Ireland

Within a generation, rapid growth has transformed Ireland from a European laggard to a widely admired “Celtic tiger.” A critical ingredient in the economy’s remarkable success was large foreign direct investment (FDI), especially into high-tech industries. Yet by the 1990s, the economy was facing large and growing skills shortages. In particular, the number of science and engineering graduates was insufficient to meet the demands of an increasingly sophisticated economy.

The central component of Ireland’s response to the skills shortage was to expand its supply of science and engineering graduates by realigning its education system to the changing requirements of industry. Specifically, the Government adopted the northern European model of higher education, which recognizes the need for both technical and traditional university education. As a consequence, the share of tertiary students at traditional universities fell from 75% in 1965 to 54% by the late 1990s; at the same time, the share of tertiary students in vocational and technological education rose from 2% to 37%.

Ireland’s tertiary education system has thus been transformed into one that places equal emphasis on general education and on vocational and technological training. Besides this shift in tertiary education, the establishment of regional technical colleges and two national institutes of higher education has also helped build up the country’s pool of skilled workers.

The Industrial Development Agency, the main body in charge of attracting FDI, provides key inputs for education policy, reflecting the central importance of FDI in the economy. Those inputs help align the needs of foreign investors with the output of the education system. For example, concerned about a looming shortage of electronics graduates in the 1970s, the Agency lobbied the Government to expand the education capacity for technology-related courses. The result was a 40% increase in the number of engineering graduates and a 10-fold increase in the number of computer science graduates between 1978 and 1983.

The key lesson from the Irish experience is that a flexible and adaptable education policy is critical for aligning the education system to the needs of industry. Ireland has gone so far as to revamp the structure of its tertiary education system to produce graduates who have the skills required by industry. In fact, the Government explicitly incorporates industry’s requirements in formulating and implementing its education policy. The country’s successful reinvention of itself as a high-tech economy illustrates the large rewards of a demand-based education system that places a premium on the effectiveness of graduates in the workplace.

Source: Thangavelu and Hu (2006).

Easing the bottleneck

Evidence from a range of sources suggests that skills constrictions may soon limit growth potential across the region. Consequently, improving the supply and relevance of skills is a vital element in enhancing national competitiveness. As there are large private gains to be made from investment in skills, this is not a problem that calls for expansive public sector financial support. The role of government should lie more in resolving coordination failures and ensuring that the policy, regulatory, and other elements of the enabling environment create the right incentives to encourage the private sector to close the gap and reap the rewards. Of course, it will also remain government responsibility to ensure that primary and secondary school systems position the young so that they can benefit from higher education and training.

The following paragraphs outline some of the main measures for easing the skills bottleneck, in terms of steps to be taken now, and those for the long run.

Short-term policy options

While developing Asia's governments wait for their longer-term investments in higher education to bear fruit (as discussed in the next section), they can start with practical short-run measures to help ease constraints. Many of these aim to allow markets to do a better job at finding the supply–demand balance for skills.

Many frictions limit the supply of skills. Occupational associations, for example, may seek to restrict the entry of new entrants into their professions so as to limit competition and underpin members' salaries. For example, bar associations of most countries impose restrictions on lawyers that have qualified in other countries, and sometimes in other jurisdictions. Unwarranted occupational barriers—those that are not required to secure efficient and safe delivery of, say, medical services and that are intended to protect the position of “insiders”—also cut the pipeline of able university graduates who may otherwise have chosen to acquire the relevant skills. The first area of change would therefore be for governments to smooth these frictions. With political will, this can be initiated quite quickly.

Second, governments can pursue policies that make it easier for skilled foreign workers to work and live in their countries (see the chapter *Asian workers on the move*, also in Part 2). Richer economies embarked on this path some time ago, and most have immigration regimes favoring skilled, rather than unskilled, migrants. Singapore is a regional example of a country successfully overcoming scarcity of skills through policies that are targeted at foreign workers (Box 2.2.2).

Third, measures to stem or even reverse the “brain drain” would make sense. The central role of engineers and scientists from the PRC and India in the creation of Silicon Valley is well known. More recently, gifted financial professionals working in international centers of finance are now returning to Asia to help run sovereign wealth funds. Yet this is just the tip of the iceberg. There are literally millions of qualified Asian graduates who study abroad and who fail to return. Although opportunities created by economic growth will tempt some back, other incentives could be considered. The experience of Taipei, China shows what a more active approach can achieve (Box 2.2.3).

2.2.2 Importing foreign professionals: Singapore's foreign talent policy

The city-state of Singapore has become one of the richest countries in the world on the back of rapid export-oriented industrialization. A defining feature of the economy is its exceptional economic openness. Extremely low barriers to trade and investment have been key factors in the country's remarkable economic success.

However, what truly sets Singapore apart is its exceptional openness to foreign workers. Non-Singaporeans account for more than a quarter of those living in the country and around a third of the workforce. To some extent, this openness is driven by a structural gap between the workers required by the economy and the domestic workforce. This explains why Singapore welcomes not only skilled workers but also unskilled workers—the latter group in fact forming the vast majority of the foreign-born workforce.

Nevertheless, the Government makes a sharp distinction between skilled and unskilled workers from overseas, and the policy toward them is highly selective and biased toward those who can add to the country's pool of skills.

For example, it is far easier for those with higher degrees and qualifications to obtain permanent residence.

Also, the Government does much more than merely welcome foreign professionals who choose to come on their own. Rather, it has gone out of its way to recruit “foreign talent,” especially for the industries that it has targeted as promising.

There is general consensus that the contribution of skilled foreign workers has been positive and substantial. That contribution is especially evident in, for example, highly skills-intensive industries. For example, the young but thriving biotech industry would probably not even exist without foreigners, given the original lack of local biotech capability. Non-Singaporeans have also contributed substantially to another new but internationally competitive industry—private banking.

The main lesson from Singapore for other Asian countries is that competing for and welcoming foreign professionals can play a key role in resolving skills shortages. Singapore is extremely active in the increasingly global marketplace for such people, and succeeding.

These lessons are not only relevant for other high-income Asian countries with restrictive policies toward foreign workers, such as Japan and Korea, but also for middle-income countries, such as Malaysia and Thailand.

Fourth, even in the short run, it may be possible to increase the number and quality of tertiary graduates, and liberalizing the outbound higher education market can add to a larger and better pool of skills and talent. Malaysia and Singapore have pursued such policies in the past. It is of course important that graduates, especially if they receive public financial support, have incentives encouraging them to return. However, the number of students that can benefit from such programs will be limited not just by fiscal resources but also by students' language skills and the quality of their secondary school qualifications. A complementary approach is to open up the domestic tertiary education market to reputable foreign universities. This may improve access to relevant tertiary education at home.

A range of other options may also be worth considering. One would be to encourage the reentry of highly skilled women into the labor force. Others include raising the retirement age, and encouraging older professionals to remain in the workforce even after they have retired. In many Asian countries, retirement ages are probably set too low. Another option would be to provide fiscal incentives for firms to provide training and retraining for their workers. Such subsidies might be economically justified because firms will often have difficulty in capturing the benefits of such training as workers leave for new jobs.

However, for many types of skills, on-the-job training and retraining are no substitute for long periods of more formal education, as discussed in the next section.

2.2.3 From brain drain to brain gain: Lessons from Taipei, China

Taipei, China has not been immune to the developing-country problem of brain drain, or the loss of the well-educated and the highly skilled to industrial countries. What makes its experiences interesting is its substantial success in reversing the trend. Local-born emigrants who have returned home after studying and working overseas, especially in the United States, have made significant contributions to the island's economic growth. It is also true that growth itself encouraged many skilled Taipei, China emigrants to return home by creating new opportunities. This same "homecoming" trend is also now occurring in the fast-growing economies of the People's Republic of China and India.

What make the experiences of Taipei, China special are the authorities' active and systematic policies to attract the locally born currently living overseas, as well as the success of those policies. Both the authorities and the private sector began to tap emigrants' expertise and connections well before the economy had evolved to a point where many emigrants began to return home. In the 1970s, the National Youth Council was set up, to keep track of skilled emigrants and to link them with local businesses.

The Council would sometimes provide travel support and temporary jobs for those who returned home.

By far the best-known initiative is the Hsinchu Science-based Industrial Park. It was created in 1980 with the goal of replicating a Silicon Valley-like cluster of high-tech industries. The authorities provided financial incentives and infrastructure for companies to locate in the park; and to attract skilled emigrants, they provided subsidized Western-style housing and commercial services. The park has succeeded in attracting both firms and people, and has become a big commercial success. It has contributed to the strengthening of research and development capacity, to industrial restructuring from labor-intensive to technology-intensive sectors, and more generally, to economic growth.

The clear lesson is that active government policies can help reverse a brain drain, although economic growth will, for any economy, remain the biggest magnet for those intending to return for good. The combination of economic growth and a far-sighted policy of viewing emigrants as a valuable resource has enabled Taipei, China to turn a brain drain into a brain gain.

The long term: Education reform

Inevitably, the skills gap cannot be closed without the lengthy and costly process of building a strong, higher education system capable of providing the qualifications required by a modernizing economy, yet in most developing Asian countries, the university system is failing to produce enough graduates with the relevant skills. Although the dearth of skills is immediate, and the results of education reform are distant, failure to make this reform—starting now—would extend a short-run, solvable issue into a long-term, hard-to-eradicate failure.

Although the development of a tertiary education sector should serve multiple societal goals, some of which will transcend business and economic needs, addressing the skills gap will require deregulation and liberalization of the market for higher education. This approach will likely increase quantity and improve quality by fostering competition. The private sector should be allowed greater scope to meet expanding tertiary education needs, sparing public sector resources for other needs (including financial support for students who do not have the means to support their own education or who cannot access other sources of funding). It will, however, be crucial for private universities to be able to levy fees, thus allowing them an adequate return on their capital investment. Box 2.2.4 offers a good example of how private sector provision of tertiary education can produce industry-relevant graduates. Box 2.2.5 suggests that even more limited forms of private sector involvement can be useful in producing such workers.

Clear advantages arise if developing Asia opens its higher education

2.2.4 Private sector incubation of skill-intensive universities: Pohang University of Science and Technology, Korea

Korea's Pohang Iron and Steel Company (POSCO) is one of the world's leading steelmakers. Its establishment of the Pohang University of Science and Technology (POSTECH) in 1986 is a good example of the private sector taking the initiative to resolve its skills shortages. POSCO, desperately short of high-quality scientists and engineers, did something about it—and extremely well. In a short time, POSTECH became a top university in Korea, and in 1998 *AsiaWeek* magazine selected it as the top Asian university in sciences and engineering. Even though POSCO initially set up POSTECH out of self-interest, the university has now become an important source of scientific and engineering talent for the whole country.

POSTECH's basic formula for academic success has been to select a small number of top students, fully support them

(fees, living allowance, etc.), and recruit the best teaching staff possible. POSTECH initially had nine departments, and has since added four more. By 2002, it had awarded around 2,500 undergraduate degrees and 4,000 graduate degrees. It has a heavy focus on research, hosting eight research centers and more than 21 affiliated laboratories. These include the Pohang Accelerator Laboratory, the only synchrotron light accelerator in the country.

Another notable feature is POSTECH's active role in the transfer of technology between academia and industry: it helped set up the Pohang Technopark Foundation, with Pohang city council and POSCO, which provides infrastructure for such transfer. A more specific example of such transfer is the POSTECH Biotech Center, which opened in 2003 and is one of the largest in Korea.

market to foreign institutions, since there is a large quality gap between foreign and local universities: a significant foreign presence may help raise standards in the domestic sector. Besides, it is likely to take some time for local institutions to acquire the human resources that will be required to design and deliver high-quality and relevant curricula.

Government will of course still have the main role to play in building world-class tertiary education systems. It will need to lead reforms in the public sector, and set attainable performance standards. It also

2.2.5 Microsoft's partnerships with universities in the People's Republic of China

One way for companies to resolve the problem of highly educated but poorly skilled employees is to work with universities (a leading source of such workers). The objective is to better align university curricula with industry needs. In the People's Republic of China (PRC), for example, university education tends to focus on theoretical knowledge at the expense of practical application. As a result, many multinationals operating in the country find that graduates often lack the skills to perform their jobs.

Microsoft ran into these problems in its software operations in the PRC. Software projects are team efforts that require application skills, which PRC university graduates often lack, more than theoretical knowledge. To mitigate the skills shortage, it formed partnerships with four PRC universities to establish software laboratories where student interns learn practical software-development skills. More broadly, in June 2002 the company and the Ministry of Education jointly launched the Great Wall Plan to formalize and systematize the company's cooperation with universities in the country. The areas of cooperation include talent training, curriculum support,

research cooperation, and academic exchange. Around 40 universities and research organizations have taken part in the program so far.

In addition to its cooperation with PRC universities, Microsoft has trained over 10,000 software engineers and senior program managers for 11 national software parks through on-site training and e-learning. Finally, in conjunction with the local software industry, the company provides training for mid- and high-level personnel to strengthen the core competitiveness of software companies with which it works.

Microsoft's partnership with PRC universities provides a possible blueprint for public-private partnerships to resolve skills gaps. PRC universities are primarily public universities, which still dominate the higher education systems of many Asian countries. This partnership involves the provision of resources in exchange for some influence over the curriculum. The private sector gains a large supply of skills while the public sector benefits from better facilities. Producing more employable graduates is also ultimately in the interests of any university, public or private.

has an important role to play in providing an interface between the private sector and industry: early identification of industry's needs and modifications to curricula are one area where coordination is possible, and government should play a major role in setting standards and disseminating information on performance (Box 2.2.1 above). Finally, it will be government responsibility to ensure that both the private and the public streams in tertiary education are appropriately regulated, especially with respect to quality control.

References

- Asian Development Bank (ADB). 2007a. "Growth Amid Change." In *Asian Development Outlook 2007*, pp. 269-316. Manila.
- _____. 2007b. "Education and Structural Change in Four Asian Countries." In *Asian Development Outlook 2007*, pp. 317-340. Manila.
- Economist*. 2007. "Capturing Talent." 18 August: 56-58.
- _____. 2008. "Unfit for Service." 19 January: 34.
- Economist Intelligence Unit (EIU) Corporate Network. 2007 and 2008. *Asian Business Outlook Surveys*. Singapore.
- Financial Times*. 2008. "Asia's Skills Deficit May Force Up Pay." 15 January: 7.
- McKinsey Global Institute. 2005. *Addressing China's Looming Talent Shortage*. New Delhi.
- Mukherjee, A. 2005. "Marketplace by Bloomberg—Commentary: India's Productivity Advantage." *International Herald Tribune*, 13 June: 2.
- National Association of Software and Service Companies (NASSCOM)-McKinsey. 2005. *Extending India's Leadership of the Global IT and BPO industries*. New Delhi.
- Shah, C. and G. Burke. 2005. "Skills Shortages: Concepts, Measurement and Policy Responses." *Australian Bulletin of Labor*, Vol. 31, No. 5: 44-71.
- Thangavelu, S. and G. Hu. 2006. "Lessons from "Benchmark" Countries: Korea and Ireland." SCAPE Working Paper No. 2006/14, Singapore Center for Applied and Policy Economics, National University of Singapore Department of Economics.
- Udomsaph, C. and A. Zeufack. 2006. "Skills Shortages and Mismatch in Thailand and Malaysia: Evidence from Linked Employer–Employee Data." World Bank, Washington, DC.
- World Bank. 2002, 2003, 2004, 2005a, and 2006. *World Bank Enterprise Surveys*. Washington, DC. Available: <http://www.enterprisesurveys.org/portal>, downloaded 12 December 2007.
- _____. 2005b. "Malaysia: Firm Competitiveness, Investment Climate, and Growth." Report No. 26841-MA, Poverty Reduction, Economic Management, and Financial Sector Unit, East Asia and Pacific Region, Washington, DC, 30 June.

Asian workers on the move

Introduction

Asian workers are on the move. Not only do millions of Asians leave home in search of better economic conditions and opportunities in other regions of the world, there is now burgeoning international migration within Asia. Increasingly, Asia's high-performing economies are drawing on migrants to meet demands along the whole spectrum of skills. Labor migration has been an important safety valve in those countries where new jobs have failed to keep pace with labor force growth.

Across the region, labor migration issues are now taking on added significance. Receiving countries are concerned that immigrants should have relevant skills, that they comply with immigration and labor regulations, and that flows are regulated to meet domestic needs. Sending countries' concerns revolve around the regulation of outflows, the rights of their workers abroad, brain drain of skilled labor, and the impact and level of remittance income. (Migration also raises vexed social issues, but the interest in this chapter is squarely on its economic dimensions.)

At a macroeconomic level, the arguments for free labor mobility across countries parallel exactly those that apply within a country. By directing scarce labor resources to their highest value uses, migration generates benefits, improving global resource allocation. The presence of significant wage differences for the same type of qualified workers in developing and industrial countries—by a factor of 10 or more as against the price differences for goods and capital that rarely exceed 2:1—suggests that the gains from increased international labor mobility would be enormous (Rodrik 2002). As home to more than half the world's population, developing Asia has the potential to reap big gains from easier migration.

Gains will not materialize automatically: many frictions retard labor movement and obstruct opportunities. Regulations and policies are still quite restrictive in most countries and are certainly much less liberal than those governing the movement of goods or capital. Labor-abundant countries are certainly losers, but labor-receiving countries that impose onerous requirements on migrants may also be missing out.

What then are feasible options for promoting greater labor mobility and are there gains to a regional—that is, developing Asian—approach? This chapter shows that in a context where the rich countries of the world are unlikely to significantly liberalize their immigration policies, Asian countries could reap important gains by working together.

In the section, *Migration trends and directions*, evolving patterns of international migration in Asia are reviewed. Reported migration data, which likely understate the true extent of movement, show rising flows within Asia. The underlying forces driving international movement of workers are examined in more detail in the following section, *Asia's labor migration dynamics*. These include divergences in opportunities and demography as well as Asia's rapid structural transformation. Revisions to immigration policies and laws have also had an influence.

The penultimate section, *Migration: A win-win proposition*, explores the potential of expanded intraregional labor migration flows in Asia. It sets out the major parameters of immigration policies in the region and the changes in policies that have occurred in the past decade. Liberalization has been slow, and migration policies have often had as much to do with sociopolitical as economic considerations. By quantifying the potential benefits of a more liberal posture toward labor movement, it shows the gains that could accrue if higher-income Asian countries liberalized their migration regimes.

The *Conclusions* suggest that cooperative regional arrangements that promote labor mobility merit serious consideration. It observes that the European Union has steadily moved toward greater intracommunity mobility of workers, and that Asia could benefit by following a similar path.

Migration trends and directions

Asians have for centuries traveled long distances for work and to set up new lives in foreign lands. The modern story of migration, though, began in the early 1970s when the oil price boom created an enormous demand for infrastructure workers in the Middle East. Hundreds of thousands of workers from India and Pakistan went to the Gulf to fill construction jobs. They were later joined by workers from the Philippines and then Bangladesh, Indonesia, and Sri Lanka. As the oil boom and the concomitant inflow of petrodollars substantially raised household incomes in the Gulf countries, demand for domestic service workers increased and those jobs were filled by Asian migrant labor.

The bursting of the oil bubble, the Gulf wars, and the completion of a large number of construction projects diminished the demand for workers in the Middle East from the mid-1980s. Yet it was at this time that labor migration within Asia began to expand, triggered by the rapid growth of East and Southeast Asian economies (Wickramasekera 2002). Japan, the newly industrialized economies (NIEs) of Hong Kong, China; Republic of Korea (hereafter Korea); Singapore; and Taipei, China, and some emerging regional economies such as Malaysia and Thailand became important destinations for Asian migrant labor, especially from Southeast Asia. In the last two decades, migration of domestic service, health, and information and communications technology (ICT) workers from Asia to North America has also significantly increased, boosted

by demographic changes in industrial countries and the booming “new economy” of the late 1990s.

Table 2.3.1 presents a taxonomy of Asian economies according to their international migration situation. With regard to migrant labor, regional

2.3.1 Migration status of Asian economies

Mainly emigration ^a	Main destinations ^b
Southeast Asia	
Indonesia	Malaysia, Saudi Arabia, Netherlands, Philippines
Lao PDR	United States, France, Thailand
Myanmar	Thailand, India, United States, Pakistan, Philippines
Philippines	United States, Saudi Arabia, Malaysia, Canada
Viet Nam	United States, Australia, Canada, France, Germany, Cambodia
South Asia	
Bangladesh	India, Pakistan, Saudi Arabia
Bhutan	India, Pakistan
India	United Arab Emirates, Saudi Arabia, United States, Bangladesh, Pakistan, United Kingdom
Sri Lanka	India, Saudi Arabia, Canada, Pakistan, United Kingdom, Australia
East Asia	
China, People's Rep. of	Hong Kong, China; United States; Canada
Korea, Rep. of	United States; Japan; China, People's Rep. of; Canada
Central Asia^c	
Armenia	Russian Federation, Ukraine, United States
Azerbaijan	Russian Federation, Armenia, Ukraine
Georgia	Russian Federation, Ukraine, Greece, Armenia
Tajikistan	Russian Federation, Uzbekistan, Ukraine
Mainly immigration ^d	Main sources ^e
Brunei Darussalam	Malaysia, Philippines, Thailand, Nepal
Hong Kong, China	China, People's Rep. of
Japan	Korea, Rep. of; China, People's Rep. of; Brazil; Korea, Dem. Rep. of; Philippines
Singapore	Malaysia; China, People's Rep. of; India; Indonesia
Taipei, China	Thailand, Philippines, Indonesia, Viet Nam
Both emigration and immigration ^f	
Cambodia	Destinations: United States, France, Australia, Canada, Thailand Sources: Viet Nam, Thailand
Kazakhstan ^c	Destinations: Russian Federation, Ukraine, Uzbekistan Sources: Russian Federation, Ukraine, Uzbekistan, Germany
Malaysia	Destinations: Singapore, Australia, Brunei Darussalam, Philippines, United States, United Kingdom, Indonesia Sources: Indonesia; Philippines; China, People's Rep. of; India; Singapore; Thailand
Nepal	Destinations: India, Pakistan Sources: Bangladesh, India, Pakistan
Pakistan	Destinations: India, Saudi Arabia, United Kingdom, United States Sources: Bangladesh, India, Nepal
Thailand	Destinations: United States; Taipei, China; Malaysia; Cambodia; China, People's Rep. of Sources: China, People's Rep. of; Myanmar; Lao PDR
Turkmenistan ^c	Destinations: Russian Federation, Ukraine Sources: Uzbekistan, Russian Federation, Kazakhstan

^a Economies having emigration rates at least twice as large as their immigration rates, except for India where the emigration-to-immigration ratio is close to 2.

^b Economies accounting for at least 5% of total emigrants. ^c Migration partly reflects the reclassification of internal migrants as international migrants at the breakup of the former Soviet Union. ^d Economies having immigration rates at least twice as large as their emigration rates. ^e Economies accounting for at least 5% of total immigrants. ^f Economies having emigration-to-immigration ratios (and vice versa) between 0.75 and 1.25.

Notes: Source and destination countries, for each row, are in descending order of importance. The immigration rate is defined as the ratio of the immigrant stock to the total population of the receiving country, and the emigration rate is defined as the ratio of the emigrant stock to the sum of the sending country's population and emigrant stock.

Sources: Hugo (2008), Table 15; University of Sussex and World Bank, *Bilateral Estimates of Migrant Stocks*, available: www.worldbank.org, downloaded 15 October 2007; Development Research Centre on Migration, Globalisation and Poverty, *Global Migrant Origin Database*, available: www.migrationdrc.org, downloaded 28 January 2008.

economies can be classified either as sources, destinations, or both. Large nations in East, Southeast, and South Asia, in which the transition to low fertility did not commence until the 1970s or later, remain labor-surplus areas. The Philippines sends the largest number of workers abroad, both to other Asian economies and elsewhere. Its migrant workers cover a broad range of skills levels and are spread widely throughout the world. For example, Filipino domestic service workers tend to flow to Hong Kong, China and the Middle East; ICT workers and nurses to Canada, United Kingdom (UK), and United States (US). Most South Asian countries are labor exporters, with the Middle East, and more recently, Southeast Asia, as major destinations.

Fifty years ago, Japan and the NIEs were labor-exporting countries. But rapid declines in fertility accelerated their demographic transition and helped their rapid economic catch-up. Labor shortages in these countries have seen them hosting large numbers of migrant workers.

Malaysia and Thailand are currently midway through their demographic transition and lag further behind the NIEs in their economic catch-up process. Both countries are sending significant numbers of workers to more developed regional neighbors such as Singapore and Taipei, China and at the same time are receiving significant numbers of immigrants from nearby labor-surplus nations. In Central Asia, Kazakhstan—the subregion's richest country—is a major destination for workers from neighbors, but it sends a significant amount of its workers abroad as well.

According to the United Nations and the bilateral migration data estimates of the University of Sussex and the World Bank, Asia was host to 26.3 million migrants, or about 13.8% of the world's total migrant stock, in 2005. Asia was much more important as a source of international migration, sending 54.2 million migrants abroad or 28.4% of the world's total. The International Labour Office estimates that half of Asia's migrants were workers (ILO 2004). Although the regional aggregate numbers suggest migrants represent only a small share of the regional population, these figures might be biased by the dominance of the People's Republic of China (PRC) and India. As shown in Table 2.3.2, if the two population giants are excluded, the rates of immigration to and emigration from developing Asia more than double. In fact, for some regional economies, migrants represent a significant proportion of their populations. Table 2.3.2 shows that although immigrants account for negligible shares of the total population in large economies such as PRC, India, and Indonesia, they make up more than 40% of the populations of the two economies of Hong Kong, China and Singapore. For many small countries in the Pacific and Central Asia, emigration rates are substantial. Samoa, for instance, has over 35% of its population abroad, while for Armenia, the equivalent figure is 21.2%.

It should be noted that these official migrant stock numbers are likely to be underestimates because they are typically based on census data which excludes much temporary and undocumented migration. Most labor migrants in Asia are temporary and often return home at the end of their fixed-term contracts. They are not detected in most standard migration data collection systems, which are designed to gather information on permanent migration. Undocumented migration is

2.3.2 Rates of immigration and emigration of developing Asian economies, %

	Immigration	Emigration
Central Asia		
Armenia	7.8	21.2
Azerbaijan	2.2	14.0
Georgia	4.3	18.6
Kazakhstan	16.4	19.6
Kyrgyz Republic	5.5	10.6
Tajikistan	4.7	10.8
Turkmenistan	4.6	5.1
Uzbekistan	4.8	7.6
East Asia		
China, People's Rep. of	0.0	0.5
Hong Kong, China	42.5	9.2
Korea, Rep. of	1.2	3.3
Mongolia	0.4	0.6
South Asia		
Afghanistan	0.2	7.5
Bangladesh	0.7	3.1
Bhutan	1.5	5.8
India	0.5	0.9
Maldives	1.1	0.5
Nepal	3.0	2.7
Pakistan	2.1	2.1
Sri Lanka	1.9	4.7
Southeast Asia		
Cambodia	2.2	2.4
Indonesia	0.1	0.8
Lao PDR	0.4	6.8
Malaysia	6.4	5.4
Myanmar	0.2	0.9
Philippines	0.4	4.1
Singapore	42.6	5.0
Thailand	1.7	1.2
Viet Nam	0.0	2.6
The Pacific		
Fiji Islands	2.1	15.2
Kiribati	2.8	5.0
Marshall Islands, Rep. of the	2.9	15.2
Micronesia, Fed. States of	3.2	17.3
Palau, Rep. of	15.2	25.8
Papua New Guinea	0.4	0.8
Samoa	5.0	35.4
Solomon Islands	0.7	0.9
Timor-Leste, Dem. Rep. of	0.6	1.4
Tonga	1.2	34.3
Vanuatu	0.5	1.4
Developing Asia	0.7	1.5
Developing Asia (excl. China, People's Rep. of and India)	1.8	3.3

Note: The immigration rate is defined as the ratio of the immigrant stock to the total population of the receiving country, and the emigration rate is defined as the ratio of the emigrant stock to the sum of the sending country's population and emigrant stock.

Sources: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2006 Revision*, available: <http://esa.un.org/unpp>, downloaded 9 January 2008; University of Sussex and World Bank, *Bilateral Estimates of Migrant Stocks*, available: www.worldbank.org, downloaded 15 October 2007.

also common in Asia. Battistella (2003) estimates that there are at least 2.4 million unauthorized migrants from developing Asia in Japan; Korea; Malaysia; Singapore; Taipei, China; and Thailand. For Kazakhstan, it is believed that the number of irregular migrants is about 50 times higher than licensed migrants (Sadovskaya 2005). Official stock estimates of the Commission on Filipinos Overseas show that there were 8.23 million Filipinos abroad at the end of 2006, equivalent to 9.5% of the resident population and 4.6 million higher than the estimate made by the University of Sussex and the World Bank. Of the total, 3.56 million are permanent emigrants, 3.80 million are overseas contract workers, and 0.88 million are irregular migrants. Given the significant proportion of temporary and undocumented migrants, the impact of international labor migration on Asian countries is clearly much larger than that suggested by official migrant stock numbers reported by the United Nations.

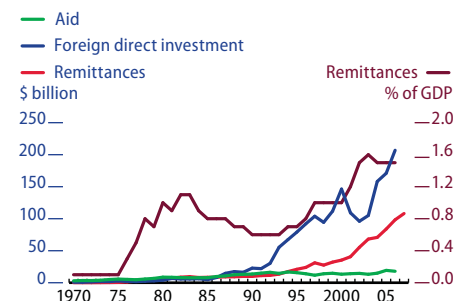
Some developing Asian economies have become increasingly reliant on migrant workers to fill domestic jobs. In Singapore, for instance, the share of nonresidents in the economically active population has risen from 18% in 1991 to 27.5% in 2006. In Malaysia; Hong Kong, China; and Thailand, the proportion of foreign workers in the mid-1990s exceeded 6% of their labor forces (Athukorala 2006). Migrant workers relieve labor and skill shortages in these economies, enabling them to fully exploit potential growth opportunities. The Singapore Government estimates that foreign labor contributed 3.2 percentage points to the annual GDP growth rate of 7.8% over the decade of the 1990s (MTI 2001). The supply of migrant workers is especially important for labor-receiving countries to sustain competitiveness particularly in labor-intensive sectors, including small and medium enterprises.

For labor-sending countries, the most direct benefit from migration is the rise in incomes accruing to migrants and the consequent inflow of remittances back home. Over the past decade, remittances have become an integral part of developing Asian economies, surpassing the amount of official aid received by a large margin (Figure 2.3.1). In 2007, total remittance inflows to developing Asia are estimated to have reached \$108.1 billion, accounting for over one third of total global remittance inflows. Remittance inflows to the top three recipients of the region—PRC, India, and the Philippines—comprise close to two thirds of the region's total receipts.

For some regional countries, remittances sent home by migrant workers represent a considerable share of GDP and create an important source of financing for their balance of payments. In Tajikistan, for instance, the inflows of remittances in 2006 were 36.2% of GDP (Figure 2.3.2) and 61.9% of exports. While there are also a large number of migrant workers abroad from the PRC, India, and Indonesia, their share of remittance inflows to GDP remains below 3% due to the sheer size of their economies. It should be noted, however, that these remittance figures represent only official inflows. Total remittances are believed to be much larger as there are likely to be substantial unrecorded remittance flows.

In some countries with high rates of population increase and low rates of economic growth, international migration has served as a crucial safety valve for reducing employment pressures and providing valuable financial resources. This is most evident in the Pacific island states and some

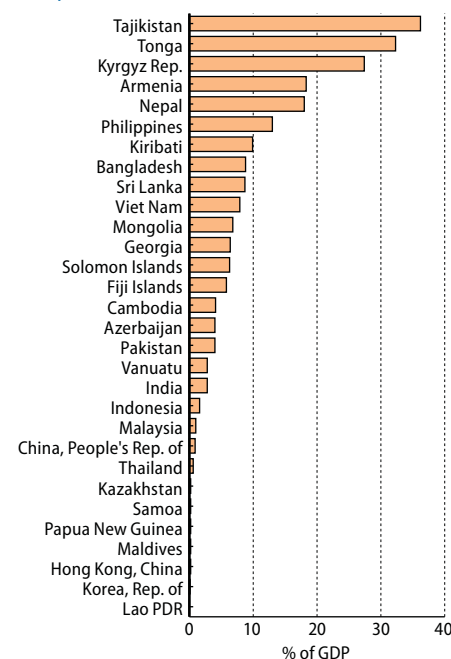
2.3.1 Aid, foreign direct investment, and remittances to developing Asia



Sources: Organisation for Economic Co-operation and Development, *Development Assistance Committee Statistics* database, available: www.oecd.org; World Bank, *Remittance data*, available: www.worldbank.org; United Nations Conference on Trade and Development, *World Investment Report* data, available: www.unctad.org; World Bank, *World Development Indicators* online; all downloaded 4 January 2008.

[Click here for figure data](#)

2.3.2 Remittance inflows to developing Asia, 2006



Source: World Bank, *Remittance data*, available: www.worldbank.org, downloaded 4 January 2008.

[Click here for figure data](#)

Central Asian countries, where emigrants account for more than 10% of their population and remittances exceed 10% of GDP. But in recent years, the importance of international migration has substantially increased even in some large economies. For instance, the deployment of newly hired workers from the Philippines increased from 253,030 in 2000 to 308,122 in 2006. Correspondingly, remittance inflows more than doubled from \$6.2 billion to \$15.3 billion during the period. Although there is little evidence so far that the safety valve of international migration has enabled labor-sending countries to increase the effectiveness of national development efforts or to restructure their economies through the use of remittances (or both), migration does raise income levels for many poor, as well as benefits the wider community through the multiplier effects of increased spending and the associated stimulus to labor markets. Most empirical studies confirm that international migration and remittances contribute importantly to poverty reduction in Asian countries (Box 2.3.1).

Asia's labor migration dynamics

The dynamics of Asia's international labor migration has been shaped by various factors, grouped for our purposes under the rubrics of global demographic changes, disparities in incomes and wages, structural changes in labor-receiving countries, globalization and regional integration, and changes in immigration policies. Divergences in demography and regional economic opportunities have played the most important roles, which are discussed first.

Global demographic changes

The highly divergent rates of population growth between developing and industrial countries have been a key driver of labor migration from the former to the latter. The demographic transition in high-income countries starting in the 1960s has led to declining labor force growth rates there since the 1980s (Figure 2.3.3). In some countries like Japan, the labor force has already begun to shrink in recent years. In contrast, developing Asia as a whole is still at a stage of rapid population and labor force growth. Over the period 1995–2005, the labor force in developing Asia grew at an annual rate of 1.6%. In some labor-sending countries like Bangladesh, Cambodia, Pakistan, Philippines, and Viet Nam, the labor force growth rate exceeded 2% a year in the last decade (Figure 2.3.4). Millions of young people enter the job market each year in these countries, but many do not get absorbed. Some of the new entrants are either unemployed, or underemployed with extremely low pay (Felipe and Hasan 2006, and the chapter in Part 2, *Young Asians: A squandered talent*). The combination of “push factors” (absence of opportunity at home) and “pull factors” (presence of demand in other countries) makes migration an attractive alternative for many.

Changes in the population's age composition are also important in determining labor migration trends. Aging populations in the industrial world have created a huge demand for health-care workers, who are in extremely short supply in their domestic economies. Many nurses, physicians, and other health workers from developing Asia now move to industrial countries to fill health sector jobs. Between 1992 and 2006, the

2.3.1 Poverty impact of international migration: Evidence from developing Asia

There has been growing evidence of the poverty-reducing effects of international migration and remittances in the particular context of Asia.

Jongwanich (2007) uses panel data of 17 Asian developing countries over the period 1993–2003 to examine the impact of remittances on growth and poverty, and finds that they have a significant direct effect on poverty reduction through increasing income, smoothing consumption, and easing capital constraints of the poor.

This cross-country regression analysis is well supported by some country-level studies using household survey data. Adams and Page (2005) estimate that remittances in Bangladesh have reduced the poverty headcount ratio by 6 percentage points. Similarly, migration and remittances accounted for about 10% of Nepal's total reduction in poverty in 1995–2004 (Lokshin et al. 2007). Analysis by Pernia (2008) of Philippine household and labor force surveys also shows that the share of remittances in household income raises the likelihood of a household climbing out of poverty.

The poverty-reducing impact of remittances, however, is not limited to recipient households. Yang and Martinez (2005) find that in the Philippines, an increase in the value of remittances leads to a reduction in poverty in both migrant families and nonmigrant families. This is perhaps due to spillover effects from greater economic activity resulting from the larger inflow of remittances, as well as from direct transfers from households with migrant members.

Parallel results are evident in a recent study on remittances and poverty in Central Asia, where remittances are found to reduce inequality among households within the community (one village or a group of villages) (Brown forthcoming).

annual deployment of migrant nursing professionals from the Philippines rose from 5,747 to 13,525.

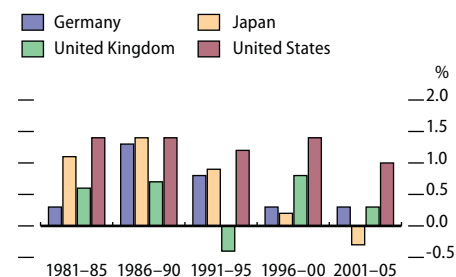
Demographic factors also play a role in determining intraregional labor migration in Asia. Asian countries are quite diversified in terms of population dynamics. The NIEs, PRC, and Thailand have experienced a remarkable decline in fertility from the 1960s to the 1990s. With the exception of Singapore, which has been populated by immigrants, population and labor force growth rates in these countries are less than 1% a year. However, in Cambodia, Lao People's Democratic Republic (Lao PDR), Philippines, and most South and Central Asian countries, the demographic transition came much later. These countries (and subregions) are expected to achieve rapid population and labor force growth rates in the next 20–30 years. The slow expansion of population and labor force in the NIEs, Kazakhstan, and Thailand, coupled with their relatively high income levels and rapid economic growth, make them important regional poles for labor migration.

Disparities in incomes and wages

Income differences are a key determinant of international labor migration. Despite its impressive economic growth and a narrowing of its income gap with industrial countries in recent years, developing Asia as a whole is still far behind rich countries in terms of per capita income. In 2006, the per capita GDP of developing Asia was only 18.1% of the Organisation for Economic Co-operation and Development average in purchasing power parity terms and 6% in market exchange rate terms. Moreover, there have been significant cross-country variations in Asia's growth performance. The convergence over the past decades of developing Asia's per capita GDP with those of the high-income economies has largely been a result of the rapid growth of large countries such as the PRC and India. Meanwhile, some regional economies have suffered from prolonged slow growth. Their income gaps with fast-growing neighbors have generally grown rather than shrunk. As shown in Figure 2.3.5, even the per capita incomes of middle-income labor-receiving countries like Malaysia and Thailand could be 10 times those of neighboring low-income labor-sending countries. The persistently large income gap between most developing Asian economies and high-income countries, as well as rising intraregional income disparities, provide a powerful economic underpinning for expanding Asian migration flows.

Given the large income disparity between labor-sending and labor-receiving countries, and their demographic differences, the wage gains of migrant workers are usually substantial. Filipino nurses, for instance, earn \$3,000–4,000 a month in the US, compared with \$75–200 a month in the Philippines (IHPDS 2005). World Bank (2006) finds that migration increases the income of Tajikistan migrants 10 times compared to what they used to earn in their home country. Depending on their occupations, the average monthly income of Vietnamese migrant workers ranges from \$150–200 in Malaysia, \$300–1,000 in the NIEs and \$1,250–2,500 in the US and UK, while the average monthly wage of a worker in Viet Nam is \$55 in 2004 (Dang 2007). Despite being partly offset by migration costs, these significant wage gaps provide a strong incentive for Asian workers to migrate to reap higher lifetime earnings.

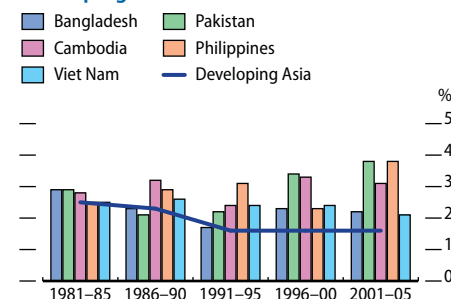
2.3.3 Declining labor force growth in selected industrial countries



Source: World Bank, World Development Indicators online, downloaded 20 February 2008.

[Click here for figure data](#)

2.3.4 Labor force growth in selected developing Asian countries



Source: World Bank, World Development Indicators online, downloaded 20 February 2008.

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Structural changes in labor-receiving countries

Three main structural changes in labor-receiving countries—in the realms of services, female employment, and low-status jobs—have provided fresh impetus to the expansion of international labor migration. First, the past 20–30 years have witnessed the increasing significance of services activities in industrial countries. As income and living standards rise, the consumer demand for services, such as domestic and restaurant help and discretionary health services, has grown rapidly in these countries. They have to rely on immigrants to meet the growing services demand, because of slow indigenous labor force growth and the nontradable nature of these services. Also in services, fast-evolving technological changes have induced the rise of knowledge- and skills-based productive services industries (such as financial and ICT services), leading to a worldwide scramble for skills and larger flows of skilled and professional workers (see the chapter *Asia's skills crisis*).

Second, partly as a response to the labor shortage, female labor force participation rates have risen in most industrial countries over the past three decades (Figure 2.3.6). Greater employment among women has raised the demand for domestic services. In some economies like Hong Kong, China; Korea; and Singapore, authorities even have policies to encourage hiring of foreign domestic helpers to relieve local women with higher levels of education of their domestic chores.

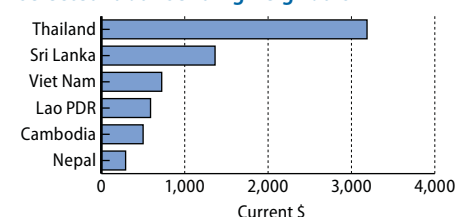
Finally, native workers become increasingly reluctant to work in jobs that have low status in their society, reflecting economic development and the increase in the education attainment of nationals. This has led to significant labor market segmentation in labor-receiving countries, in which migrants are employed in tasks, on the lower rungs of the employment ladder, that are shunned by local workers (Piore 1979, Massey et al. 1993). In Asia, the bulk of the low-skilled migrant labor correspond to this category, filling jobs that offer low status, low income, and little security.

Malaysia and Thailand are most evident examples of such labor market segmentation. More than a million unskilled workers from neighboring poor countries are concentrated in a narrow range of low-status jobs in each country (Figure 2.3.7). In turn, substantial numbers of Malaysian and Thai migrants work in the higher-income Asian economies of Japan; Korea; Singapore; and Taipei, China. Even in times of high unemployment and economic downturn, locals are reluctant to enter the sectors that are typically for migrants, such that demand for migrant workers is rigid even during those periods.¹

Globalization and regional integration

Globalization and regional integration are important forces shaping international migration flows. Economic globalization has been associated with decreases in transportation, communications, and other transaction costs, which have been driven by rapid technological progress as well as efforts toward building regional infrastructure to widen and integrate markets. The costs of moving people have also fallen. Better communication, information dissemination through mass media, and the availability of faster and cheaper transport links have made migration that much easier. In Asia, increasing regional integration of trade and

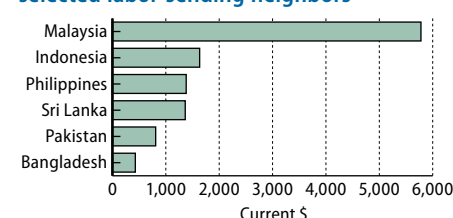
2.3.5a Per capita income in Thailand and selected labor-sending neighbors



Source: World Bank, *World Development Indicators* online, downloaded 20 February 2008.

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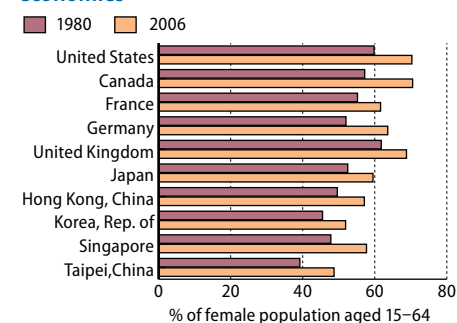
2.3.5b Per capita income in Malaysia and selected labor-sending neighbors



Source: World Bank, *World Development Indicators* online, downloaded 20 February 2008.

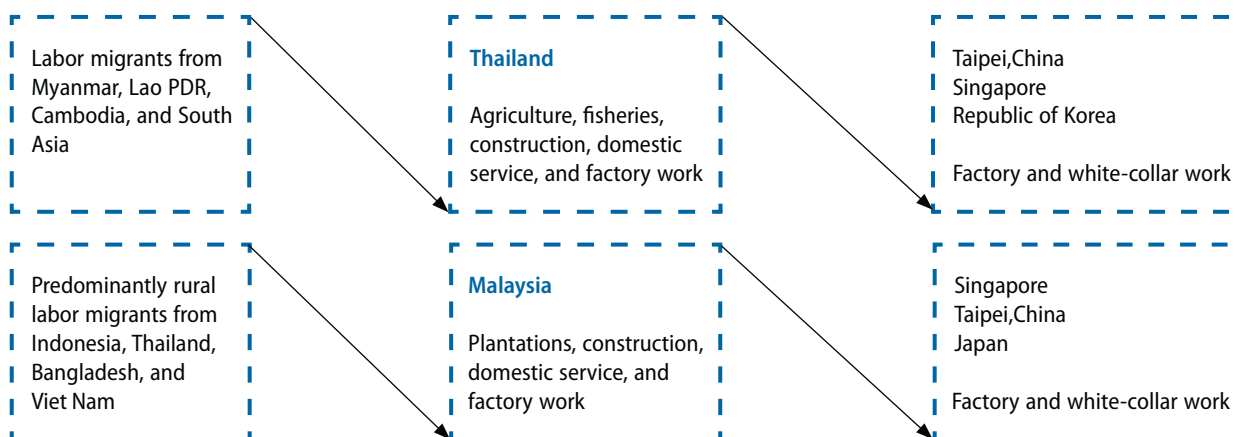
[Click here for figure data](#)

2.3.6 Female labor force participation in selected industrial and newly industrialized economies



Sources: World Bank, *World Development Indicators* online; <http://eng.dgbas.gov.tw>; both downloaded 20 February 2008.

[Click here for figure data](#)

2.3.7 Labor immigration and labor market segmentation, Malaysia and Thailand

Source: Hugo (2008).

investment has especially boosted intraregional movement of skilled labor, as regional production networks of multinational corporations pave the way for intracorporate transfers of managers and professionals among varying locations.

But globalization can also dampen international labor migration. Research on migration during the early period of globalization suggests that capital movement substituted for migration and served to narrow factor price differentials (Williamson 1998). This effect can also be observed in Asia. The relocation of manufacturing production from regional high- and middle-income economies (Japan, Malaysia, the NIEs) to some low-cost countries (particularly the PRC) has lowered demand for manufacturing workers in labor-receiving countries, and reduced emigration pressures by creating jobs and raising incomes in labor-sending countries.

Similarly in the services sector, advanced telecommunications facilities and the development of the Internet enable companies to outsource a range of labor-intensive services jobs (broadly classified under ICT services and business process outsourcing) to developing countries, implying much greater expansion of services trade without involving the physical movement of people. This negative effect of services outsourcing on skilled migration is particularly evident in India, where the booming outsourcing industry has slowed the emigration of ICT workers and even triggered return migration from the US and other rich countries (Khadria 2004).

Changes in immigration policies

Certain changes in international migration policies have helped expand Asia's migration flows. For example, selectivity, favoring skilled workers, has played a pivotal role in the increase in inflows of skilled immigrants to rich countries. During the 1990s, in view of intensified labor and skills shortages, most industrial countries in North America and Europe adopted more liberalized immigration policies toward skilled workers. In the US, the annual number of visas issued for highly skilled professionals (H-1B visas) increased from 110,200 in 1992 to 355,600 in 2000. Some European countries have also enacted legislation to secure inflows of skilled workers, such as the 2000 "Green Card" initiative for information

technology specialists in Germany and the 2002 Highly Skilled Migrant Programme in the United Kingdom. Asia is an important beneficiary of the relaxation of skilled labor migration restrictions in industrial countries. In 2005, Asia accounted for around 70% of all the new H-1B workers to the US, with India, PRC, and Philippines ranking as first, second, and fourth primary sources, respectively (USCIS 2006).

In Asia, robust economic growth in the late 1980s and early 1990s tightened the supply of labor, leading some countries to open their doors to migrant workers. The Singapore Government, for example, has long recognized the importance of foreign workers in sustaining economic growth and views its migration policy as a key element of the national development strategy. Since the late 1980s, it has devised an innovative immigration policy, using a combination of the price mechanism and employment quotas, to regulate inflows of workers in line with domestic labor market conditions. Taipei, China officially adopted a labor migration policy intended to bring in additional workers for major construction projects in 1989, with the Employment Services Act of 1992 the major legal basis for the entry of such workers. In recent years, the authorities there have emphasized foreign workers as a means of promoting targeted industries and upgrading economic infrastructure, going beyond the initial objective of using these workers to alleviate temporary labor shortages (Athukorala 2006).

Some Asian economies do not have explicit policies to encourage the entry of foreign workers, but resort to irregular migrant workers drawn from tourists, students, refugees, trainees, etc. to meet their labor demand. Governments may turn a blind eye to these practices for a time, especially in economic boom times (Wickramasekera 2002). For example, although Thailand has never allowed unskilled foreign workers to be employed in the country, its policy toward irregular migration has been tolerant. The Government has introduced several amnesty programs to allow illegal migrants from Cambodia, Lao PDR, and Myanmar to work in specified jobs that local workers do not want to perform. Japan and Korea are also examples of countries that have highly restrictive labor migration policies but that permit some back-door entry through trainee programs.

Migration: A win-win proposition

The increased prominence of intraregional labor migration has been a key feature of the development of international migration in Asia. Between 1995 and 2000, 40% of the 2.6 million–2.9 million Asian migrant workers went to other Asian countries to seek employment (ILO 2006). This is quite different from the situation two decades ago, when the bulk of Asian migrant workers sought employment mainly in countries outside Asia. Widening income gaps and divergent demography within Asia explain much of this.

Migration pressures arising from demographic differences within Asia are expected to become even more accentuated in the future. During the next 10–15 years, the working age populations in the NIEs, Thailand, and even PRC are expected to shrink. Meanwhile, in most South and Southeast Asian countries, the same age group will keep on growing over

the next three decades (Figure 2.3.8). These divergent population trends are illustrated in Figure 2.3.9, which shows the widening gap between the shrinking share of the working age population in East Asia and the rising share of the working age population in South Asia. A similar pattern can also be found at the subregional level, such as between Thailand and Cambodia, Lao PDR, and Myanmar, as well as between Singapore and its Association of Southeast Asian Nations (ASEAN) neighbors (Figure 2.3.10). This growing imbalance in the distribution of labor resources in regional countries is likely to serve as a powerful engine for intraregional labor migration pressure over the next two decades.

The future pattern of regional economic development is also likely to fuel expanded labor migration in Asia. Despite the recent growth pickup in most South Asian countries and some Southeast Asian labor-sending countries such as the Philippines and Viet Nam, their per capita income levels remain well below the region's high-income countries. The large income disparities between labor-sending countries and labor-receiving countries are a persistent phenomenon in Asia and will spur workers to seek employment abroad over a long period. In addition, the continuing economic development and poverty reduction in some low-income regional economies will ease the constraints that poverty imposes on potential emigrants, further driving migration pressures.

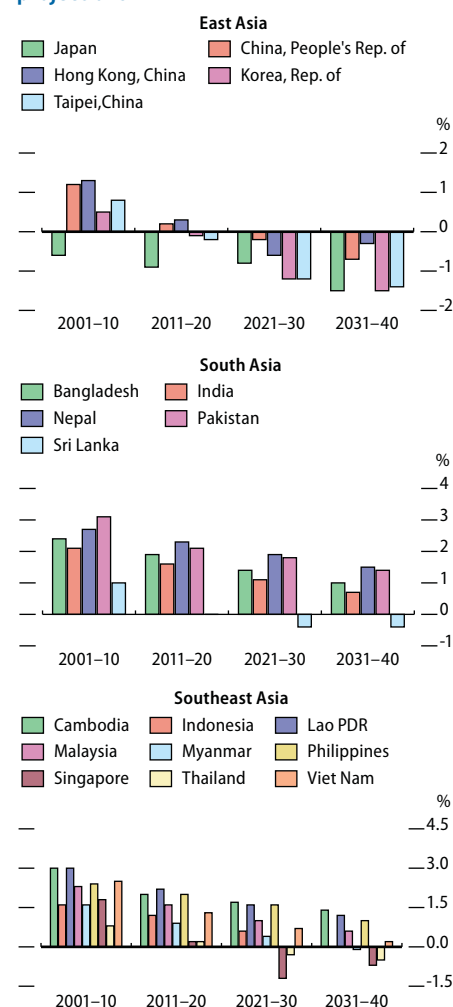
The substantial potential for intraregional labor migration created by economic and demographic fundamentals offers an opportunity for Asian countries to reap the gains through efforts toward greater integration of regional labor markets. More liberalized movement of labor, combined with the region's already significant growth, has the potential to alleviate excess demand for labor, create decent and productive jobs for millions, and facilitate further economic growth. Migration promises an improvement in the welfare of both sending and recipient economies, but to achieve it, the immigration policies of host countries must be appropriately attuned.

Dimensions of immigration policy

In the last few years, three major trends have emerged in the labor migration policies of Asia's six major labor-receiving economies (Japan; Korea; Malaysia; Singapore; Taipei,China; and Thailand).

First, policies toward immigrant workers have shifted from a reaction to short-term needs to an active structural approach to meet long-term labor demands. When intraregional labor migration started booming in the early 1990s, most labor-receiving countries had no long-term strategy. Their governments either ignored migration, or introduced temporary policy measures. The underlying belief was that the employment of migrant workers would be a temporary phenomenon associated with cyclical economic booms, and that there would be no need for long-range planning (Chantavanich 2007). However, the facts have since shown otherwise and migration has persisted. International labor migration has proven deeply rooted in the structural features of countries' growth experiences that have endured over long periods. Even large economic shocks have done little to upset migration flows. For example, the Asian financial crisis set off a series of regulations in host countries that aimed to protect local workers by stemming the inflow of foreign workers and

2.3.8 Annual growth of working age population: United Nations median projections



Sources: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2006 Revision* and *World Urbanization Prospects: The 2005 Revision*, available: <http://esa.un.org/unpp>; <http://eng.dgbas.gov.tw>; downloaded 20 February 2008.

[Click here for figure data](#)

repatriating irregular migrants. Many of these restrictions, however, had limited impact, and migrant workers again poured in during the postcrisis years.

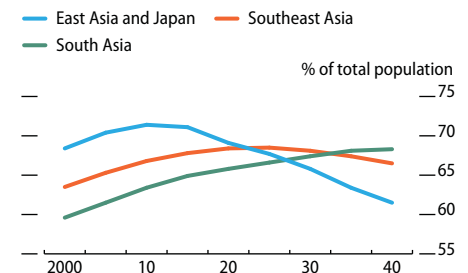
Singapore is the first regional country to establish a conscious and explicit policy toward foreign workers. It manages migrant workers through an industry-specific quota system and the imposition of a levy on employers for the hiring of less-skilled foreign workers, with the objective of spurring economic growth but limiting dependence on unskilled migrants. Taipei, China has followed Singapore's example in building formal institutional arrangements for labor migration, but it remains at an early stage of implementation. Recently, Korea has introduced a more formal employment permit scheme to replace its industrial trainee program, in an effort to manage foreign workers more effectively. Malaysia and Thailand are moving toward a more formal policy and legislative framework for migration management, but the effects have so far been limited because of a large presence of undocumented migrant workers. Their governments have tried to bring more foreign workers into the official management system through both amnesties for and crackdowns on irregular migrants (Chantavanich 2007, Kanapathy 2006).

Second, following the global trend for increased selectiveness in labor immigration policy, Asian labor-receiving countries are adopting a more open policy for professional and highly skilled foreign workers, but are attempting to limit labor migration at lower skills levels. This has been driven by increasing global competition in attracting talented people, as well as rising concern that the large influx of unskilled and low-skilled foreign workers may create social friction. Widening domestic wage inequality between skilled and unskilled labor in most regional economies in recent years may have also contributed to barriers toward lower-skilled migrants.

The governments of host countries manage unskilled and semiskilled migrant workers through measures such as visa controls, work permit systems, and foreign worker levies, keeping them on a transient basis, subject to repatriation during periods of economic downturn. Unskilled and semiskilled foreign workers are often confined to limited sectors or occupations, with the purpose of protecting the employment of local workers. Some countries such as Malaysia and Singapore intend to reduce their dependency on low-skilled migrant workers by shifting their economies toward knowledge-based activities (Wongboonsin 2003).

Third, bilateral agreements have been increasingly used by labor-receiving countries to liberalize and regulate labor migration. Such accords provide labor-receiving countries a country-specific, tailor-made solution to labor mobility. Through them, host economies can determine the sources of migrant workers based on their political and strategic interests or historic and cultural links. For example, Taipei, China has only recruited foreign workers from a limited number of countries, such as Indonesia, Mongolia, Philippines, Thailand, and Viet Nam, and has signed with each sending country a special bilateral agreement (Lee 2006). Bilateral agreements can also serve as an important tool to secure labor-sending countries' cooperation in managing irregular migration. This is true for example of Malaysia and Thailand, which have sought bilateral agreements with large sending countries to manage

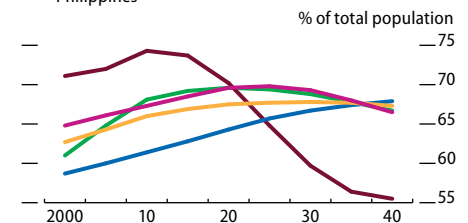
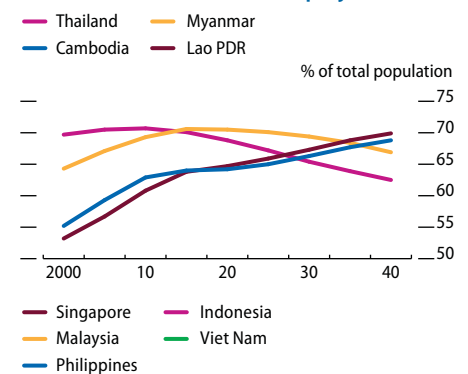
2.3.9 Working age population in Asia: United Nations median projections



Sources: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2006 Revision* and *World Urbanization Prospects: The 2005 Revision*, available: <http://esa.un.org/unpp>; <http://eng.dgbas.gov.tw>; downloaded 20 February 2008.

[Click here for figure data](#)

2.3.10 Working age population in Southeast Asia: United Nations median projections



Sources: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2006 Revision* and *World Urbanization Prospects: The 2005 Revision*, available: <http://esa.un.org/unpp>, downloaded 20 February 2008.

[Click here for figure data](#)

such migration and try to ensure orderly labor movement. Malaysia has signed bilateral agreements with Bangladesh, PRC, Indonesia, Pakistan, Sri Lanka, Thailand, and Viet Nam. In 2003, Thailand entered into agreements with Cambodia, Lao PDR, and Myanmar for government-to-government recruitment of migrant workers. Korea has also forged bilateral labor agreements with Indonesia, Mongolia, Philippines, Sri Lanka, Thailand, and Viet Nam under its Employment Permit System, partly motivated by the desire to reduce irregular labor migration.

Asian regional economic integration has been associated with a rise in bilateral trade agreements that cover broad objectives beyond traditional trade policies of tariff and nontariff barriers. These free trade agreements often include provisions for services liberalization and labor mobility. For example, the India-Singapore Comprehensive Economic Partnership Agreement has extensive coverage of the movement of people and the recognition of qualifications for identified occupations and categories of workers. In addition, the Japan-Philippines Economic Partnership Agreement has incorporated a commitment regarding visa allocations for the movement of health-care workers.

The impacts of liberalizing labor migration in Asia

To evaluate the potential benefits to Asia of enhanced regional labor market integration, a simulation was conducted using a global computable general equilibrium model (Box 2.3.2). The simulation posits that labor immigration restrictions in Japan; Korea; Singapore; and Taipei, China are eased so as to raise the number of both skilled and unskilled workers in these four economies by 3% through increased numbers of migrants during the period 2007–2012. Additional migrant workers are supplied by the less-developed Asian economies in proportion to their share of the host countries' migrant population. In the baseline for the time horizon between 2001 (the model's base year) and 2012, the status quo is maintained and the share of migrant workers in the host population is fixed at the base-year level.

The simulation results show that over a 6-year period the liberalization of labor migration in high-income Asian economies leads to an increase in intraregional migrant workers by 3.2 million (Table 2.3.3). Japan receives the largest portion (62.9%) of the additional migrant workers. The vast majority of the additional migrant workers are unskilled, accounting for nearly three fourths of totals. But there are some cross-country variations. Nearly 40% of the additional immigrant workers to Singapore are skilled, while the equivalent share in Taipei, China is only 12%. In terms of the sources of these increased migrant workers, the PRC and Korea are the two largest suppliers. Yet despite a 771,000 increase in immigrant workers in Korea due to its liberalization, its emigrants increase by almost the same amount due to its large migrant stocks in Japan. The Philippines, Thailand, and the rest of East Asia are also the primary suppliers of these additional migrants, with more modest contributions from India and other South Asian countries.

Most labor-receiving countries gain in terms of real GDP as a result of the labor migration liberalization (Table 2.3.4). Korea is the only exception in which the negative impact of the emigration of its own

2.3.2 GMig2: A model of global migration

The model used, GMig2, is based on the GTAP model (Hertel 1997), adjusted to take into account bilateral labor, wage, and remittance flows. It is documented in Walmsley et al. (2007).

The database used with GMig2 has 2001 as its base year. It is taken from the GTAP 6.2 Data Base (Dimaranan 2006) and is augmented with the bilateral migration database developed by Parsons et al. (2007), skill data from Docquier and Marfouk (2005), and remittance data from the World Bank (Ratha 2003). For the simulation, the GMig2 database has been aggregated into 10 sectors and 21 countries/regions.

The model tracks both the home (sending) and host (receiving) region of each person and each skilled and unskilled worker. An increase in the number of migrant workers from one region to another would reduce the number of workers in the labor-supplying region and increase the labor force of the labor-importing region. The populations would change in a similar way, although it is assumed that migrant workers move with their families.

Changes in the number of migrants occur exogenously through changes in quotas imposed by the host economies, and these migrant workers are supplied by designated home countries according to the share of migrant workers from the home country in the migrant pool of the host economy. There is no unemployment or pool of unemployed to replace lost migrant workers. All labor (by skill type), regardless of origin, is assumed to be perfectly substitutable, although migrants are assumed to have different initial productivities and wages from domestic workers.

Migrant workers are assumed to gain 50% of the difference between their nominal wages at home and the nominal wages in the host region, reflecting the fact that their productivities also change as they move from the home to the host region and interact with the resources and technology of that host region. Remittances are assumed to be a constant proportion of the income received by migrant workers and flow out of the host country back to the permanent residents of the home country.

2.3.3 Migrant stock changes resulting from liberalization by high-income Asian economies, 2012

	Number of additional migrants (000's)	Skilled (000's)	Unskilled (000's)
Total	3,180	837	2,343
Received from abroad			
Japan	2,000	581	1,419
Korea, Rep. of	771	190	581
Taipei, China	344	40	304
Singapore	65	25	40
Sent abroad			
Korea, Rep. of	738	214	524
Taipei, China	0.34	0.19	0.15
Singapore	3	1	2
China, People's Rep. of	1,094	297	797
Rest of East Asia	340	100	240
Indonesia	137	29	108
Malaysia	44	17	27
Philippines	278	73	205
Thailand	291	45	246
Rest of Southeast Asia	135	29	106
India	26	8	18
Rest of South Asia	94	24	70

Source: GMig2 simulations.

workers due to the liberalization of migration by other countries is large enough to offset the real GDP gains due to its own liberalization. Indeed, on balance, Korea receives 57,000 additional unskilled workers, but loses 24,000 skilled workers (Table 2.3.3). All the exclusively migrant-sending economies experience negative changes in real GDP. The magnitude of the real GDP declines depends on the extent to which the fall in labor reduces the endowment of skilled and unskilled labor at home. Those countries with low migration stocks relative to their home populations (PRC, India, and Indonesia) experience lower losses in real GDP, while those sending high proportions of their labor forces experience larger losses.

The story is different for changes in GDP per capita. As shown in Table 2.3.4, in per capita terms, the labor-sending countries' GDP rises as a result of their smaller resident population and higher marginal productivity of labor inputs. The labor-receiving economies experience relative losses in per capita GDP because the migrant workers are assumed less productive than local workers.

Labor-sending economies gain in real income from the liberalization of labor movement into high-income Asia due to the increase in remittances sent home by new migrants and the rise in real wages of skilled and unskilled workers at home. The real income gains for the rest of East Asia and the Philippines are most significant, representing 1.6% and 4.3% of their GDP, respectively, mainly due to their relatively large migration flows to the four recipient economies. These gains are typically larger than those they may reap from Asia-wide regional trade liberalization.² For other labor-sending countries, the income gains range from 0.1% to 0.6% of GDP. Given the relatively small scale of the liberalization, which is limited to only four regional high-income economies, the simulation indeed confirms that easing restrictions on labor movement can bring a large boost to regional economies.

2.3.4 Impacts of liberalization by high-income Asian economies on GDP, income, and remittances, 2012 (changes relative to baseline)

	Real GDP (%)	Per capita real GDP (%)	Rise in real income of permanent residents (as % of baseline GDP)	Inward remittances (\$ million)	Outward remittances (\$ million)
Japan	1.0	-1.9	0.4	1	5,259
Korea, Rep. of	-0.6	-0.5	0.0	788	844
Taipei, China	0.9	-1.9	0.1	3	928
Singapore	0.9	-2.4	-0.3	21	250
China, People's Rep. of	-0.1	0.0	0.1	1,340	5
Rest of East Asia	-1.7	0.6	4.3	1,353	1
Indonesia	-0.0	0.1	0.2	354	1
Malaysia	-0.2	0.1	0.2	179	5
Philippines	-0.4	0.3	1.6	1,425	31
Thailand	-0.2	0.5	0.6	859	1
Rest of Southeast Asia	-0.1	0.0	0.2	203	0
India	-0.0	0.0	0.0	224	0
Rest of South Asia	-0.0	0.0	0.2	522	8

Source: GMig2 simulations.

Real incomes for permanent residents also rise in three of the recipient economies. While liberalization of unskilled migrants yield the greatest real income gains for Japan and Taipei, China, for Korea real income increases because of remittances. Singapore experiences falling real incomes due to the pressures that inward migration create on skilled and unskilled wage income, relative to increasing income from capital.

Table 2.3.5 presents the impacts of migration on real wages by skills level, and decomposes them into changes caused by liberalization of skilled labor migration only, by unskilled labor migration only, and by both skilled and unskilled labor migration. It shows that the real wages of skilled and unskilled workers in Japan; Singapore; and Taipei, China fall as a result of the increase in supply of skilled and unskilled migrant labor. Though migration retards real wages, slow labor force growth would still imply rapid wage growth in these countries. Migration pares back gains, it does not eliminate them.

As others (Shi and Tyers 2005, for example) have concluded, it is unlikely that migration will be able to solve the problems associated with declining population growth rates in many of the industrial economies, although it can be used to alleviate some of the pressures. In labor-sending countries, real wages of both skilled and unskilled workers rise as expected, with the largest increase occurring in the Rest of East Asia and the Philippines. The wage impacts of liberalization of labor migration are, generally, more notable in recipient countries than in source countries.

The analysis suggests that intraregional policies can offer an important alternative mechanism by which Asian economies can reap some of the gains from liberalizing migration, particularly given the likelihood that the US and Europe will continue to strictly limit numbers of immigrants. The scenario of opening up labor migration in high-income Asian economies has shown that the economic benefits to labor-recipient economies (from liberalizing the movement of both skilled and unskilled workers) outweigh the economic costs. And, although labor-sending countries may suffer from lower economic growth in the short run due to the decreased labor supply, they clearly gain in terms of higher real income when they send migrants abroad and receive more

2.3.5 Impacts of liberalization by high-income Asian economies on wages (% changes relative to baseline)

	Liberalization of unskilled labor migration		Liberalization of skilled labor migration		Liberalization of unskilled and skilled labor migration	
	Unskilled wage	Skilled wage	Unskilled wage	Skilled wage	Unskilled wage	Skilled wage
Japan	-0.8	0.5	0.3	-1.0	-0.5	-1.0
Korea, Rep. of	0.6	-0.3	-0.2	1.0	0.4	0.7
Taipei, China	-0.9	0.2	0.3	-1.0	-0.6	-0.8
Singapore	-1.1	0.1	0.2	-1.8	-1.0	-1.6
China, People's Rep. of	0.1	0.0	0.0	0.6	0.0	0.5
Rest of East Asia	1.7	0.7	-0.1	5.9	1.6	6.6
Indonesia	0.1	0.0	0.0	0.2	0.1	0.2
Malaysia	0.2	-0.1	0.0	0.5	0.2	0.4
Philippines	0.9	0.7	0.3	0.7	1.1	1.3
Thailand	0.6	0.0	0.0	0.5	0.6	0.5
Rest of Southeast Asia	0.1	0.0	0.0	0.2	0.1	0.2
India	0.0	0.0	0.0	0.0	0.0	0.0
Rest of South Asia	0.0	0.0	0.0	0.1	0.0	0.1

Source: GMig2 simulations.

remittances. Growth in labor-sending countries might even accelerate in the long run if they reinvested a significant share of remittance income.

Conclusions

Over the past two or three decades, demographic, economic, and policy changes have conspired to produce burgeoning migration flows in Asia. These trends are likely to be further amplified in the future, leading to an even larger number of Asian workers on the move.

The mounting pressures for greater international labor migration present opportunities for significant economic gains, but will also lead to policy challenges. More Asian countries are likely to take a strategic approach to managing migration and will shift their focus from policies that focus on temporary migration flows to more formal, long-term policy frameworks that recognize the deeply embedded structural factors that are driving migration. These frameworks can be expected to attempt to maximize national interest while minimizing the social friction that is sometimes associated with large-scale migration. But there is also a need for greater cooperation.

Existing frameworks are inadequate and the construction of yet more barriers to the migration of unskilled workers is at odds with underlying realities and economic opportunities. The persistently large presence of undocumented migrant workers not only demonstrates the institutional weakness of existing arrangements but also that there are all-round economic gains to be made from more liberal regimes.

Effective management of cross-border labor migration is highly dependent on effective international cooperation. Asia is well positioned to pursue greater regional liberalization of labor mobility to address the growing imbalances in its labor markets. The quantitative scenarios presented earlier illustrate the potential gains and suggest that labor mobility issues warrant closer attention. Existing bilateral agreements are certainly more useful instruments than ad hoc or unilateral approaches to the management of migrant flows. But they can be distortionary (in the same way that bilateral trade agreements are) and are often linked to

the closeness of sociopolitical ties rather than the potential for economic gains. Moreover, bilateral accords make it hard to get countries together to agree on common standards on issues related to workers' rights or other regulations.

Asia has seen some tentative movements toward greater regional cooperation in managing and facilitating labor migration flows. The Asia-Pacific Economic Cooperation grouping has identified measures to facilitate the mobility of business people within that region. In May 2003, the Senior Labor Officials' Meeting of ASEAN nations agreed to begin liberalizing their labor markets by opening up certain sectors to workers from other ASEAN countries. There has also been a significant increase in policy dialogue and cooperation among labor-sending economies and among labor-receiving economies, and between the two sets. These efforts are still very much at early stages. Regional governments need to cooperate more to further open up their labor markets, promote orderly and managed labor flows, and minimize the transaction costs of migrant workers.

As Asian countries are gearing up efforts to intensify regional economic integration, the experience of Europe may be relevant. The free movement of labor between EU member states is a principle underlying its Single Market Programme. Following decades of progress in trade and financial integration, the EU has also steadily moved toward greater intracommunity mobility of workers. The increased labor mobility helps member countries dampen the effects of country-specific shocks and alleviate the structural pressures from long-term demographic changes. Though Asian countries have made substantial progress in integrating their goods markets and are now beginning to make some headway on capital markets (see Part 1), a vision of an "integrated Asian labor market" is yet to emerge. Still, efforts to promote regional cooperation and liberalization in labor migration, to complement deepening integration in goods and capital markets, hold great promise for the future.

Endnotes

- 1 The Government of Thailand has made attempts to give migrants' jobs to local workers, but all such moves failed regardless of the incentives that were offered (Battistella 2003).
- 2 A separate modeling analysis using ADB's GEMAT model finds that the income gains of the Philippines from an Asian free trade area is 1.1% of its GDP. See ADB (2006).

References

- Adams, Richard Jr. H. and John Page. 2005. "Do International Migration and Remittances Reduce Poverty in Developing Countries?" *World Development*, Vol. 33, No. 10: 1645-69.
- Asian Development Bank. 2006. "Routes for Asia's Trade." In *Asian Development Outlook 2006*, Part 3, pp. 265-302. Manila.
- Athukorala, Prema-Chandra. 2006. "International Labour Migration in East Asia: Trends, Patterns and Policy Issues." *Asian-Pacific Economic Literature*, Vol. 20, No. 1: 18-39.
- Battistella, Graziano. 2003. "International Migration in Asia." In *Migration Patterns and Policies in the Asian and Pacific Region*, Chapter 1. Asian Population Studies Series No. 160, Economic and Social Commission for Asia and the Pacific. New York: United Nations.

- Brown, Richard P.C. Forthcoming. "A Comparative Econometric Assessment of the Effects of Migrants' Remittances on Income and Welfare in Armenia, Azerbaijan, the Kyrgyz Republic and Tajikistan." Background paper prepared for the Regional Technical Assistance on Remittances and Poverty in Central Asia and South Caucasus, Asian Development Bank, Manila.
- Chantavanich, Supang. 2007. "Thailand Policies towards Migrant Workers from Myanmar." Paper presented at the Asia Pacific Migration Research Network Conference, Fujian Normal University, Fuzhou, PRC, 26–29 May.
- Dang, Nguyen Anh. 2007. "Labour Export from Viet Nam: Issues of Policy and Practice." Paper presented at the Asia Pacific Migration Research Network Conference, Fujian Normal University, Fuzhou, PRC, 26–29 May.
- Dimaranan, Betina V., ed. 2006. "Global Trade, Assistance, and Production: The GTAP 6 Data Base." Center for Global Trade Analysis, Purdue University, West Lafayette.
- Docquier, Frédéric and Abdeslam Marfouk. 2005. "International Migration by Educational Attainment, 1990–2000." In Caglar Ozden and Maurice Schiff, eds., *International Migration, Remittances & the Brain Drain*, Chapter 5, pp. 151–99. Washington, DC: World Bank.
- Felipe, Jesus and Rana Hasan, eds. 2006. *Labor Markets in Asia: Issues and Perspectives*. London: Palgrave Macmillan for the Asian Development Bank.
- Hertel, Thomas W., ed. 1997. *Global Trade Analysis: Modeling and Applications*. Cambridge: Cambridge University Press.
- Hugo, Graeme. 2008. "Asian Labour Migration Trends." Background paper for *Asian Development Outlook 2008*, Asian Development Bank, Manila.
- Institute of Health Policy and Development Studies (IHPDS). 2005. "Migration of Health Workers: Country Case Study Philippines." Working Paper No. 236, Sectoral Activities Programme, International Labour Office, Geneva.
- International Labour Office (ILO). 2004. *Towards a Fair Deal for Migrant Workers in the Global Economy*. International Labour Conference, 92nd Session, Report VI. Geneva.
- . 2006. "Facts on Labour Migration in Asia." Fourteenth Asian Regional Meeting, Bangkok, August.
- Jongwanich, Juthathip. 2007. "Workers' Remittances, Economic Growth and Poverty in Developing Asia and the Pacific Countries." UN ESCAP Working Paper WP/07/01, Economic and Social Commission for Asia and the Pacific, United Nations, Bangkok.
- Kanapathy, Vijayakumari. 2006. "International Migration and Labour Market Developments in Asia: Fine-tuning the Policy and Institutional Framework for Managing Cross-border Labour Flows." Paper presented at the Workshop on International Migration and Labour Markets in Asia, Japan Institute of Labour, Tokyo, 17 February.
- Khadria, Binod. 2004. "Migration of Highly Skilled Indians: Case Studies of IT and Health Professionals." STI Working Paper 2004/6, Directorate for Science, Technology and Industry. Organisation for Economic Co-operation and Development. Paris.
- Lee, Joseph S. 2006. "Report on Bilateral Agreement on Recruiting and Managing of Foreign Workers: The Case of Taiwan." Paper presented at the Japan Institute of Labour Policy and Training (JILPT) Workshop on International Migration and Labour Market in Asia, Tokyo, 17 February.
- Lokshin, Michael, Mikhail Bontch-Osmolovski, and Elena Glinskaya. 2007. "Work-Related Migration and Poverty Reduction in Nepal." World Bank Policy Research Working Paper 4231, Washington, DC.
- Massey, Douglas S., Joaquin Arango, Graeme Hugo, Ali Kouaouci, Adela Pellegrino, and J. Edward Taylor. 1993. "Theories of International Migration: A Review and Appraisal." *Population and Development Review*, Vol. 19, No. 3: 431–66.

- Ministry of Trade and Industry (MTI). 2001. "Has Foreign Talent Contributed to Singapore's Economic Growth? An Empirical Assessment." In *Economic Survey of Singapore 2001Q3*, Singapore.
- Parsons, Christopher R., Ronald Skeldon, Terrie L. Walmsley, and L. Alan Winters. 2007. "Quantifying International Migration: A Database of Bilateral Migrant Stocks." In Caglar Ozden and Maurice Schiff, eds., *International Migration, Economic Development & Policy*, Chapter 1, pp. 17-58. London: Palgrave and World Bank.
- Pernia, Ernesto M. 2008. "Poverty and the Distributional Impacts of Migration: The Philippine Case." Background paper for the *Asian Development Outlook 2008*, Asian Development Bank, Manila.
- Piore, Michael J. 1979. *Birds of Passage: Migrant Labour and Industrial Societies*. Cambridge: Cambridge University Press.
- Ratha, Dilip. 2003. "Workers' Remittances: An Important and Stable Source of External Development Finance." In *Global Development Finance*, Chapter 7. Washington, DC: World Bank.
- Rodrik, Dani. 2002. "Feasible Globalizations." NBER Working Paper 9129. National Bureau of Economic Research, Cambridge, Massachusetts.
- Sadovskaya, Elena Y. 2005. "Labour Migration in Central Asia, Russia, Afghanistan and Pakistan." Unpublished. Available: www.iomkz.kz/files/Summary%20of%20Analytical%20Overview.doc.
- Shi, Qun and Rodney Tyers. 2005. "Global Demographic Change and Economic Performance: Applications of an Augmented GTAP-Dynamic." Paper presented at the 8th Annual Conference on Global Economic Analysis, Lübeck, Germany.
- US Citizenship and Immigration Services (USCIS). 2006. "Characteristics of Specialty Occupation Workers (H-1B): Fiscal Year 2005." Washington, DC.
- Walmsley, Terrie L., L. Alan Winters, and S. Amer Ahmed. 2007. "Measuring the Impact of the Movement of Labor Using a Model of Bilateral Migration Flows." GTAP Technical Paper No. 28, Center for Global Trade Analysis, Purdue University, West Lafayette.
- Wickramasekera, Piyasiri. 2002. "Asian Labor Migration: Issues and Challenges in an Era of Globalization." International Migration Papers 57, International Migration Programme, International Labour Office. Geneva.
- Williamson, Jeffrey G. 1998. "Globalization, Labor Markets and Policy Backlash in the Past." *Journal of Economic Perspectives*, Vol. 12, No. 4 (Fall): 51-72.
- Wongboonsin, Patcharawalai. 2003. "Comparative Migration Policies in the ESCAP Region." In *Migration Patterns and Policies in the Asian and Pacific Region*, Chapter 3. Asian Population Studies Series No. 160, Economic and Social Commission for Asia and the Pacific. New York: United Nations.
- World Bank. 2006. "Tajikistan Policy Note: Enhancing the Development Impact of Remittances." Report No. 35771-TJ, Washington, DC.
- Yang, Dean and Claudia Martinez. 2005. "Remittances and Poverty in Migrants' Home Areas: Evidence from the Philippines." In Caglar Ozden and Maurice Schiff (eds.), *International Migration, Remittances and the Brain Drain*, Chapter 3, pp. 81-122. Washington, DC: World Bank.



Part 3

Economic trends
and prospects in
developing Asia

Central Asia

Armenia
Azerbaijan
Georgia
Kazakhstan
Kyrgyz Republic
Tajikistan
Turkmenistan
Uzbekistan



Armenia

Another year of double-digit growth was seen in 2007, with a robust performance in construction, services, and agriculture. Strong remittance inflows, rising incomes, and solid private investment fueled domestic demand. As escalating prices of energy and food imports pushed up inflation, the central bank increased the refinancing rate and allowed the domestic currency to appreciate. The medium-term outlook is bright. Construction and services are expected to continue powering growth, with a strengthening contribution from realized investments in mining. To sustain expansion, the authorities will have to diversify the economic base and continue implementing structural reforms.

Economic performance

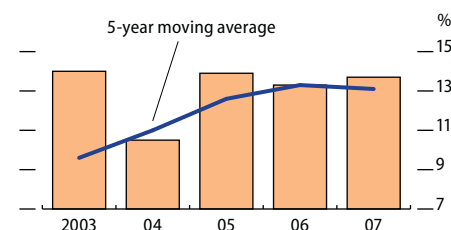
Continuing the double-digit growth trend of the past half decade, GDP grew at an annualized rate of 13.7% in 2007 (Figure 3.1.1). On the aggregate demand side, strong inflows of workers' remittances and higher wages fueled private consumption. Significant private investments were channeled into several industries: real estate, mining, gas supply, and transport and communications. Public investment increased, by over 40%, most of which was directed to developing and rehabilitating public infrastructure. Yet despite strong growth, unemployment stayed high at 6.7%, only a slight improvement from 2006's 7.2%.

Growth in aggregate supply was led by construction, services, and agriculture (Figure 3.1.2). Construction output expanded by 18.4%, largely arising from the building of new homes and offices in Yerevan; expansion of production capacity in mining, metals, and energy; and large-scale construction in transport and communications. Services output grew by 12.5%, underpinned by transport and communications; travel; wholesale and retail trade; and finance. With more favorable weather, agriculture recovered from its poor performance in 2006 to expand by 9.6%, marking a surge in the output of fruit and vegetables, tobacco, and wheat.

Industry (excluding construction) was sluggish in 2007, growing by only 3.2%. Metallurgy expanded by 13.8%, supported by strong demand for copper, molybdenum, and other nonferrous metals. Mining rose by 6.6%, on high demand for construction materials and metal ores. However, processing output (which includes food, tobacco, and beverages) edged up by only 0.5% in the first 10 months of the year. Moreover, manufacturing output of precious metals and stones—mainly diamond processing—continued to tumble (by 47%), reflecting the diminished supply of stones made available to the country. Electricity generation declined by 0.7%.

Inflation (Figure 3.1.3) rose sharply to average 4.4% in 2007. External factors were the major culprits, with steep increases in the prices of energy; other raw materials; and food such as grains, vegetable oil, and

3.1.1 GDP growth



Source: National Statistical Service of the Republic of Armenia, available: <http://www.armstat.am>, downloaded 10 March 2008.

[Click here for figure data](#)

3.1.2 GDP growth by sector



Source: Ministry of Finance and Economy, available: <http://www.mfe.am>, downloaded 10 March 2008.

[Click here for figure data](#)

butter. Monopolistic or oligopolistic practices of producers and importers of certain products exacerbated the pressure.

Surging monetary aggregates also stoked inflation. The monetary base, for example, leaped by 51% and the money supply (M2) by 63.9%, reflecting unsterilized foreign exchange intervention, dedollarization of cash holdings, and expansion of bank credits. In an attempt to counter inflation pressure, the Central Bank of Armenia raised the refinancing interest rate (its main policy instrument) on several occasions in 2007, from 4.75% to 5.75%. It also allowed the exchange rate to appreciate by 21.6% against the dollar. Some export sectors and remittance-dependent households have suffered from the sharp appreciation.

Fiscal policy has been prudent. Total fiscal revenues (including nontax receipts and grants) came to AMD570.1 billion, and total expenditures to AMD565.9 billion, producing a small budget surplus (Figure 3.1.4). Total revenues rose by 29.1%, mainly on higher tax collection—value-added tax was up by 49.5% and income tax by 31.8%—and reduced official transfers. Fiscal expenditures increased by 17.6%: about 72% of the total was current spending, such as wages, subsidies, interest payments, and goods and services; 25% was on public capital outlays; and the rest was for lending.

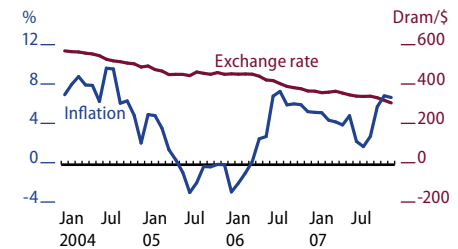
Although the tax-to-GDP ratio climbed to 18.2% in 2007 from 16.6% in 2006, it remains low because of widespread tax evasion, weakness in tax administration, excessive exemptions that limit the tax base, and heavy reliance on indirect taxes (which constitute about 60% of total tax receipts). Consequently, the major contributors to economic growth—construction, services, and agriculture—have largely escaped the tax net. Lack of buoyancy in the services tax stems from the fact that it is specific rather than ad valorem. Agriculture will not be taxable until 2009, in accordance with an agreement with the World Trade Organization. Foreign and joint-venture companies are the top taxpayers; many large domestic enterprises do not pay tax.

The total value of goods exported (customs data) was \$1.2 billion in 2007, up by 16.7% relative to the previous year. The major commodities include precious stones and metals, base metals and mineral products, and prepared foodstuffs. Armenia is currently pursuing a diversification strategy to expand its narrow export structure. Exports of precious stones, such as polished diamonds, used to account for more than 50% of total export income, but exports of base metals have recently become a leading income earner. Base metals accounted for 33.7% of total export receipts in 2007 (up from 28.5% in 2006), while precious stones and metals amounted to 18.5% of the total (falling from 30.6% in 2006).

Goods imports surged by 49.7%, to \$3.3 billion in 2007. New construction projects boosted spending on imports of building materials, and machinery and equipment also grew rapidly. Higher incomes and remittances raised imports of consumer goods, while sharp increases in prices of energy and commodities, especially grains, pushed up “other imports” and the total value of imports (Figure 3.1.5). The trade deficit in 2007 came in at \$2.1 billion.

A services trade deficit of \$137.2 million was recorded in the first 9 months of 2007 and is estimated at about \$180 million for the year. Although remittances helped offset a widening trade gap, a current account deficit of \$436 million (4.7% of GDP) is estimated for the year

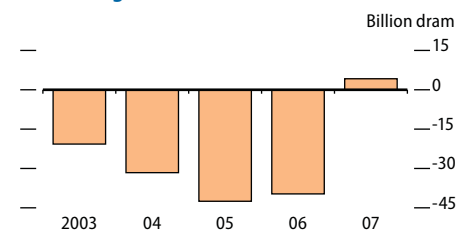
3.1.3 Inflation and exchange rate



Sources: International Monetary Fund, *International Financial Statistics* online database; Ministry of Finance and Economy, available: <http://www.mfe.am>; both downloaded 10 March 2008.

[Click here for figure data](#)

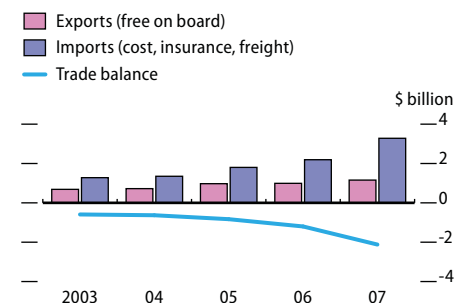
3.1.4 Budget balance



Source: Ministry of Finance and Economy, available: <http://www.mfe.am>, downloaded 11 March 2008.

[Click here for figure data](#)

3.1.5 Merchandise trade balance



Source: National Statistical Service of the Republic of Armenia, *Socio-economic Situation of the Republic of Armenia*, various issues.

[Click here for figure data](#)

(Figure 3.1.6). The current account deficit was financed by foreign direct investment (FDI) of \$354.5 million in the first 9 months of 2007 and by external borrowings. Gross official international reserves jumped to \$1.7 billion in 2007 (up by 55%), equivalent to more than 5 months of imports of goods and services.

External debt amounted to \$1.4 billion at end-2007 (a 12.8% rise compared with 2006). Continued official emphasis on a sustainable debt-management policy has seen a notable reduction in external public debt as a share of GDP in recent years. It was 14.8% of GDP in 2007, with most of the outstanding debt contracted on concessional terms (Figure 3.1.7).

The Government has made solid progress in improving the general business environment. As demonstrated in the *Doing Business* survey for 2008, the country's ranking climbed to 39 in 2007 (out of 178 countries and areas), from 46 in 2006. However, much remains to be done to move toward international best practice, particularly in the areas of payment of taxes (the ranking declined to 143 from 137), and to a lesser extent, investor protection (which weakened to 83 from 81) and enforcement of contracts (which remained at 64).

In addition, further reform is needed to enhance competition in domestic markets, in order to improve efficiency and to limit inflation pressure. A recent comprehensive study on the economy by the World Bank noted that some sectors are being controlled by a few incumbents, which either singly or in cartels dominate the distribution of particular products. Further reform is also required to strengthen the rule of law and to improve the judicial system.

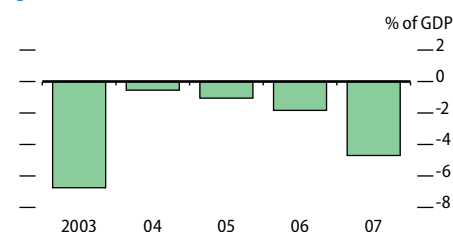
The Government has acknowledged this. It adopted an anticorruption strategy and action plan in 2003, as well as an action plan for public sector management reform, which aims to improve accountability and provide civil society a greater voice. A second anticorruption strategy is now being prepared. The Government is also planning to create an electronic procurement system. The intention is to help improve transparency and reduce corruption.

Economic prospects

As the economy is small and open, developments internationally—especially in the Russian Federation—have a significant impact on performance. It is expected that high energy prices will continue to exert pressure on inflation over the forecast period, and that large inflows of remittances will continue because the Russian economy (the source of 75–80% of Armenia's remittances) will remain robust. The central bank has kept the same inflation target for 2008 and has committed to tightening monetary policy if inflation pressure accelerates. Fiscal policy will be expansionary this year relative to last year. The authorities are determined to maintain a flexible exchange rate policy and the dram is likely to continue appreciating against the dollar.

The economic outlook is positive. In 2008, construction and services (in particular, transportation and communications, and wholesale and retail trade) are expected to continue driving growth. Moreover, production in mining—especially copper and molybdenum—is forecast to expand as recent investments in the sector begin to pay off. On the

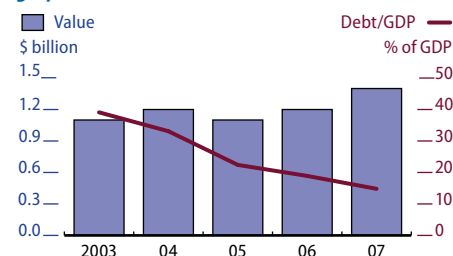
3.1.6 Current account balance



Sources: Ministry of Finance and Economy, available: <http://www.mfe.am>, downloaded 11 March 2008; staff estimates.

[Click here for figure data](#)

3.1.7 External debt



Sources: Ministry of Finance and Economy, available: <http://www.mfe.am>; National Statistical Service of the Republic of Armenia, available: <http://www.armstat.am>; both downloaded 4 February 2008; staff estimates.

[Click here for figure data](#)

3.1.1 Selected economic indicators

	2008	2009
GDP growth	10.0	8.0
Inflation	5.5	5.0
Current account balance (% of GDP)	-4.5	-4.9

Source: Staff estimates.

demand side, remittance inflows and higher disposable incomes, in part boosted by a steep rise in pensions and minimum wages that came into effect on 1 January this year, will continue to fuel consumption spending and imports. GDP is projected to grow at 10.0% in 2008 and 8.0% in 2009.

Parliament approved the state budget for 2008. Fiscal revenues are expected to reach AMD746 billion (25.8% of GDP), and fiscal expenditures AMD822 billion (28.4% of GDP), with a budget deficit of AMD76 billion (in contrast to a surplus of AMD4.2 billion in 2007). Major spending items are the increase in pensions (from AMD11,500 to AMD20,000 a month) and minimum wages (from AMD20,000 to AMD25,000 a month).

Increased private and public consumption expenditures, combined with external price pressures, will result in a pickup in inflation to 5.5% in 2008. The authorities' commitment to tightening monetary policy and some likely exchange rate appreciation will help curb inflation pressure. The potential hike in the price of gas resulting from the elimination of the gas subsidy by end-2008 will impact on inflation in 2009, though softer prices for imports of foodstuffs and petroleum may allow inflation to ease to 5.0% in 2009.

The trade deficit is expected to widen in the forecast period because of persistent expansion in imports to support higher construction and investment activity, as well as high volumes of food imports. The narrow export structure means that exports are susceptible to changes in international prices and demand. Mining and metallurgy exports are forecast to be robust because of new investment. Increased net income from abroad, along with larger workers' remittances and other transfers, are expected to partly offset the enlarged trade deficit. The current account deficit is projected to be around 4.5% of GDP in 2008 and 4.9% in 2009. Inflows of capital grants, FDI, and foreign development assistance are likely to fully finance the larger current deficit and provide for a continued increase in official reserves.

There are a range of risks to the medium-term outlook. Due to the openness of the economy, external factors will play a prominent role. A marked slowdown of the Russian economy could reduce remittances, trade, and FDI. A substantial downturn in global demand for commodities would also have an important adverse effect. On the domestic front, a downturn of the real estate market would also have a significant impact on growth. In addition, further appreciation of the dram may make it hard to sustain export growth.

Development challenges

The economic base is narrow, and the Government recognizes that in order to achieve a more diversified and sustainable growth path it needs to capture other production activities in the value chain, broaden its sources of energy supply, and develop new areas, such as information technology. It also needs to push through further institutional reforms in the areas of tax administration and collection, customs, the judiciary, and competition policy.

Azerbaijan

The boom in production and exports of oil and gas is seeing few signs of ending: operations at large new investments began in 2007, and are expected to reach their peak in the next few years. Earnings from hydrocarbons have led to a large current account surplus and strong currency appreciation in real terms. Significant fiscal loosening in 2007 fueled domestic demand and inflation, as the central bank lacked adequate instruments for controlling monetary expansion. A key policy aim in the medium term is to diversify the economy, and reduce its heavy dependence on oil and gas.

Economic performance

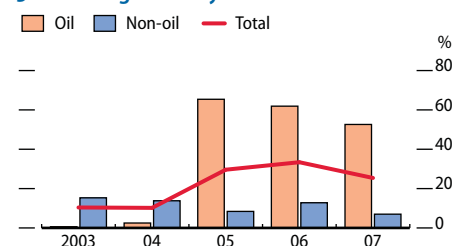
At 25.4% in 2007, GDP growth was underpinned by surging crude oil production and exports, which leaped by 31.5% and 39.1%, respectively. This performance was due to increased production at the Azeri-Chirag-Guneshi offshore oil field operated by the Azerbaijan International Operating Company, the largest exporter and accounting for over 90% of total crude oil exports. Oil from that field is exported to Western markets through the Baku-Tbilisi-Ceyhan pipeline. Oil production is expected to reach 1 million barrels a day this year. Natural gas production increased by over 70% in 2007 as production at the Shah-Deniz offshore block came on stream.

Services and construction also expanded rapidly. Growth in services at 25.1% was bolstered by the expansion of communications and transport. Services' robust growth was also helped by comprehensive tariff adjustments and policies to expand private sector services in rural areas. Reforms in customs and tax administration have increased the transit of goods (including crude oil) through Azerbaijan. Construction, predominantly residential, grew by 19%, due to substantial improvements in regulations and licensing. These changes included the simplification of regulation procedures and unification of technical requirements in construction.

Despite the strong expansion, the growth rate of non-oil GDP continued its post-2003 decline, showing symptoms of “Dutch disease” (Figure 3.2.1). Agriculture—the largest employer, accounting for nearly 40% of total employment—has in particular been hard hit by the real appreciation of the manat, which has stimulated imports of agricultural commodities from neighboring countries. The sector contracted by 1.7% in spite of administrative attempts at support, including subsidies and concessional loans to farmers.

Foreign direct investment, particularly by international oil and gas companies, has been the main driver of heady investment in the past decade. However, it declined by 28.9% or about \$1.3 billion in 2007, with the completion of several significant oil and gas exploration projects

3.2.1 GDP growth by sector



Sources: International Monetary Fund, *Regional Economic Outlook*, Middle East and Central Asia, October 2007; *Asian Development Outlook* database; staff estimates.

[Click here for figure data](#)

(Figure 3.2.2). A further decline in foreign direct investment is expected over the next 5 years. In 2007, domestic investment (mainly public) balanced the decline in foreign investment, to account for over 53% of the total.

Public investment focused on social sectors and improvement of public utilities. These investments were aligned with the state program on socioeconomic development of the regions and with the national employment strategy. Compared with public investment, growth in domestic private investment was modest. However, the Government consolidated efforts to strengthen the non-oil sector by improving the investment climate. While most reform efforts were more procedural than structural, the authorities achieved solid progress in easing business registration generally and that of small and medium enterprises (SMEs) particularly. The authorities reformed SMEs' registration procedures by introducing a "single window." It is also expected that a unified set of licensing requirements will be designed and that market-entrance requirements, especially for SMEs, will be eased.

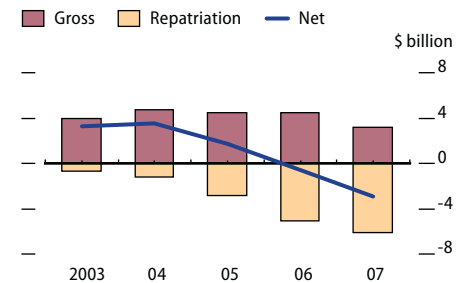
Another significant change was a decline in the average cost and time for opening a new business, from over 50 days in 2006 to less than 30 in 2007. The Government also established the Azerbaijan Investment Company with an initial capital of about \$100 million as a public equity fund to invest in private non-oil companies.

Continued strong foreign currency inflows from oil and gas exports put additional pressure on inflation. Despite sterilization efforts by the National Bank of Azerbaijan (NBA), money supply (M3) rose by about 71.6% in 2007 (Figure 3.2.3). The manat appreciated by about 5% against the United States dollar in nominal terms. A stronger local currency could potentially help alleviate the upward pressure on consumer prices, but the authorities are reluctant to allow further appreciation to avoid harming the non-oil tradable sectors. However, due to higher inflation than in major trading partners, the real effective exchange rate has appreciated by over 20% since end-2004 (Figure 3.2.4). In a parallel move to tighten, NBA also introduced an interest rate corridor of 5–19% for centralized lending operations, and lifted the discount rate by 350 basis points to 13% during 2007.

The central bank's primary objective is price stability, yet it is heavily constrained by the fiscal dominance of monetary policy: it has to buy foreign currency from the Government, which uses oil revenues to finance its expansionary fiscal policy. In 2007, NBA intervened in the foreign exchange market in an effort to maintain a competitive real exchange rate. With a limited capacity to sterilize its purchases, it could not effectively control the monetary base and the expansion in the money supply. As part of structural measures, limits on capital outflows have been liberalized.

The inflation rate doubled from an average of 8.0% in 2002–2006 to 16.7% in 2007. A big jump in consumer inflation was recorded in January 2007 (Figure 3.2.5) when the Government raised public utility tariffs (water supply and sanitation, electricity, and gasoline). The acceleration in consumer prices after October 2007 was attributable to a steep rise in imported commodity prices, in particular wheat, because wheat-related products weigh heavily in the consumption basket and because about half the grain consumed is imported. At year-end, prices were 20.0% higher

3.2.2 Foreign direct investment

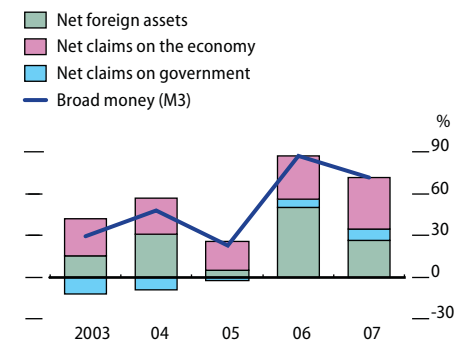


Note: Data for 2007 are for January to September.

Source: National Bank of Azerbaijan, available: <http://www.nba.az>, downloaded 7 March 2008.

[Click here for figure data](#)

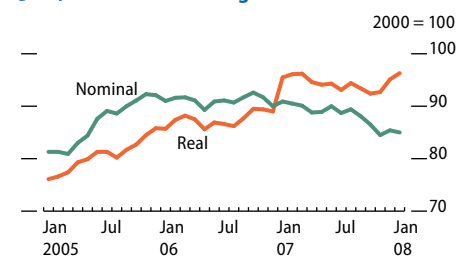
3.2.3 Factors affecting money supply (M3) growth



Source: National Bank of Azerbaijan, available: <http://www.nba.az>, downloaded 5 March 2008.

[Click here for figure data](#)

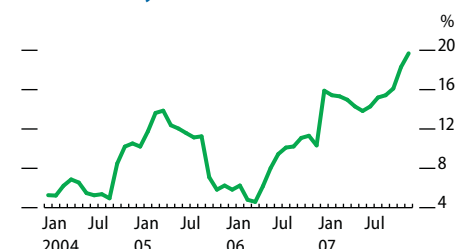
3.2.4 Effective exchange rates



Source: National Bank of Azerbaijan, available: <http://www.nba.az>, downloaded 5 March 2008.

[Click here for figure data](#)

3.2.5 Monthly inflation



Source: State Statistical Committee of Azerbaijan.

[Click here for figure data](#)

than a year earlier. Although the value-added tax and import duties on agricultural products have been lowered, imports are still hampered by insufficient customs facilities and delays in clearance.

Inflation was also fueled by a surge in government expenditures (including wages and other compensations, and social transfers). In 2007, the total public sector wage bill, for example, soared by over 60%.

With a presidential election to be held in October this year, the authorities will probably attempt to use administrative tools, such as price ceilings on key commodities, to avoid further price rises. Controls may be effective at least in the short term, but in the longer term the Government will have to consider their possible impact on agricultural production.

The increases in global oil prices and in the export volume of hydrocarbons resulted in a current account surplus estimated at \$8.0 billion, equivalent to 27% of GDP in 2007 (Figure 3.2.6). According to preliminary data, the trade surplus rose by over 30%, driven by crude oil exports, which account for about 90% of the total. Gross international reserves, excluding gold, increased from \$2.5 billion at end-2006 to \$4.3 billion at end-2007 (Figure 3.2.7).

With some \$2 billion in assets, the State Oil Fund of Azerbaijan (SOFAZ) is a key institution for the management of oil wealth. It derives its revenues primarily from oil sales, income from oil transport, bonuses paid by foreign oil companies, the excess between market and projected oil prices, and income from financial investments. In addition to making direct transfers to the state budget, SOFAZ also spends directly on major infrastructure projects and gives assistance to internally displaced people. These expenditures are in line with the annual consolidated budget approved by Parliament.

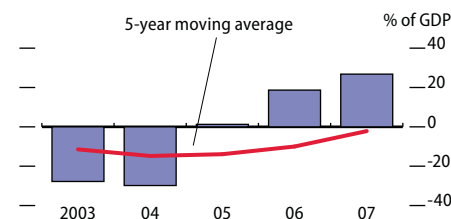
The external debt burden remained moderate, with the end-of-year stock of public and publicly guaranteed debt standing at \$2.2 billion, equivalent to about 12% of GDP.

As in previous years, the Government ran an expansionary fiscal policy backed by soaring oil revenues. As a result of a midyear revision to the state budget, consolidated expenditures were increased by over 80%. Revenues and grants amounted to over 30% of GDP, with corporate income tax and value-added tax the main sources of funds. Government spending reached 35% of GDP, lifted in part by increases in public sector wages, pensions, and infrastructure development. The overall deficit came in at 2.1% of GDP (Figure 3.2.8).

Among banking sector reforms, the minimum capital requirement was raised to \$11 million (to increase capitalization and induce further bank consolidation), and some components of the Basel II principles were enforced. The Government also privatized the second-largest state-owned bank—Kapital Bank—and passed a new law on deposit insurance. It also took measures to curtail implicit energy subsidies, including the increase in utility prices in January 2007. This led to a reduction in energy subsidies from 21% of non-oil GDP in 2006 to an estimated 11% in 2007. In 2008, it is expected that state energy subsidies will decline to single-digit levels. In addition, the authorities have substantially improved the collection of utility payments from around 40% to 90% of billings.

About 20 state-owned enterprises out of more than 50 have already adopted International Financial Reporting Standards. It is expected

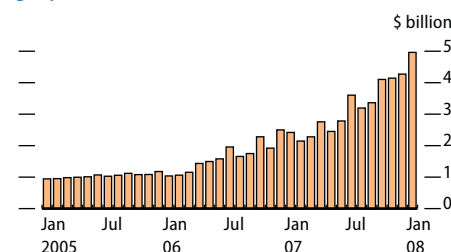
3.2.6 Current account balance



Sources: National Bank of Azerbaijan; staff estimates.

[Click here for figure data](#)

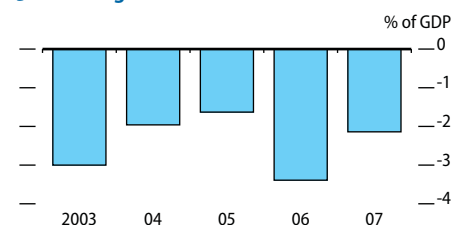
3.2.7 Gross international reserves



Source: International Monetary Fund, *International Financial Statistics* online database, downloaded 5 March 2008.

[Click here for figure data](#)

3.2.8 Budget balance



Sources: Asian Development Outlook database; State Statistical Committee of Azerbaijan.

[Click here for figure data](#)

that in 2008 the largest state-owned enterprises, including the State Oil Company of Azerbaijan and Azerenergy (the state electricity company) will introduce these standards.

Economic prospects

The economic outlook for 2008 and 2009 remains positive and GDP growth rates are projected at 15.7% and 18.0% (Figure 3.2.9), reflecting a moderate increase in hydrocarbon production and exports. Crude oil and natural gas production, respectively, are projected to rise by an average of 21% and 26% in the forecast period. While FDI inflows into the sector will gradually decline, domestic investment, largely public, will increase by 8% over the forecast period, supporting growth. Expansion in the non-oil sector, including agriculture, is expected to remain at about 9%. Since GDP growth will be concentrated in capital-intensive sectors, a sharp drop in unemployment is unlikely, although average nominal wages are expected to continue rising.

In late 2007, Parliament approved the state budget for 2008. While high oil prices and increasing hydrocarbon export volumes are the main contributor to growth in the state budget revenues (28.1% of the total), higher tax receipts and customs fees will be the predominant source of government revenues (over 80%) in 2008. It is expected that over 54% of tax revenues will be collected from oil-related industries. SOFAZ will become the second-largest source of government funding, accounting for about 15% of the total. State spending is set to increase by 34.9% to 27.0% of GDP. In the medium term, the Government is keen to reduce fiscal spending to a level consistent with a sustainable expenditure framework that takes into account the long-term oil revenue profile.

Inflation will remain in double digits, given the expansionary fiscal policy. To help keep it in check, NBA will likely make further increases in the refinancing rate, expand open-market operations, and raise commercial banks' reserve requirements for external borrowing in order to limit this source of capital inflows. It will continue to face conflicting pressures in conducting monetary policy, given its limited tools, and the undeveloped local financial and capital markets. Higher inflation than in major trading partners risks weakening non-oil export competitiveness.

Continuing growth in oil export volumes in 2008–2009, in conjunction with high global oil prices, will keep the current account running a large surplus of 38–40% of GDP. Growth in spending on imports of capital goods will gradually decelerate, as government investments slow and as hydrocarbon projects are completed. However, an appreciating currency and rising wages will boost spending on imported consumer goods and luxuries. The large medium-term trade balance will offset a negative income balance resulting from the repatriation of profits by foreign oil investors.

Development challenges

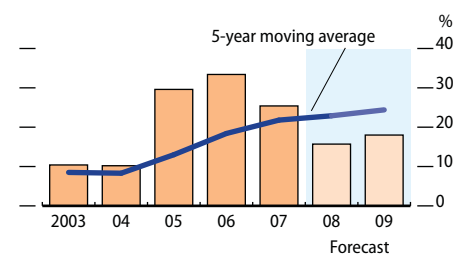
The main challenge for the Government is to maintain macroeconomic stability in an oil-related boom. Growth in public expenditures and robust development in infrastructure in the next couple of years

3.2.1 Selected economic indicators

	2008	2009
GDP growth	15.7	18.0
Inflation	13.0	12.0
Current account balance (% of GDP)	38.0	40.0

Source: Staff estimates.

3.2.9 GDP growth



Sources: State Statistical Committee of Azerbaijan; staff estimates.

[Click here for figure data](#)

will increase pressures on inflation and the exchange rate. Further easing business regulations and improving the investment climate are necessary to strengthen the comparative advantage of the non-oil sector, particularly in telecommunications, agriculture, and food processing.

The Government has already taken some steps to diversify the non-oil economy, but needs to accelerate the process. It faces several policy issues, and in response may have to take steps along the following lines. First, it should develop a national strategy for economic diversification, based on an analysis of the country's comparative advantage and development priorities. In particular, decisions to develop any new sectors or industries should take into account financial affordability and economic viability to ensure maximum development impact.

Second, it needs to adopt special policies for developing the non-oil sector that have been identified as priorities by the national strategy. Public investment should be carefully administered, and private investment, both domestic and foreign, attracted through favorable market incentives. These should include simplified business regulations and taxation procedures for start-up companies, and security of property and contract rights.

Third, the Government needs to promote processed products in resource-based sectors (such as petrochemicals and agroprocessing), which are less affected by world price fluctuations and which have greater value added than the basic resources themselves. The country is in a good position to expand output of processed products because of its rich natural resources and its relatively high level of human capital.

Lastly, since regional cooperation is a prerequisite for long-term economic sustainability, it needs to boost intraregional ties. It is expected that a new road connecting Azerbaijan and Turkey via Georgia, which opened last year, will greatly enhance regional cooperation and trade by providing an alternative corridor to those through the Islamic Republic of Iran and the Russian Federation.

Georgia

Economic growth in the Asian Development Bank's newest member has been robust in recent years, supported by strong domestic demand and supply-side reforms. Investment activity has been buoyed by large foreign direct investment inflows. Revenue collections have soared but so too has public spending. Near term, the large current account deficit has to be managed while macroeconomic imbalances are unwound; further out, more jobs are needed. The outlook for rapid growth is positive.

Economic performance

Resilient to shocks, growth accelerated to 12.0% from an average of 8.3% in 2004–2006 (Figure 3.3.1). Rising domestic demand, particularly consumption, as well as buoyant investment underpinned the spurt. Consumption growth was supported by rising real wages and surging workers' remittance inflows.

The investment activity was bolstered by foreign direct investment (FDI) amounting to \$1.4 billion (13.8% of GDP) in 2007, up from \$1.1 billion the previous year (Figure 3.3.2). The increase in FDI reflects continued government reforms to improve incentives for private sector development, including extensive privatization. FDI also helped cushion the adverse impact of the loss of large bilateral trade flows due to a Russian trade and transit embargo imposed in 2006.

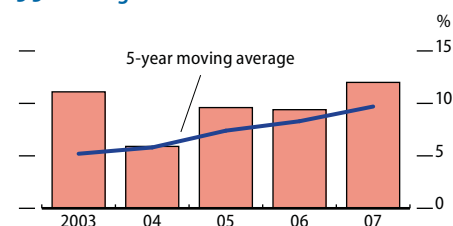
Industry, led by mining and manufacturing, grew by 12.8%, reflecting in part a favorable external environment for such export-oriented products as ferrous alloys and copper ore. Higher industrial growth may also reflect the crossover of enterprises to the formal from the informal sector, as reforms have made staying informal less attractive. Another factor could be progress in industrial restructuring, with the exit of older, more inefficient firms and the entry of new, more productive firms.

Services continued to grow strongly, by 14.4% in 2007, led by the subsectors of wholesale and retail trade, hotels and restaurants, and transport. Buttressing recent strong performance are reforms in policies toward infrastructure development, especially in energy, transport, telecommunications, and financial services.

Agriculture showed signs of recovery beginning in the second quarter from the slump in 2006 to expand by 3.8%. However, the trend in growth in recent years has been weak due to the incomplete transition from subsistence to commercial agriculture.

Differences in sector growth rates over the years have led to large changes in the composition of GDP, with services accounting for some three fifths and industry around one fourth (Figure 3.3.3). Despite agriculture's dwindling share in GDP, its impact on food prices is substantial.

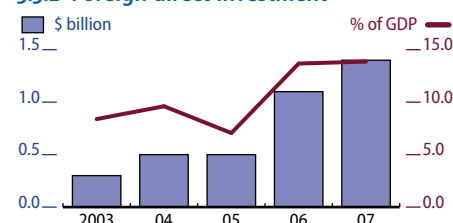
3.3.1 GDP growth



Sources: Department of Statistics, available: <http://www.statistics.ge>, downloaded 18 March 2008; staff estimates.

[Click here for figure data](#)

3.3.2 Foreign direct investment



Sources: International Monetary Fund, *International Financial Statistics* online database, downloaded 14 March 2008; staff estimates.

[Click here for figure data](#)

Surging foreign exchange inflows have underpinned recent growth, but have also complicated the task of containing internal and external imbalances. Inflation rose to double digits in the second half of 2007 (Figure 3.3.4). The 12-month end-of-period inflation for 2007 stood at 11.0% and the period average at 9.2%.

In the consumer price index basket, the largest increases were registered in the categories of gas, fuels, and electricity (23.9%); transport (15.6%); and food (12.9%). Increased world prices for energy and food (particularly cereals) were a contributory factor. The domestic prices of most tradable goods are likely to have been pushed up by the depreciation of the local currency, the lari, on a trade-weighted basis over recent months. The nominal effective exchange rate depreciated by 0.7% year on year in December 2007. The real effective exchange rate appreciated marginally by 0.5%. The growth rate of average wages outstripped growth of real value added per employee in the first half of 2007.

Added to this mix was a marked expansion in credit to the private sector, which boosted broad money growth (M3) to 49.7% (Figure 3.3.5), stoking accelerating inflation pressure during the year.

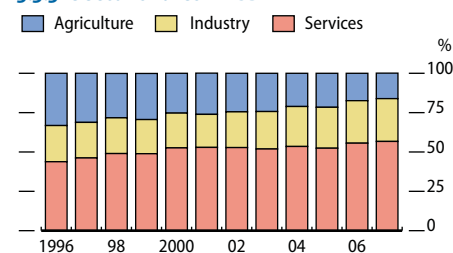
The National Bank of Georgia (NBG) has so far followed a hybrid approach aimed at inflation control and smoothing fluctuations in the exchange rate, but has encountered inherent tensions between these two aims. In fact, its preference seems to have been to slow exchange rate appreciation and, more recently, to induce nominal exchange rate depreciation, as concern to control inflation gave way to worries over competitiveness (as export growth appeared to wane). The monetary instruments used were foreign exchange interventions and open-market operations (using NBG certificates of deposit and sale of its holdings of government securities), the latter on a limited scale given the underdeveloped financial sector.

As a complementary sterilization measure, government deposits have been accumulated with NBG, made possible by significant privatization proceeds that have exceeded the overall deficit. Georgia faces the classic problem of the “incompatible trinity”: with free capital mobility, monetary policy can be oriented toward an external objective (exchange rate) or an internal objective (price level), but not both at the same time. It is now seeking to get out of this bind and in legislation approved in February 2008 NBG’s main objective is stated to be price stability.

At a time when the economy shows signs of overheating, the fiscal deficit widened in 2007 as record revenue collections were outweighed by a record level of public spending. Budgetary revenues (excluding privatization receipts) rose sharply to an estimated 29.4% of GDP, from 26.3% the previous year, on the back of tax revenue collections that rose by 40.0%. The main sources of recent growth in receipts have been value-added tax, profit tax, income tax, and excise duty. Major reforms in tax policy and administration have sustained the upward trend in budgetary revenues, in particular, flat-rate taxes (on income and profit) on a broader tax base, together with substantially improved tax compliance.

Budget expenditures grew by 36.6%, with the expenditure-to-GDP ratio now at 32.5%. The higher spending was mainly on defense, infrastructure development, and social sectors. The fiscal outturn for 2007 (a deficit of 3.1% of GDP) is wider than originally planned (2.6%) and

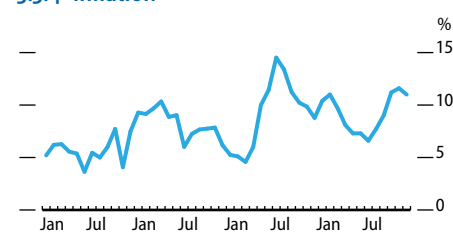
3.3.3 Sector shares in GDP



Sources: Department of Statistics, available: <http://www.statistics.ge>, downloaded 18 March 2008; staff estimates.

[Click here for figure data](#)

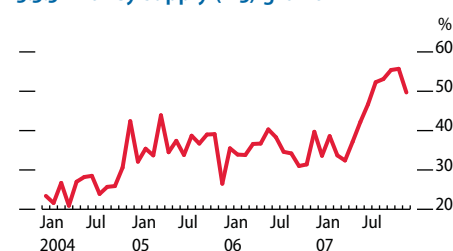
3.3.4 Inflation



Source: National Bank of Georgia, available: <http://www.nbg.gov.ge>, downloaded 18 March 2008.

[Click here for figure data](#)

3.3.5 Money supply (M3) growth



Sources: National Bank of Georgia, available: <http://www.nbg.gov.ge>; International Monetary Fund, *International Financial Statistics* online database; both downloaded 10 March 2008.

[Click here for figure data](#)

slightly higher than the 2006 outturn of 3.0% (Figure 3.3.6). The deficit was, however, more than covered by privatization receipts, estimated at 3.8% of GDP in 2007.

Public debt ratios, both external and domestic, have been falling. Total government debt stood at 22.0% of GDP for 2007 (down from 35.7% in 2005) and of this, the external share is estimated at around 17%, down from 27.0% in 2005 (Figure 3.3.7). Debt-reducing factors include the effect of higher GDP growth on the debt-to-GDP ratio, debt-reduction operations, prepayment of debt owed, and a conservative external borrowing policy. The relatively low public debt and strong GDP growth point to a sustainable fiscal deficit.

Nonetheless, with limited effectiveness of monetary policy, fiscal policy should be developed into a more effective instrument for managing the large foreign exchange inflows. Saving the receipts from overperformance (relative to the original budget) rather than ratcheting up public spending would help sterilize foreign exchange inflows and thus lessen the risk of the economy overheating. At some time in the future, the Government envisages eliminating fiscal deficits altogether. The February 2008 legislation includes a directive to make fiscal surpluses mandatory and to establish a “future generations fund” and a “stable development fund” to absorb both the surplus and privatization proceeds.

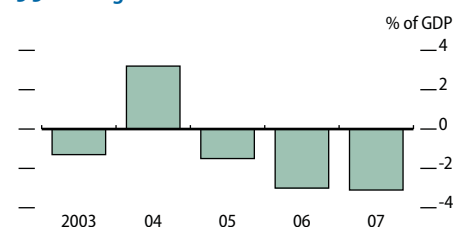
The current account deficit is large and growing (14.7% of GDP in 2007, from 9.8% in 2005). The trade balance has been deteriorating, with particularly sharp downturns in 2006–2007 as import growth outpaced export growth (Figure 3.3.8). The deteriorating trade balance has been partially offset by growing surpluses in other components of the current account, notably nonfactor services, income, and transfers.

Whether such a large deficit is sustainable requires a view of the other side of the coin, namely the savings-investment gap. The gap is mainly in the private sector account—the recent private investment boom has been covered by FDI while private saving has fallen. The contribution of the public sector to the savings-investment gap is less significant. The potential risk presented by the widening of the savings-investment gap stems from the expected slowdown in FDI from its current high levels. Such a slowdown will require an adjustment in the savings-investment gap either through a painful retrenchment in investment or, preferably, through higher private saving to finance expanding domestic private investment.

Structural reforms have affected growth and private investment. Governments have vigorously pursued business regulatory reforms since 2004, and licensing reforms stand out as a key area that has transformed the business environment. Other “business-friendly” policies include labor regulations, property registration, and tax reform. Consequently, the cost of doing business has fallen appreciably—the country’s global rank in the World Bank’s *Doing Business* index is now 18 and inward FDI has surged. Public sector reform is moving apace. The program for privatizing large-scale enterprises is now nearly complete. Public finance reforms on both the revenue side (such as tax reforms) and the expenditure side (such as improved allocative and operational efficiency of public spending) have contributed to fiscal sustainability.

Public administration has seen notable progress in implementing anticorruption measures and in streamlining administrative structures,

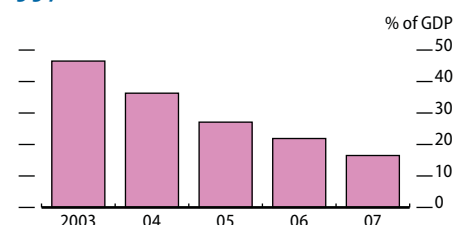
3.3.6 Budget balance



Sources: International Monetary Fund, *Country Report* Nos. 06/171 and 07/299, both available: <http://www.imf.org>; staff estimates.

[Click here for figure data](#)

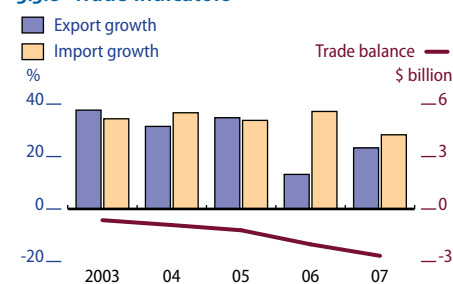
3.3.7 External debt



Source: International Monetary Fund, *Country Report* No. 06/171, available: <http://www.imf.org>.

[Click here for figure data](#)

3.3.8 Trade indicators



Sources: National Bank of Georgia, available: <http://www.nbg.gov.ge>, downloaded 10 March 2008; staff estimates.

[Click here for figure data](#)

3.3.1 Selected economic indicators

	2008	2009
GDP growth	6.5	7.0
Inflation	9.5	7.0
Current account balance (% of GDP)	13.6	11.5

Source: Staff estimates.

while significant consolidation of the banking system has taken place, with an increase in minimum capital requirements. The effectiveness of the private credit bureau has been strengthened by a broadening of the database of payment information collected and improvement of the means for distributing borrowers' debt profiles to creditors. Also, the law on insolvency procedure passed in May 2007 has reduced the time involved in closing a business and improved the debt-recovery rate. These reforms, together with a generally prudent macroeconomic policy, have boosted credit to the private sector from a very low base.

Economic prospects

Relative to 2005–2007, GDP growth in the forecast period is expected to fall to 6.5–7.0%, largely reflecting decelerating domestic demand. The expected growth easing stems from the following factors: investment growth may be pared back given an uncertain environment leading up to parliamentary elections to be held this May; the Government has committed to more restrained public spending on concerns of fueling inflation (thereby probably slowing demand growth); and the negative contribution of net exports will continue to affect growth, since foreign demand for exports is likely to be somewhat weaker as the impact of moderating eurozone expansion is likely to outweigh the effect of any depreciation in the lari-euro exchange rate.

GDP growth is projected to pick up to 7.0% in 2009 as private sector investment, particularly on the domestic side, responds to productivity-enhancing reforms. The balance of risks to projected GDP growth is on the upside. The postelection policy environment is likely to see deepening reforms and institution building. If promising signs of rapprochement with the Russian Federation do indeed materialize, then demand for Georgia's traditional exports to that country could recover, and the negative contribution of net exports to growth could ease somewhat.

Average consumer price inflation in 2008 is expected to stay at around 9.5%, reflecting high energy and food prices, as well as continued depreciation of the exchange rate on a trade-weighted basis, which will feed through to domestic production costs. In 2009, inflation is projected to fall back as energy and import prices moderate. There are both upside risks and downside potential to these projections: further upward pressure on world energy and food prices in 2008 will see double-digit inflation carry forward into 2009, while slower demand growth aided by substantial fiscal tightening may help reduce pressure on prices.

Export growth is likely to remain subdued in 2008 given the external environment. Import growth may also wane as domestic demand weakens. The services and income surpluses are expected to increase. The combination of these influences is likely to result in some narrowing of the current account deficit to 13.6% of GDP in 2008 and to 11.5% in 2009, aided by adherence to structural reforms leading to quality improvements in the export sector.

3.3.1 Development challenges

Recent strong growth has yet to translate into sustained trends in declining unemployment and falling poverty rates.

The overall unemployment rate edged up to 13.6% in 2006. The urban rate is five times that in rural areas (28% and 5.7%, respectively), and is mainly because the data reflect open unemployment in urban areas and substantial underemployment in rural areas.

The poverty incidence rose by an estimated 5.7 percentage points in 2004–2005 to 32.9%. According to recent World Bank estimates the poverty incidence fell in 2006 to 31%. At this point, firm evidence of a sustained downward trend in poverty incidence is lacking.

Unemployment is high, given the labor market rigidities. Job creation remains quite low, because enterprises are still being restructured and because new private businesses (as opposed to privatized enterprises that were once state owned) are still a relatively small share of the formal sector.

Conversely on the supply side, skills shortages in emerging growth sectors are constraining employment. With net new job creation highest among small private firms, a greater focus on creating an enabling environment for them is required. This calls for addressing their current obstacles, such as access to diverse sources of finance, limits on acceptable types of collateral, high costs of evaluating credit information, and ineffective systems for enforcing repayment of debts.

Kazakhstan

After nearly a decade of GDP growth averaging 10%, a sudden halt in capital to domestic banks, due to global financial market turmoil, triggered a sharp reduction in lending activity and a downturn in growth. A spike in inflation and a drop in foreign exchange reserves added to difficulties. Any further deceleration in growth is expected to be checked by increased oil income, a healthy fiscal position, and still-strong foreign reserves. Key challenges are keeping non-oil growth out of a slump, managing banking sector external debt, and lowering inflation. Long-term prospects remain positive, given the substantial oil wealth.

Economic performance

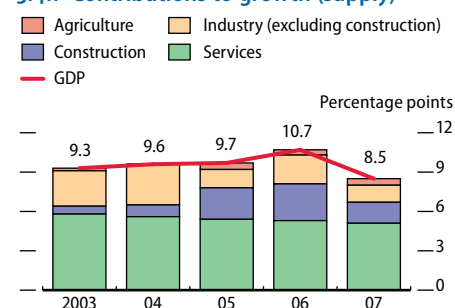
Midyear 2007 was a turning point for the economy, bringing new macroeconomic difficulties to this petroleum-rich country. In the first half of the year, GDP had grown by 10.2%, but international financial turbulence sharply reduced capital inflows, which in turn restricted bank lending and slowed economic activity: GDP growth fell markedly to 5.8% in the fourth quarter. Expansion for the year is now estimated at 8.5% (Figure 3.4.1).

Rapid growth in 2000–2004 had been driven primarily by rising oil production and large hydrocarbon investments that were financed by inflows of foreign direct investment. However, rapid development of the country's non-oil economy has become the main engine of growth since 2005, especially construction and services, and was mostly financed by borrowing from domestic banks.

The banks borrowed from abroad to finance their lending, since the domestic deposit base is small. External debt has surged in recent years and by end-September 2007 it amounted to \$93.9 billion (Figure 3.4.2), including \$28.4 billion of intracompany loans among oil companies. The private portion amounted to \$62.5 billion (equal to about 60% of GDP) with the bulk of this resulting from the rapid expansion of borrowing by local banks after 2004.

Heavy external borrowing allowed domestic banks to keep fueling their lending activity, which more than quadrupled between 2004 and mid-2007 (Figure 3.4.3). In this rapid expansion of credit, local banks became overexposed to the country's booming real estate market, with some 70% of loans (reportedly) directly or indirectly connected to the sector. The phenomenon experienced by Kazakhstan for the past few years, in which credit boom and rising real estate prices were interlinked and mutually reinforcing, acted as a “financial accelerator,” risking a housing market bubble and overindebtedness of businesses and households.

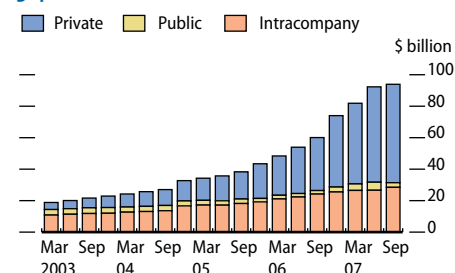
3.4.1 Contributions to growth (supply)



Source: Agency of Statistics of the Republic of Kazakhstan; International Monetary Fund, *Article IV Consultation*, July 2007.

[Click here for figure data](#)

3.4.2 External debt



Source: National Bank of Kazakhstan, available: <http://www.nationalbank.kz>, downloaded 12 February 2008.

[Click here for figure data](#)

From August, local banks had difficulties in accessing funds from the international markets. This raised their borrowing costs and precipitated a liquidity squeeze, which both reduced their ability to service their foreign debt and led to a sharp increase in domestic interest rates. As a consequence, bank loans to the domestic economy grew by only 1.8% in the fourth quarter. Without access to bank financing, many construction companies suspended activities, and the real estate market stagnated.

The National Bank of Kazakhstan (NBK) as lender of last resort opened a short-term credit line for liquidity support. It injected around \$18 billion (gross) into the banking system in August and September, mainly through repurchase agreements and foreign exchange swaps. Money market rates moved from about 6% in June to 12% by end-2007. NBK's credit to banks, however, fell from about \$2.2 billion at end-August to \$0.6 billion by year-end.

To avoid a collapse in the real estate market and an economic recession in general, the Government allocated \$4 billion of budget funds as a rescue package: \$1 billion was used in 2007, and the rest will be taken up in 2008. These funds are channeled through domestic banks and target three areas. One part is transferred to construction companies to enable them to complete unfinished residential construction (previously financed by advance payments from putative owners). Another part will be used to finance industrial investment projects (which were suspended by banks). The rest will be used to support small businesses. The funds' allocation is administered by the state-owned Kazyna Sustainable Development Fund. Such support weakened the fiscal stance as the balance moved into deficit for the first time in 3 years (Figure 3.4.4). Revenues rose by 23.5%, but were outpaced by expenditure growth of 37.5%.

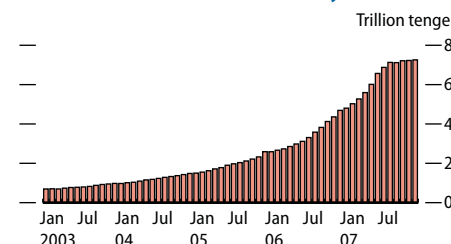
Rumors about a banking crisis and a housing crash, along with a dearth of information, caused steep depreciation of the domestic currency, the tenge. At end-August, during a public holiday, the tenge slumped from T125/\$1 to T150–170 in private foreign exchange offices throughout the country. NBK intervened to support the currency to bring the rate back to T120/\$1, holding it stable through year-end. In its rescue operations, NBK's foreign exchange reserves dropped by \$6 billion in August–October, but reserves subsequently increased somewhat through January 2008 (Figure 3.4.5).

Consumer price inflation in September 2007 moved into double digits for the first time in 7 years (Figure 3.4.6). End-of-year inflation reached 18.8%, pushing annual average inflation to 10.8%. Prices of vegetable oil, bread, and flour were the chief culprits in food price inflation. During 2007, the price of vegetable oil doubled, and those of flour and bread rose by two thirds and by one half, respectively.

Various factors played a part in the climbing prices. Externally, these were, in the main, escalating global food prices. Internally, these were excessive domestic demand fueled by a rapid money expansion, real wages that rose faster than labor productivity, increases in utility and transport tariffs, and structural rigidities that limited competition.

In response to the surge in inflation, the Government introduced a raft of measures including a ban on vegetable oil and oilseed exports; elimination of duties on imports of vegetable oil and reduction of duties on imports of other important foodstuffs; introduction of licensing for

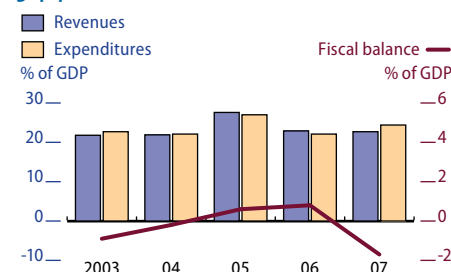
3.4.3 Bank loans to the economy



Source: National Bank of Kazakhstan, available: <http://www.nationalbank.kz>, downloaded 28 February 2008.

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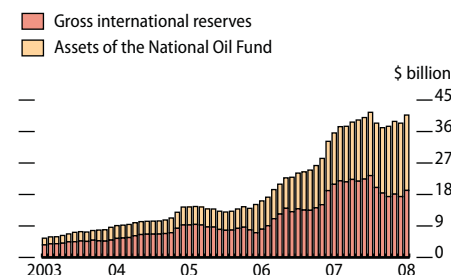
3.4.4 Fiscal indicators



Source: Ministry of Finance of Kazakhstan.

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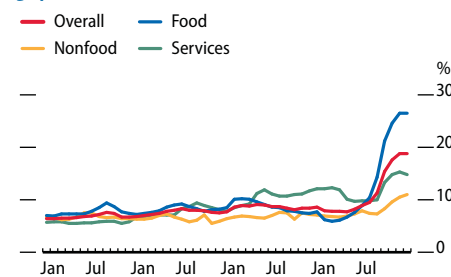
3.4.5 International reserves and assets of the National Oil Fund



Source: National Bank of Kazakhstan, available: <http://www.nationalbank.kz>, downloaded 12 February 2008.

[Click here for figure data](#)

3.4.6 Inflation



Source: National Bank of Kazakhstan, available: <http://www.nationalbank.kz>, downloaded 12 February 2008.

[Click here for figure data](#)

wheat exports; creation of wheat stabilization funds in the regions; and administrative control through “memorandums” limiting price increases over various basic food items and temporary freezes on any further utility and transport tariffs.

The current account deficit increased from \$1.8 billion in 2006 to \$7.0 billion (about 6.8% of GDP) in 2007. With high world oil prices, the trade balance remained positive, though below a year earlier. However, the trade surplus was swamped by spending on services (mainly transport, construction, and oil exploration services), repatriation of income by foreign direct investors, and current transfer outflows (Figure 3.4.7).

Economic prospects

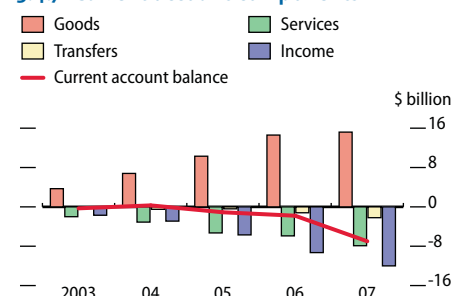
GDP growth is projected to fall to 5.0% in 2008, and a modest increase to 6.3% is penciled in for 2009. These are much lower rates than in recent years, and below earlier expectations. Global oil price increases, strong growth in government expenditures, and large investments in the oil sector are all positives in the outlook. The banking problems and associated difficulties in the areas of construction and real estate development, despite the pledge of substantial government assistance, are the main negatives that will damp growth. Moreover banks, which must repay about \$14 billion in 2008 while facing restricted access to external financing, may limit credit, an increasingly important element in maintaining both investment and domestic demand.

Inflation is the Government’s priority. NBK has announced a 2-year monetary program which, in the baseline scenario, targets end-of-period inflation of below 10% and average inflation of 16–18% in 2008, achieved by holding expansion in credit to the economy at 9.5%. For 2009, the average inflation target is 8.5–10.5%. Memorandums, which are used to control prices for basic consumer items, will no doubt be continued but they risk developing black markets and discouraging domestic production.

The current account balance is expected to maintain large deficits of about 5.6% and 4.1% in 2008 and 2009, respectively (though improved as a share of GDP compared with 2007). Oil exports will continue rising, based largely on continued increases in global prices and moderately higher oil production from existing fields (Figure 3.4.8). Non-oil commodity exports (mainly metals and grain) will also see strong gains. Import growth is expected to decelerate, reflecting the slowdown in economic activity. Despite an improvement in the trade balance to \$1.0 billion–1.5 billion, the current account deficit will remain heavy, given the continued ramping up of imports and services for oil and gas projects, and repatriation of income.

Striking the right balance between monetary and fiscal policies in order to keep the non-oil sector from slumping, yet maintaining progress in bringing down inflation enough to keep an anchor on expectations, will be the main challenge. A prompt but careful readjustment of macroeconomic management should ensure a soft landing for the domestic economy. This would allow an acceleration of structural reform.

3.4.7 Current account components



Sources: National Bank of Kazakhstan, available: <http://www.nationalbank.kz>, downloaded 28 February 2008; staff estimates.

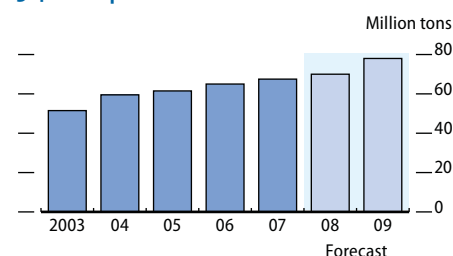
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3.4.1 Selected economic indicators

	2008	2009
GDP growth	5.0	6.3
Inflation	17.4	10.7
Current account balance (% of GDP)	-5.6	-4.1

Source: Staff estimates.

3.4.8 Oil production



Sources: Agency of Statistics of the Republic of Kazakhstan; staff estimates.

[Click here for figure data](#)

Kyrgyz Republic

Despite continuing political tensions, the economy grew strongly in 2007, driven by services, construction, and manufacturing. Inflation, particularly for food products, jumped in the second half of the year. The authorities resumed their efforts to improve the business environment and to attract foreign investment. Prudent macroeconomic management will be critical for continued rapid growth, especially in light of the economy's vulnerability to external shocks from commodity price swings and to economic developments in Kazakhstan and the Russian Federation.

Economic performance

The political situation has been volatile since the Tulip Revolution of March 2005, when protesters ousted the long-time leader and brought a new president to power. Since then, the president's stand-off with Parliament, packed with deputies from the former era, has fueled political instability: for example, the period since the revolution has seen four prime ministers. In the parliamentary elections of December 2007, the newly formed pro-presidential party, Ak Zhol, obtained a majority of seats. This may provide the Government with a base on which to advance economic reforms.

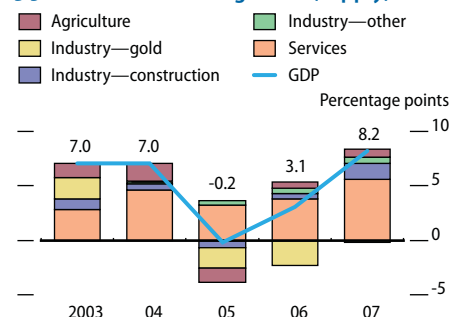
In the economic sphere, and for the first time since March 2005, the economy has resumed its dynamic growth. According to preliminary data from the National Statistics Committee, GDP grew by 8.2%, well above the recent trend (Figure 3.5.1). The strong performance is all the more encouraging because the Kumtor gold mine—the largest single contributor to GDP—has not fully recovered from an accident in 2006 and operational problems in 2007, which led to a marginal fall in output. Excluding gold, the economy grew by 8.7% in 2007.

The strong performance was driven by a 12.4% expansion in services, which contributed about two thirds of GDP growth. Buoyancy in the sector was due to gains in the trade subsector, as well as large gains for some of the smaller subsectors, especially communications. Industry (excluding gold) grew by 12.5%, contributing about one quarter of GDP growth and reflecting a marked 20.2% expansion in construction activity and gains in processing industries and utilities.

Agriculture, which suffers from weak productivity, continued to expand at a muted 1.5%. According to the National Statistics Committee's preliminary figures, the overall economy recorded more vibrant growth in the first half of the year (up 9.2% year on year), with a lower grain crop and, perhaps, higher producer prices affecting output in the second.

On the demand side, private consumption in 2007 continued to be the main engine of growth, invigorated by rising real incomes, including

3.5.1 Contributions to growth (supply)



Source: National Statistics Committee of the Kyrgyz Republic.

[Click here for figure data](#)

those from remittances (Box 3.5.1) and from the shadow economy, which is estimated at around 50–60% of official GDP. Although anecdotal evidence suggests a strong expansion in fixed investment (in roads as well as in mining, construction, and energy) and data show a healthy net inflow of foreign direct investment (FDI), the preliminary official data on fixed investment estimated growth to be only 3.7% for the year.

Inflation accelerated, notably in the second half (Figure 3.5.2). From an average of 4.0% over the last 5 years, it averaged 10.2% for the whole year, soaring to 20.1% at end-2007, the highest rate since 2000. October saw a 9% month-on-month increase in inflation.

For food products, particularly bread and cereals, the largest rise in prices was seen in October–November 2007. The continued decline in the area planted to grain (estimated at around 20% over the last 7 years), falling yields, together with unfavorable weather conditions in 2007, lowered domestic grain production, of which wheat production fell by 16%. The country imported approximately 360,000 tons of wheat in 2007 (the equivalent of nearly half domestic production), with most of that coming from Kazakhstan. As bread and other wheat-related products make up a large share of the consumption basket, the sharp rise in global wheat prices has boosted inflation. Other price increases were also important, notably for natural gas, with supplies from Uzbekistan almost doubling in price to \$100 per 1,000 cubic meters in 2007.

While external factors played the major role in high inflation, other elements such as the rapid growth in the country's monetary aggregates in recent years; wage increases of about 30%; and, possibly, escalating price expectations by producers late in the year, as well as agriculture's supply constraints, also had an impact.

With about 40% of the population living below the poverty line, and bread accounting for about a third of spending on food, the rising prices of wheat hit hard the population's poorer groups. The authorities have responded with a combination of administrative and economic policy measures under the direction of a newly established Food Security Council, chaired by the prime minister. They released wheat from strategic reserves, cut value-added tax for producers and importers of food products from 20% to 10%, and tightened monetary policy. They plan to develop a food security strategy that envisages stockpiling grain reserves of 100,000–150,000 tons, protecting the most vulnerable groups of the population, improving the provision of agricultural inputs, and enhancing the incentive structure for farmers.

The more buoyant economic activity of recent years and large foreign exchange inflows—especially in the form of remittances and foreign capital or due to tourism—led the National Bank of the Kyrgyz Republic (NBKR), the central bank, to ratchet up its purchases of foreign exchange in order to limit the nominal appreciation of the som. Since these operations were mostly unsterilized, broad money (M2) increased by an average of 30% annually from 2002 to 2006, recording 52% growth in 2006 (Figure 3.5.3). (However, as M2 was only about 15% of GDP in 2002, some of the rapid growth reflects the economy's monetization.)

Concerned with inflation pressure in the second half of the year, the monetary authorities sharply reduced their interventions in late 2007, allowing a notable nominal appreciation of the som against the United

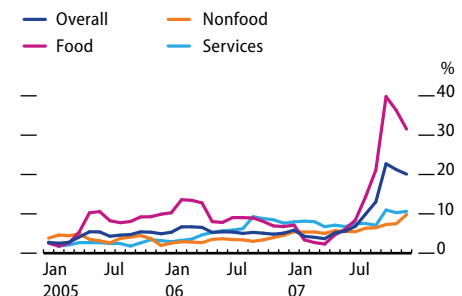
3.5.1 Remittances

Preliminary findings of a recent study on remittances by the Asian Development Bank in the region suggest the need for further refining the country's balance-of-payments (BOP) remittance calculation methodology and its BOP data.

It is estimated that around 16% of households received remittances in 2006, at an average of \$1,331. Remittance inflows in 2006 were estimated at \$615 million (22% of GDP); official estimates put the total at \$730 million. This may suggest that transactions of different natures (such as revenues from exports of goods and services, and trade credits) are being counted as remittances in the BOP accounts.

Remittances were found to be important for the welfare of households, lifting many of them out of poverty, and generally having a positive impact on personal consumption, imports, and informal employment.

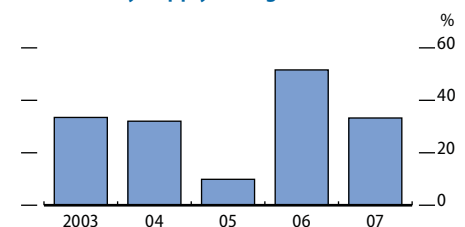
3.5.2 Inflation



Sources: National Statistics Committee of the Kyrgyz Republic; National Bank of the Kyrgyz Republic, available: <http://www.nbkr.kg>, downloaded 3 March 2008.

[Click here for figure data](#)

3.5.3 Money supply (M2) growth



Source: National Bank of the Kyrgyz Republic, available: <http://www.nbkr.kg>, downloaded 3 March 2008.

[Click here for figure data](#)

States dollar—by about 9% between September and November—with some retracement in the rate by January 2008 (Figure 3.5.4). NBKR's preliminary estimates put broad money growth for the year at 33%, and net purchases of foreign exchange at \$240 million, taking the level of international reserves beyond the \$1 billion mark (Figure 3.5.5).

In addition to changes in foreign exchange operations, NBKR almost tripled its policy discount rate (from 4.0% in August to 11.5% in October), and aggressively increased issuance of NBKR notes to reduce commercial banks' excess reserves. Banks recorded a slight slowing in credit growth after September, though this may also be attributable to a credit crunch experienced by the Kazakh parent banks of local subsidiaries, which account for about half of all outstanding loans in the domestic banking system.

According to preliminary data, the fiscal deficit was 2.2% of GDP in 2007, or about 1 percentage point below the originally planned target (Figure 3.5.6). This performance is mainly the result of underspending in the first half of the year, emanating from, on the one hand, delays in budgetary approval and, on the other, better than expected growth in budget receipts, itself mainly due to higher import duties, stronger value-added tax receipts, and some improvement in revenue administration.

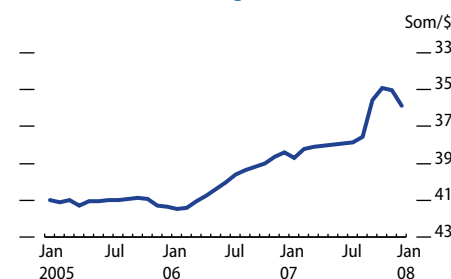
The strong revenues allowed for additional fiscal expenditures to finance construction activities for the Shanghai Cooperation Organization Summit held in August 2007; the cost imposed by a March 2007 bill on the lowering of the retirement age; policy measures aimed at tackling the inflation pressure in the second half, such as emergency grain imports and a 10% increase in pensions and selected welfare benefits from October 2007; and early costs associated with construction of the Kambarata-2 hydropower project.

After much debate across the country, the Government decided in early 2007 to withdraw its decision to take part in the Heavily Indebted Poor Countries Initiative led by the International Monetary Fund (IMF) and the World Bank. Since then, it has updated the medium-term public debt management strategy for 2007–2010, which continues the 45% minimum grant element required on any new public borrowing and aims to strengthen supervision of public enterprises' external borrowing. Due to a combination of rapid output growth, the som's strengthening, and prudent debt management, the external public debt burden fell from over 100% of GDP in 2003 to around 60% in 2007 (Figure 3.5.7). The latest country debt-sustainability analysis, undertaken jointly by IMF and the World Bank in November 2007, lowered the country's risk of debt distress from high to moderate.

The country continues to run a trade deficit, estimated at \$1.6 billion in 2007, despite rapid export growth (up by about 41%, driven by mineral products and other non-gold items). Strong demand for imported consumer and investment goods, as well as higher import prices (for gas, oil, and food products in particular), propelled an estimated 52% import growth. Figures 3.5.8 and 3.5.9 show the composition of exports and imports.

Although the expanding trade gap was partly offset by the rise in workers' remittances from abroad, estimated to have increased to \$800 million, the current account deficit widened to \$600 million or 16%

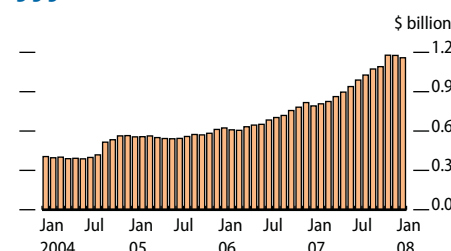
3.5.4 Nominal exchange rate



Sources: International Monetary Fund, *International Financial Statistics* online database; National Bank of the Kyrgyz Republic, available: <http://www.nbkr.kg>; both downloaded 4 March 2008.

[Click here for figure data](#)

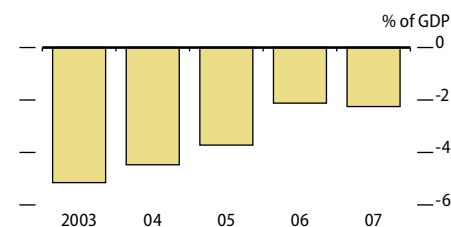
3.5.5 Gross international reserves



Source: National Bank of the Kyrgyz Republic, available: <http://www.nbkr.kg>, downloaded 4 March 2008.

[Click here for figure data](#)

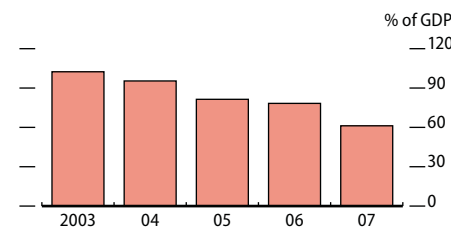
3.5.6 Fiscal balance



Source: National Statistics Committee of the Kyrgyz Republic.

[Click here for figure data](#)

3.5.7 External debt



Source: National Statistics Committee of the Kyrgyz Republic.

[Click here for figure data](#)

of GDP, according to preliminary estimates (Figure 3.5.10). The number, however, is being revised to account for the informal sector's reexport trade in consumer goods.

Estimates for the capital and financial accounts showed robust growth in FDI inflows, which amounted to more than \$480 million, much from Kazakhstan, with investments going primarily into finance and manufacturing. Together with other recorded inflows and private short-term flows (reflected in the sizable, positive errors and omission rubric), the overall balance of payments was comfortably in surplus, with international reserves rising.

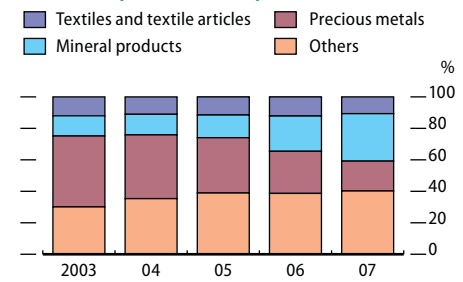
Although the authorities were preoccupied with political issues and with addressing the inflationary surge, some progress was noted in implementing sector and structural reforms. The Government has adopted a strategy for 2007–2010 to facilitate private sector-led growth and diversify the economy. It has also created a high-level investment council that promotes private sector development by facilitating dialogue among government agencies, private sector participants, and the donor community. Laws on streamlining inspections and on a regulatory framework for business activity were also adopted. In addition, Parliament passed legislation allowing the privatization of key assets of the Kyrgyz energy sector. In the financial sector, the privatization strategy for the Aiyl Bank was approved by the Government, and submitted to Parliament. However, the new tax code is still awaiting approval by Parliament, and action needs to be taken on the large quasi-fiscal deficit in the important energy sector to enhance its efficiency.

Despite the above efforts, the implementation gap in adopting structural reforms remains a serious issue, as evidenced by the country's low scores on transparency, governance, and other indicators related to the business environment. The country's ranking in *Doing Business 2008* worsened by six places, from 88 to 94 out of 178 countries and areas. Transparency International's *Corruption Perceptions Index 2007* ranked the country 150 out of 180 (a worsening from 142 out of 163 the previous year). The continuing uncertainty with the revision of the terms of the agreement with the Cameco Corporation of Canada, the country's leading foreign investor, and ambiguities surrounding other agreements in mining, industry, and tourism, will not help the business climate.

Economic prospects

Apart from the impact of world prices on its major imports, the Kyrgyz Republic has so far been little affected by adverse global economic developments. However, the world and the region have entered a challenging period, where growth forecasts are being revised downward for major economies, oil prices are at record highs, food and raw material prices are escalating, and major financial markets appear mired in difficulty. For this small open economy, economic developments in its large regional partners, such as Kazakhstan and the Russian Federation, become of particular importance, and are a potential source of risks. The adverse effects would be felt through weaker exports, slower capital inflows and investment activity, and potentially lower employment opportunities for Kyrgyz workers (Box 3.5.2) and weaker remittance inflows.

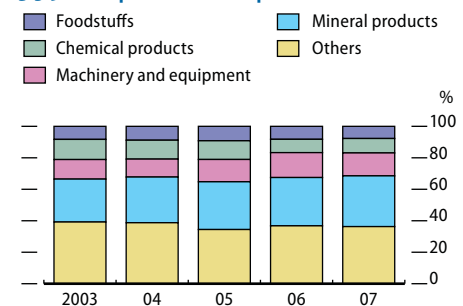
3.5.8 Composition of exports



Sources: National Statistics Committee of the Kyrgyz Republic; staff estimates.

[Click here for figure data](#)

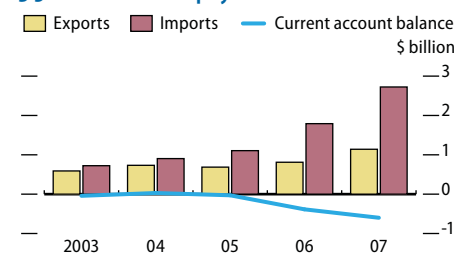
3.5.9 Composition of imports



Sources: National Statistics Committee of the Kyrgyz Republic; staff estimates.

[Click here for figure data](#)

3.5.10 Balance-of-payment indicators



Sources: National Bank of the Kyrgyz Republic, available: <http://www.nbkr.kg>, downloaded 3 March 2008; staff estimates.

[Click here for figure data](#)

Three years after the Tulip Revolution, the country is still vulnerable to political instability. However, the current Government has a “window of stability” because of its control of Parliament and because the public has grown weary of protests in any form. The challenge for policy makers is to use this period for uniting the various factions and to prevent vested interests from derailing the reform agenda.

The Government is fully aware of the problems it faces. For the forecast period, it envisages various scenarios (baseline, optimistic, and pessimistic) depending on global and regional conditions and domestic developments. Assuming no major political disruptions, sustained regional economic growth, and continued high world gold prices, the baseline forecasts adopted here are attainable. In domestic economic policy, keeping inflation in check through adequate monetary and fiscal policy action, but without undermining growth prospects, is a major concern. In this respect, strengthening central bank independence is important.

Development challenges

Improving the business and investment environment is perhaps the most crucial task for invigorating private investment, attracting FDI, and ensuring solid economic growth. With a less fortunate natural resource endowment and a smaller market than those of its neighbors, the Kyrgyz Republic needs not only to continue developing highly educated and professional human resources. It also needs to have an investment climate that is superior to that of its neighbors, in order to be able to compete for FDI flows into Central Asia. To achieve this, and to create foundations for the economy’s diversification, the following minimal list is suggested: transparent conduct of privatization, strict enforcement of contracts, effective and efficient public services and administration, and improvements in economic policy making and management.

The authorities face demanding times ahead, and a prudent policy response to the potential deterioration of external conditions will be critical for sustaining economic growth.

3.5.1 Selected economic indicators

	2008	2009
GDP growth	7.6	7.6
Inflation	12.0	10.0
Current account balance (% of GDP)	-14.6	-17.0

Source: Government of the Kyrgyz Republic.

3.5.2 Unemployment

According to the National Statistics Committee, unemployment was stable at around 8% in 2006 (the last full year for which data are available). However, the true level of unemployment is higher, given that official statistics regard all people with a piece of land as “employed.” In reality, people formerly working on large collective farms in the Soviet regime were left unemployed after the collapse of the Soviet Union.

Agricultural activities have not been able to feed the growing rural population, which constitutes two thirds of the total. Many employed people work in the country’s sizable informal sector. Absence of jobs in rural areas has led to mass migration of mainly young people to urban areas, and, increasingly, abroad.

Tajikistan

Economic growth was robust in 2007, reflecting strong expansion outside the aluminum and cotton sectors, but inflation accelerated on rising food and energy prices. The medium-term prospects are for continued healthy growth, though inflation will remain problematic. The Government is implementing an expansive infrastructure-focused national development strategy, largely financed by external borrowing. This runs the risk of debt distress reemerging.

Economic performance

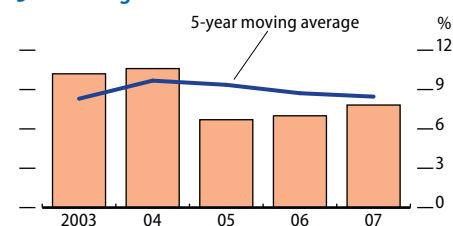
At 7.8%, Tajikistan recorded another year of robust economic growth in 2007, improving on its performance in 2005 and 2006 (Figure 3.6.1). But it is still below the very high rates achieved in 2000–2004, reflecting the sluggish pace of reforms in agriculture, a weak business environment, and high energy costs.

Aluminum and cotton, the traditional economic mainstays, failed to drive expansion in 2007. Growth in aluminum output (up by only 1.5%), as well as in chemicals, was hit by higher prices of imported natural gas from Uzbekistan and by electricity shortages stemming from shortfalls in hydropower generation. Cotton performed even worse: production fell by 4%, reflecting both a reduction in the planted area and declining productivity. The protracted approach to land reform and the lack of progress in solving the long-standing problem of a large debt overhang owed by cotton farmers created disincentives for production of that crop.

Rapid expansion elsewhere compensated. Industry nearly doubled its growth rate to 9.9%, with double-digit rates in almost all subsectors (except aluminum and electricity). Expansion in food processing, textiles, and construction materials was especially buoyant. The power shortages had little impact on food processing because it was given supply priority, for food security reasons. Robust growth in non-cotton sectors lifted agriculture's growth to 6.5% from 5.4% in 2006; the major drivers were higher production of livestock and of fruits and vegetables. Services sector growth of 8.0% was led by trade, construction, and finance, reflecting growing consumer spending and demand generated by an increasing range of infrastructure projects.

Domestic demand was fueled by burgeoning private consumption expenditure and by rising project investment. Strong private consumption is evidenced by double-digit growth in consumer goods imports, as households receiving migrants' remittances spent more. Such recipients are also starting to invest in housing and in small businesses. Investment activity is mainly directed to large government infrastructure projects, which are funded by bilateral loans and foreign direct investment (FDI)

3.6.1 GDP growth



Source: State Statistical Committee of the Republic of Tajikistan, available: <http://www.stat.tj>, downloaded 5 February 2008.

[Click here for figure data](#)

on a joint-venture basis. Private sector FDI is yet to take off, against a background of multiple obstacles to doing business.

Average inflation in 2007 was 13.1%, but the year-end rate came in at 19.7% (Figure 3.6.2). Inflation pressure stemmed from higher food and fuel prices, increases in utility and transport tariffs, and strong consumer demand on the back of a near doubling in workers' remittances. Prices of wheat—the major staple—jumped in September 2007, following the pattern of price escalation in other Central Asian countries. (Tajikistan imported about one half of its wheat from Kazakhstan.) Wheat prices rose by about 80% in 2007, and were the main driver of inflation, as the weight of wheat is about one tenth of the consumer price index basket.

Utility prices climbed steeply in 2007. Natural gas prices rose by 60%, owing to higher prices for imports from Uzbekistan. Electricity tariffs saw a 50% adjustment, as part of a multiyear plan to bring tariffs to levels that would justify badly needed investment in new generation capacity by foreign investors.

In response to the inflation pressure, the National Bank of Tajikistan tightened its lending to the financial sector. Monetary policy, however, is constrained by weak institutional capacity, the underdeveloped nature of the financial sector, and the continued reliance on the central bank for directed lending, mainly to the cotton sector. Tajikistan has a managed floating exchange rate policy, intervening only to smooth sharp fluctuations. In 2007, the nominal exchange rate was stable at around TJS3.44/\$1 (Figure 3.6.3).

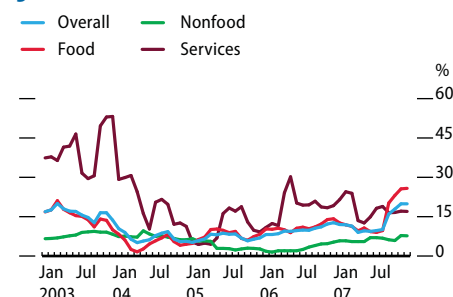
Parliament approved a 3-year Poverty Reduction Strategy (PRS) for 2007–2009 and a National Development Strategy through 2015. The PRS marks a significant shift in government focus from the prudent macroeconomic policies of the transition period to an emphasis on aggressive policies to implement long-term development goals. The financing of the new PRS is envisaged at about \$5 billion, compared with \$0.7 billion for the previous strategy. It is expected to be financed largely by FDI in infrastructure, especially in energy and transport.

The budget for 2007 moved to an expansionary track to accommodate the financing of the PRS. Enlargement of the Public Investment Program (PIP) has led to a substantial widening of the overall fiscal deficit (to 6.4% of GDP) (Figure 3.6.4). Excluding the PIP, the Government achieved a fiscal surplus of 1.6% of GDP. Social sector spending rose (albeit from a low base) aided by strong revenues, in turn supported by robust economic growth and better tax administration. The bulk of PIP spending is on infrastructure projects, mainly in roads and hydropower. Project loans from the People's Republic of China accounted for much of the external financing of the PIP in 2007.

After declining for several years, the ratio of external debt to GDP is set to rise to about 56% of GDP by 2009 (Figure 3.6.5). It was brought down to 31% of GDP in 2006 from more than 100% in 2000 by debt reduction agreements, including those with the Russian Federation and the International Monetary Fund, but external borrowing for the new transport and energy projects will take the debt ratio up again.

The current account deficit is estimated to have sharply widened in 2007 to 15.2% of GDP due to a much larger trade deficit. Imports grew at an estimated 39.2%, primarily for the infrastructure projects (but

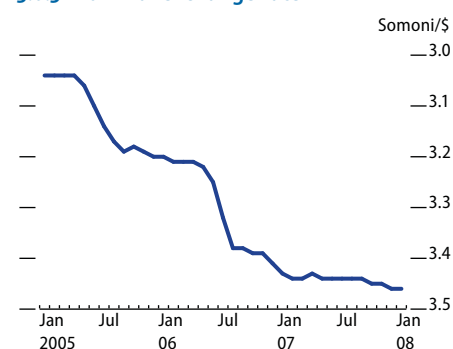
3.6.2 Inflation



Source: National Bank of Tajikistan, available: <http://www.nbt.tj/en>, downloaded 3 March 2008.

[Click here for figure data](#)

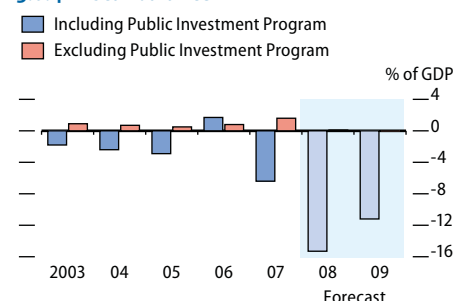
3.6.3 Nominal exchange rate



Sources: International Monetary Fund, *International Financial Statistics* online database; National Bank of Tajikistan, available: <http://www.nbt.tj/en/>; both downloaded 27 February 2008.

[Click here for figure data](#)

3.6.4 Fiscal balance



Sources: International Monetary Fund, *Country Report* No. 07/144; Ministry of Finance.

[Click here for figure data](#)

also greater imports of consumer goods). Much steeper oil and natural gas prices also contributed to the higher import bill. Export growth, in contrast, managed only 9.4% on poorly improving volumes of aluminum and cotton exports.

Remittances grew strongly, as the boom in the construction and oil sectors in Kazakhstan and the Russian Federation continued to attract many Tajik workers. According to the latest estimates from the central bank, workers' remittances surged to an estimated \$1.8 billion in 2007 from the previous year's \$1.2 billion. The current account deficit amounted to an estimated \$476 million in 2007, financed largely by project loans and FDI. The official reserves rose by \$70 million to \$273.8 million.

Progress on structural reforms has been patchy. In agriculture, the growing farm debt in the cotton sector and the protracted approach for its resolution and for implementation of comprehensive sector reform are symptomatic of difficulties. Also, poor farmer incentives and rent seeking continue to hobble a major part of the economy. In power though, the Government has started to adjust electricity tariffs to cost-recovery levels and to provide a compensatory mechanism for the poor.

Economic prospects

Policy assumptions are that external financing, including FDI in the energy sector, will be attracted at record volumes relative to GDP and that fiscal policy will be expansionary. Monetary policy will seek to contain inflation but implementation will remain difficult given the paucity of policy instruments. The Government will adhere to its policy of a managed float, that is, intervening in the foreign exchange market only in cases of sharp fluctuations. It is also foreseen that the Government will pursue structural reforms only slowly, including those in agriculture, but electricity tariffs are seen being adjusted upward (as per the energy strategy). Moreover, government employees' wages, including those working in primary health care and education, will be gradually raised.

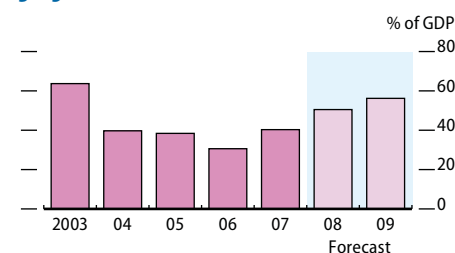
A booming construction sector in the Russian Federation and across Central Asia will sustain demand for Tajik workers. World prices for cotton are also expected to be stable. Prices for fruits and vegetables should rise, creating incentives for exporters.

On the import side, higher prices for energy and food will add to production costs and consumer inflation, respectively. Food prices, including those for wheat, are expected to keep on climbing as global demand rises faster than supply. Domestic production of wheat this year is likely to be hurt by the recent cold winter.

The economy is projected to expand at a slightly higher pace than in 2005–2007, at about 8%. Services will continue to be an important source of growth, largely on rising remittance-based consumption spending. Industrial growth, led by food processing and construction materials, will also buttress expansion. Non-cotton sectors, including fruits and vegetables, will underpin agricultural growth, although the slow pace of reforms in the sector and declining cotton production will hold it back.

Inflation is expected to be in double digits in a context of cost-push and demand-pull pressures. The former are expected to come mainly from higher prices for food and energy. The price of natural gas imported

3.6.5 External debt



Sources: International Monetary Fund, Country Report No. 07/144; Ministry of Finance.

[Click here for figure data](#)

3.6.1 Selected economic indicators

	2008	2009
GDP growth	8.0	8.0
Inflation	17.0	10.0
Current account balance (% of GDP)	-15.3	-11.1

Source: Staff estimates.

from Uzbekistan in 2008 was set at \$145 per 1,000 cubic meter, a 45% increase from 2007. The latter pressures are seen emanating from rising remittances and wages, and an expansionary fiscal policy. Inflation expectations will remain high over the medium term.

The current account deficit is set to be wide at about 15% of GDP this year and then moderate in 2009 (Figure 3.6.6). Import growth will largely reflect the schedule for ongoing infrastructure implementation. Export growth is likely to decelerate, perhaps averaging about 10%, though workers' remittances are expected to continue rising healthily. Project loans and FDI are seen fully covering the current account deficit and providing moderate additions to official reserves.

A major downside risk to economic prospects is the impact of unusually cold weather in early 2008, which pushed the water levels at major hydropower stations to record low levels. This may well mean that electricity rationing will continue. The cold winter will also likely have severely damaged agriculture. An additional difficulty emerged in early March 2008 when the International Monetary Fund (IMF) Executive Board decided that Tajikistan had to advance repayment of about \$47.4 million because of misreporting of information under an IMF loan agreement.

Development challenges

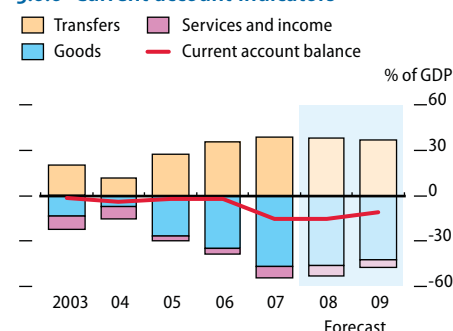
The small, landlocked, and open Tajik economy faces two main challenges: maintaining macroeconomic stability and diversifying the economy to sustain high growth rates.

The external loans attracted for financing infrastructure projects are expected to have a marked impact on the economy, because the projected volume of their disbursements is large relative to GDP. In the annual PIPs, the externally financed parts of the development budget are projected to be 10–15% of GDP in 2008–2009. Moreover, activities related to the projects are exempt from taxes and duties. Thus, the overall budget deficit is set to widen sharply. A debt-sustainability analysis by IMF and the World Bank in 2007, which took into consideration the new loans, classified Tajikistan as having a high risk of debt distress. A balancing act will therefore be required to maintain stability while implementing the PRS.

The economy now needs to diversify more than ever as the contributions from its former bastions—aluminum and cotton—shrink. The robust, fairly widespread growth of 2007 suggests opportunities for private sector-led diversification. Obstacles abound though, including an inadequate legal framework and judicial system, weak public administration, and meager public and private infrastructure.

Lack of profitable investment opportunities (given the small size of the economy) and limited physical access to export markets constrain private sector development. Improvements, primarily in transportation and energy, as well as in the financial system and information technology, are therefore needed. Regional integration, including cross-border trading arrangements, would help foster private activities. The Government should accelerate the pace of structural reform, and implement a strategy for the private sector.

3.6.6 Current account indicators



Source: International Monetary Fund country reports.

[Click here for figure data](#)

Turkmenistan

The economy continued to grow rapidly in 2007. The Government has initiated a series of reforms that, if implemented, should stimulate greater economic openness. The country depends heavily on gas and oil exports, which are underpinning rapid growth, and will continue to do so over the medium term. Activity is dominated by the state sector and, longer term, would benefit from key development reforms, such as unifying foreign exchange rates, liberalizing direct control, and developing the private sector.

Economic performance

In 2007, GDP grew by about 20% according to official statistics. However, these tend to overestimate growth, as discussed in *Asian Development Outlook 2006* (p. 108). Growth for the year is likely to have been around 10%, up from 9.0% in 2006, according to International Monetary Fund (IMF) estimates (Figure 3.7.1). Growth in the gas and oil sector is estimated at 6.8%, while non-hydrocarbon activity is put at 11.0%, unchanged from a year earlier.

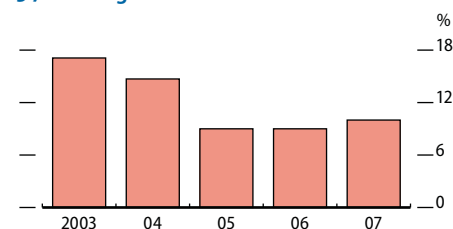
Growth in 2007 reflected an expansion in production and export volumes of gas, which benefited from higher export prices. Cotton, the dominant agricultural crop and a major export, as well as wheat, appear to have fallen short of official production targets. Construction activity, however, remained buoyant owing to spending on public sector projects.

According to IMF estimates, inflation moderated somewhat from 8.2% in 2006 to 6.5% in 2007 (Figure 3.7.2). An apparent slower monetary expansion from the previous year appears to have been a factor, but it is difficult to assess trends in inflation because of extensive subsidies, price controls, and restrictions on cash withdrawals from banks, all of which suppress price rises.

The authorities maintained the country's multiple exchange rate system in 2007, with the official rate for the Turkmen manat at TMM5,200/\$1 (since April 1998) and a greatly depreciated illegal black market rate at TMM23,500/\$1—the latter essentially unchanged from 2006. However, in a step to improve the system in January 2008, the official rate was devalued to TMM6,250/\$1 and a commercial exchange rate of TMM19,800/\$1 was introduced. The new approach broadens access of the private sector to foreign exchange by allowing businesses and individuals to engage in transactions at the commercial rate at 100 banks throughout the country. The Government has announced that it intends to unify the exchange rates in 2009. This would be a major step in improving the pricing system to allocate resources efficiently.

Fiscal policy is not transparent. The general government budget surplus is estimated to have fallen from 5.1% of GDP in 2006 to about

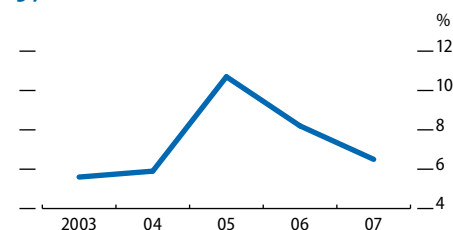
3.7.1 GDP growth



Source: International Monetary Fund, *Regional Economic Outlook: Middle East and Central Asia*, October 2007.

[Click here for figure data](#)

3.7.2 Inflation



Source: International Monetary Fund, *Regional Economic Outlook: Middle East and Central Asia*, October 2007.

[Click here for figure data](#)

0.7% in 2007 (Figure 3.7.3). In about equal measure, this stemmed from (relative to GDP) a decline in revenues and an expansion in expenditures. Public sector revenues derive largely from gas and oil income, which were buoyant, but since they are partly transferred to the government budget and partly into an off-budget fund, actual budget receipts during any year are largely determined by administrative decision. Spending has increased, reflecting higher public sector wages and capital outlays.

With booming hydrocarbon revenues, a large surplus of \$3.9 billion was maintained on the trade and services balance in 2007. Although both exports and imports grew rapidly, because exports are about twice as large as imports a more rapid growth in imports did not reduce the dollar value of the trade balance. The current account surplus is estimated to be \$3.4 billion, unchanged from the dollar value in 2006, though in relation to GDP the surplus fell to 13.0% from 15.3% (Figure 3.7.4). Gross official international reserves are estimated to have increased to \$8.0 billion, equivalent to 18 months of merchandise imports of goods and services.

Since the election of a new president in February this year, the country appears to have become more open to the outside world and has initiated several reforms in the areas of education, health care, information technology, and social welfare. In education, compulsory (primary and secondary) teaching has been extended from 9 to 10 years and the curriculum is now to be taught in three languages (Turkmen and English, and Russian once more). New curricula for primary and secondary education have been prepared, and new textbooks have been written. Selected teachers are to be sent abroad for further training. Tertiary education also has been extended, from 3 to 5 years.

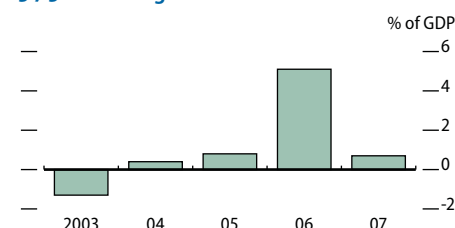
Public health will concentrate on assigning more doctors to rural areas, and specialized hospitals are being built. However, the country urgently needs to recruit a greater number of qualified doctors and skilled medical technicians. The Internet and mobile phones have been made affordable to the population, and restrictions on Internet use have been eased. Finally, a Social Reform Code was published on 19 March 2007, covering pensions and some areas of social security.

Economic prospects

The country will continue to rely heavily on the production and export of natural gas and cotton. It has good long-term potential for development, given its rich resource base, especially the large though uncertified gas and oil reserves. With the scheduled expansion and construction of gas pipelines, it can increase exports of natural gas to the Russian Federation and the Ukraine, and attempt to diversify its export markets.

The growth prospects for 2008–2009 are promising. An agreement with the Russian Federation in December 2007 raised gas prices by an average of 40% for 2008 (to \$130 per 1,000 cubic meters in the first half of the year and to \$150 in the second). Economic growth is expected to be 10–11%, led by gas and oil exports. Annual inflation will be about 9% over the period, with continued administrative measures and subsidies. The fiscal position will remain in surplus on higher hydrocarbon revenues, which are also expected to keep the current account in surplus at 12% of GDP and to provide substantial increases to the international reserves.

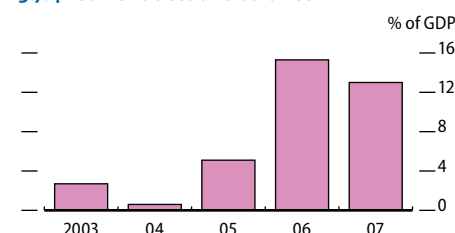
3.7.3 General government fiscal balance



Source: International Monetary Fund, *Regional Economic Outlook: Middle East and Central Asia*, October 2007.

[Click here for figure data](#)

3.7.4 Current account balance



Source: International Monetary Fund, *Regional Economic Outlook: Middle East and Central Asia*, October 2007.

[Click here for figure data](#)

3.7.1 Selected economic indicators

	2008	2009
GDP growth	10.0	10.0
Inflation	9.0	9.0
Current account balance (% of GDP)	12.0	12.0

Source: Staff estimates.

Uzbekistan

High commodity prices and buoyant external demand helped generate impressive economic growth and a record current account surplus in 2007. Yet this strong performance, alongside rising capital inflows and the exchange rate policy, created inflation pressure. The outlook for continued rapid growth is favorable, but inflation will likely remain high. Although tax and treasury reforms are under way, the overall reform process needs additional impetus for the country to reach its broader economic development objectives.

Economic performance

The economy grew by 9.5% in 2007. Industry and services were the major contributors, growing by 12.1% and 26.6%, respectively. Industrial growth was grounded in the increased production and export of metals, gas, and automobiles. Metals are the country's largest single export, and have received significant government investment in recent years. Reconstruction worth \$49.4 million was completed last year at two big mines belonging to Almalyk Mining and Smelting, the country's second-biggest producer of gold and the only producer of copper and zinc.

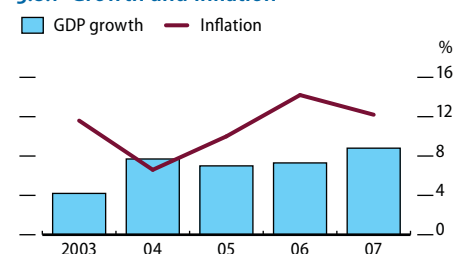
Benefiting from higher gas production, Uzbekistan boosted gas export volumes by about 18% to an estimated 14.5 billion cubic meters in 2007, and secured a 40% gain in the export price. Overall, the fuel and energy subsector grew by 10.1%. Output of the automotive industry, driven by substantial government support in the form of tax exemptions and subsidies, climbed by 27%, with much production going to the Russian Federation and other countries in the Commonwealth of Independent States.

Growth in services stemmed from increased revenues from gas transit, substantial Russian-led investments in the communications sector, and intensified construction activity in housing and infrastructure. Despite deteriorating soil quality, favorable world prices for cotton, rising grain harvests, and greater productivity from privatization of agricultural cooperatives lifted growth in agriculture to 6.1% in 2007.

Although official data put consumer price inflation at around 7% in 2007, estimates by the International Monetary Fund point to 12.3% (Figure 3.8.1). Inflation pressure stemmed from a marked expansion in the money supply, public sector wage rises, and activities related to the general election.

Booming commodity exports and remittances propelled the current account surplus to an estimated \$4.3 billion, or 21.1% of GDP in 2007 (Figure 3.8.2). A heavy export concentration in gold, cotton, and energy (mostly gas), together accounting for 56% of total exports of goods in

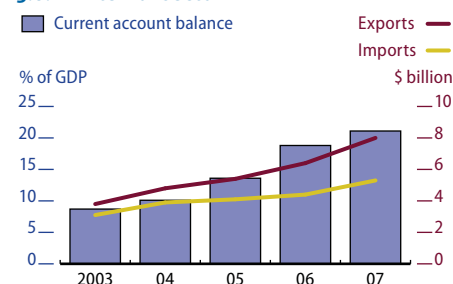
3.8.1 Growth and inflation



Sources: International Monetary Fund, *Regional Economic Outlook: Middle East and Central Asia*, October 2007; staff estimates.

[Click here for figure data](#)

3.8.2 External sector



Sources: International Monetary Fund, *Regional Economic Outlook: Middle East and Central Asia*, October 2007; staff estimates.

[Click here for figure data](#)

2006, as well as strong external demand, allowed the country to reap the benefits of soaring international prices in 2007. As one of the world's largest producers and exporters of gold, Uzbekistan has benefited tremendously from the metal's record prices. Remittances represent another significant foreign currency source, and come primarily from Uzbeks working in Kazakhstan and the Russian Federation.

A conservative external borrowing policy by the Government led to a further reduction in the external debt ratio to a projected 19.5% of GDP by end-2007. The country posted a record level of gross official reserves in 2007, of about \$6.5 billion, equivalent to 15 months of imports of goods and services (Figure 3.8.3). In addition to vibrant export performance, the long-standing restrictive import policy has helped foster the current account surplus and a large accumulation of official foreign reserves.

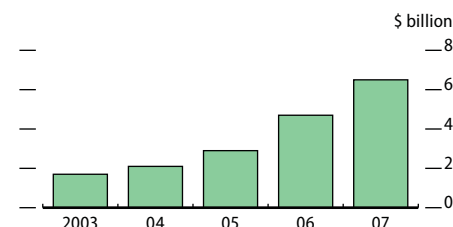
The current account surplus and foreign direct investment inflows put upward pressure on the exchange rate, with the result that the central bank intervened in the foreign exchange market to prevent a nominal appreciation of the local currency, the sum, against the dollar, continuing a policy aimed at boosting exports. Indeed, over the year the sum depreciated by about 4% against the dollar. Intervention, which resulted in an estimated \$1.8 billion net increase in official reserves in 2007, created pressures for growth in bank liquidity and monetary expansion. To mitigate them, the central bank expanded its open-market operations, mainly by selling central bank certificates. The impact of these operations, however, was partly offset by a reduction in reserve requirements for local deposits from 15% to 13%. Money supply grew rapidly, by an estimated 46% over the year, up from 36.8% in 2006 (Figure 3.8.4).

The consolidated general government budget is expected to have recorded a surplus of 2.3% of GDP in 2007, somewhat less than in 2006 as the earlier surge in revenues decelerated (Figure 3.8.5). Wages and pensions were raised twice during the year, by 25% in August and by 20% in November, though these were counterbalanced by moderation in planned capital spending and continued strong government revenues, which are estimated at about one third of GDP for 2007. The strong budget performance of the past 2 years was driven by tax reforms, growing customs receipts, and increases in utility prices. However, still more revenue strengthening will be required as the Government has pledged to raise all public sector wages, pensions, and social benefits by 150% by 2010, relative to 2006.

The Government has initiated important reforms in the public sector (and see Box 3.8.1). In January 2008, Parliament approved a substantially revised tax code. Consistent with the long-standing policy of easing the tax burden, the rate of unified tax for micro- and small enterprises was reduced from 10% to 8%, and the rate of corporate income tax for banks was lowered from 17% to 15%. The new code also introduced an excess profits tax for "subsurface users" extracting or producing cathode copper, cement, polyethylene granules, and gas. The tax rates are 60% for cathode copper and 75% for all other commodities. The taxable base for the excess is defined as the difference between the price set by legislation and the selling price.

Although general confidence in the banking system has been rising, the ratio of broad money (M2) to GDP is low (10.3% in 2006), which

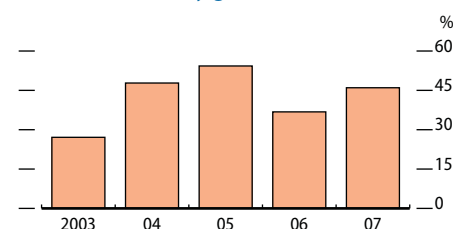
3.8.3 Gross international reserves



Sources: International Monetary Fund, *Regional Economic Outlook: Middle East and Central Asia*, October 2007; staff estimates.

[Click here for figure data](#)

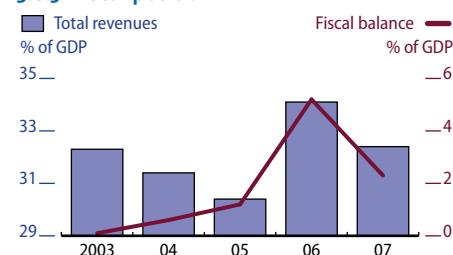
3.8.4 Broad money growth



Sources: International Monetary Fund, *Regional Economic Outlook: Middle East and Central Asia*, October 2007; staff estimates.

[Click here for figure data](#)

3.8.5 Fiscal position



Sources: International Monetary Fund, *Regional Economic Outlook: Middle East and Central Asia*, October 2007; staff estimates.

[Click here for figure data](#)

suggests that banking still plays a relatively minor role in the economy. The fact that the tax authorities are allowed to check taxpayers' bank accounts undermines confidence in banking—as does the central bank's anti-inflationary effort of limiting the volume of cash that depositors may withdraw, which induces greater holdings and transactions in cash.

Economic prospects

World prices of gold, cotton, and gas seem set to stay buoyant over the next couple of years (Figure 3.8.6). The Government plans to continue promoting development of the gold sector and recently adopted an extensive program of modernization and technical renovation at Almalyk Mining and Smelting for 2008–2012. The price of cotton is expected to keep on rising, reflecting a rundown of global stocks and a strengthening of demand. The People's Republic of China, for example, is expected to become a more important buyer of cotton. For 2008, Uzbekistan once again negotiated substantial price rises for gas exports.

Apart from strong price incentives for increased commodity production, industry will remain a major contributor to growth through expanded automobile production, following General Motors' investment in UzDaewooAuto. Greater investment in communications and hydrocarbons, much by Asian and Russian companies, as well as government infrastructure spending, will maintain construction's strong expansion. Moreover, government policy to raise wage levels should ensure that consumer demand remains buoyant. All these factors indicate that the economy should grow by around 7–8% in the forecast period.

Healthy external demand and surging commodity prices, coupled with greater remittances and import controls, are expected to keep the current account surplus at 18.5% in 2008 and 17.5% in 2009. Exports will continue to flow toward the Russian Federation and neighboring countries. With the strong current account surplus, gross official foreign exchange reserves should keep building. This will sustain inflation pressure in the economy, because the monetary authorities are unlikely to be able to fully sterilize the liquidity created by continuing the policy of gradual nominal depreciation of the sum.

The conservative fiscal stance is expected to be kept in place, leading to a positive fiscal balance and so assisting monetary policy efforts. Still, the central bank's commitment to currency depreciation will likely result in persistent rapid monetary expansion. This and planned increases in utility tariffs are expected to mean little relief in inflation.

Development challenges

The benign outlook may deter the Government from embarking on major structural reforms in the forecast period, even though large foreign exchange reserves, a low level of external debt, and rising fiscal revenues put it in a comfortable position to push through long-awaited reforms aimed at industrial diversification, banking and trade liberalization, and private sector development. The authorities are in a position to exploit the present growth momentum and substantially expand reform initiatives in order to secure sustainable growth for the longer term.

3.8.1 Restructuring the budget

The Government has established a treasury, which, under a public finance reform management project, is setting up a treasury single account and is streamlining the budget execution mechanism. In 2007, it implemented treasury operations at the regional level, closed thousands of accounts of spending units, and introduced territorial single treasury accounts. The major medium-term hurdle for these reforms will be the consolidation of all government fiscal accounts into a single account, including those of the Government's extrabudgetary funds.

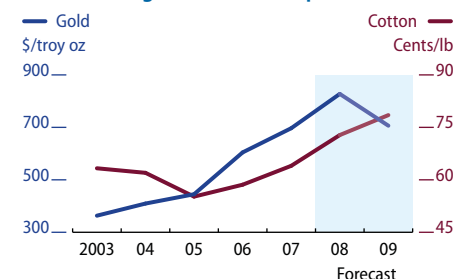
The Reconstruction and Development Fund (RDF) was established in 2006 with capital targeted to reach \$1.0 billion by 2010, though in fact it had already reached \$1.2 billion at end-2007 because of a strong budgetary position. According to the State Investment Program, eight high-priority investment projects were approved for financing from RDF funds in 2008, mainly in the chemical and hydrocarbon sectors. RDF's role in these projects will focus on procuring capital goods.

3.8.1 Selected economic indicators

	2008	2009
GDP growth	7.8	7.2
Inflation	10.9	10.5
Current account balance (% of GDP)	18.5	17.5

Source: Staff estimates.

3.8.6 World gold and cotton prices



Source: Economist Intelligence Unit, *Global Outlook*, March 2008.

[Click here for figure data](#)



East Asia

People's Republic of China

Hong Kong, China

Republic of Korea

Mongolia

Taipei, China

People's Republic of China

Supported by strong domestic and external demand, GDP growth reached a multiyear high in 2007. Inflation also quickened, a result of high global oil and grain prices, domestic price pressures on some foods, and excess liquidity in the banking system. The Government has taken more aggressive tightening measures which, combined with weaker external demand, are expected to slow economic growth in 2008 and 2009. Price pressures are seen easing somewhat later this year. A longer-term goal is to achieve a more balanced and inclusive economy.

Economic performance

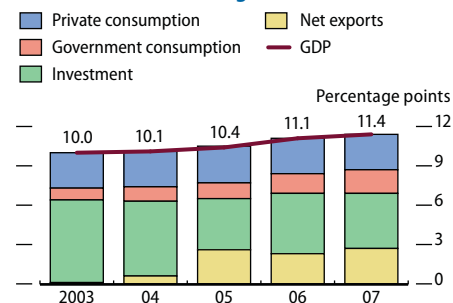
GDP growth reached 11.4% in 2007 in the People's Republic of China (PRC), a 13-year high and the fifth consecutive year of double-digit expansion. Fueled by buoyant exports and vigorous domestic demand, it accelerated from 11.1% in the first quarter to 11.9% in the second. To prevent overheating, the Government raised interest rates and banks' reserve requirements, abolished or cut export tax rebates on certain products, and imposed tariffs on some exports. As a result, GDP decelerated gradually to 11.5% in the third quarter and 11.2% in the fourth. Most of the slowing was caused by a reduced contribution from net exports.

It was hard to detect any signs of rebalancing away from industry-led growth. This sector contributed 7.5 percentage points to total growth, and services another 3.5 percentage points. Agriculture made a minor contribution. On the demand side, domestic consumption replaced investment to become the biggest driver of growth for the first time in 7 years, contributing 4.5 percentage points of GDP growth, compared with 4.2 percentage points from investment and 2.7 percentage points from net exports (Figure 3.9.1).

Rapid economic growth and government policies to promote employment helped create 12.0 million new jobs in urban areas in 2007, well above an official target of 9 million, though about 24 million new jobs were needed to absorb all newcomers to the labor market, according to the National Development and Reform Commission. The private sector and small and medium enterprises generated about 80% of the new jobs, although their share of total employment was only about 16% in 2007.

Wage increases lifted real urban incomes by 12.2% last year. Rural incomes in real terms grew by 9.5%, driven mainly by remittances of migrant farmers who moved to cities for better jobs (Box 3.9.1). Fueled by buoyant urban and rural incomes, private consumption rose by about 8%, continuing to grow at a rate below that of total GDP. Investment in some overheated sectors eased, but overall investment was again boosted by high industrial profitability, strong investment initiatives at

3.9.1 Contributions to growth (demand)



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

3.9.1 Workforce in transition

The country faces three main challenges related to the workforce, and has started to address some of them.

Massive rural-to-urban migration

The scale of domestic movement of labor has been huge in the past two decades, reflecting both “push” and “pull” factors—rural poverty and underemployment push farmers to leave their homes, and higher-paying jobs pull them to cities. Migrant workers (defined as those having migrated for employment for at least 6 months in the previous year) are estimated at 140 million–200 million, and have helped fuel economic growth in urban areas.

The profile of rural-to-urban migrants has become younger, but remains dominated by unskilled and semiskilled workers. About two thirds have not received any job training. With a poor education and rarely any vocational skills, migrant workers seldom get good jobs in cities. They are also denied full access to basic public services away from their rural homes, such as education, health care, or social protection.

Shortage in semiskilled and skilled workers

While unemployment and underemployment among unskilled workers appears to be rising, a paucity of skilled workers has led to severe recruitment and retention problems for local and foreign firms. Recent studies have identified growing skill constraints in areas like English-language skills and research and development.

Despite an influx of nearly 5 million new university graduates annually, both domestic and foreign firms complain of job applicants' low employability. Only 10% of graduates meet the English-language requirements of foreign companies, which now account for more than 20% of all local job opportunities.

A rapidly aging population

The need to reengineer the PRC workforce is set against a backdrop of broader economic and social transitions, including an aging population. The old-age dependency ratio (the number of people at the retirement age and above divided by the number of people of working age) is forecast to double between 2005 and 2030 and the population over

60 to triple by 2050 relative to 2005. This transition will hit the PRC at a much lower per capita income level than most other countries, further straining health, insurance, and social protection systems.

While some have pointed to a potential evaporation of the low-cost labor pool, arguably, this core challenge is again more of quality than of quantity. To maintain sustainable economic growth, the shrinking of the low-cost labor pool should be offset by an improvement of labor skills and productivity. Although the number of young workers (aged 15–24) is forecast to remain over 200 million until 2015 (declining gradually thereafter), the key question is whether sustainable but decelerating growth driven by human capital and technological progress can support an aging population.

The restructuring

Sweeping labor law reforms that came into effect in January 2008 represent a step forward in protecting the rights of workers and providing stronger stipulations in areas such as written labor contracts, handling labor disputes, payment of wages on time, and long-term job security. A long-term relationship between employers and employees will be helpful for workers to strengthen their on-the-job skills. In addition, the reforms provide incentives for employers to invest in vocational training. However, in the short term, the legislation might well cause some employers to cut staffing levels or even relocate.

Other reforms include a range of vocational training programs for rural-to-urban migrants and others to retrain laid-off workers. The challenge will be in enforcing these changes, in ensuring that the programs are adequately funded, and in involving the private sector and other stakeholders.

At a broader level, employer surveys and other evidence suggest a need to reorient education from a focus on rote and theory toward flexibility in learning and applied skills. Such a shift becomes increasingly important to more closely link the classroom to the labor market, which is in line with the rapid technological change and broader social transitions. (See also the chapter *Asia's skills crisis* in Part 2.) To address such interlinked challenges, the Government will need to continue reforms in education, training, and pensions, and to construct a stronger social safety net.

provincial level, a booming stock market, and still-low lending rates. Fixed asset investment in industry grew by 29% in 2007. About 60% of corporate investment is financed from firms' internal funds, mostly own capital and profits. Consequently, rising corporate profits tend to make domestic overinvestment in manufacturing, and growth in net exports, mutually reinforcing. This also made corporate investment less sensitive to increases in interest rates.

Government efforts to restructure investment seem to be having some impact. The policy to encourage innovation, save energy, and cut

pollution has led to accelerated investments in hi-tech machinery and in recycling while investment in overheated sectors such as steel, electricity, and heat power slowed modestly (Figure 3.9.2). In addition, policies to stimulate the rural economy pushed up investment in agriculture last year by 31.1%, faster than that in industry and services. Indeed, encouraged by the policies to promote development in remote areas and in old industrial areas, investment in western and central regions grew by about 30%, faster than in the east. As investment has grown faster than GDP (both in nominal terms) for several years, its share of GDP reached a high level of 44.5%, symptomatic of the economic imbalance.

An imbalance was also seen in a soaring trade surplus, with merchandise exports growing by 27.6%, much faster than import growth of 18.0%, in the first half of 2007 (Figure 3.9.3). To rein in the trade surplus, the Government launched a series of measures: an export tariff was imposed on 142 products in June and export tax rebates were reduced or abolished in July for 2,831 items; and import restrictions were abolished on 338 items. Export growth slowed to 24.7% in the second half of the year, when import growth picked up to 22.6%. Yet the trade surplus still climbed by 45% to \$316.6 billion for the year. The main contributor was processing trade, which involves the assembly of imported intermediate items and their export as final goods, often by manufacturers owned by foreign firms.

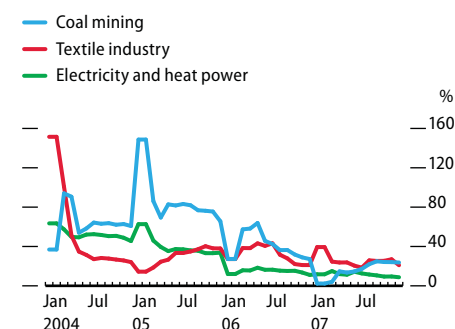
The surge in the trade surplus increased the current account surplus to an estimated \$353 billion, equivalent to 11% of GDP. Foreign direct investment inflows rose by 13.8% to \$82.7 billion. As well as these inflows, short-term speculative capital flowed into the booming real estate sector and stock markets. Foreign reserves reached \$1.53 trillion by year-end, the largest in the world. In October, the China Investment Corporation was established to invest part of the pool of reserves abroad.

To maintain a gradual appreciation of the yuan's nominal exchange rate, the People's Bank of China, the central bank, has to drain excess liquidity created by the accumulation of foreign reserves. Since it cannot fully achieve this, excess liquidity is injected into the economy by an expansion of base money. As a result, broad money supply (M2) grew by 16.7% last year, above the central bank's target of 16%. Growth of bank lending was also strong at 16.1% by end-2007. The authorities allowed the yuan's appreciation against the United States (US) dollar to accelerate in nominal terms to 6.9% in 2007 from 3.4% in 2006. According to the Bank for International Settlements, the PRC's nominal and real effective exchange rates appreciated year on year by 1.6% and 4.1%, respectively, in 2007.

Inflation became a serious problem in 2007, caused mainly by rising prices for food (up 12.3%), and to a lesser degree housing and fuel. Inflation reached 6.9% in November 2007 (Figure 3.9.4), the highest since 1996, with a year-average rate of 4.8%. Underlying the hike in food prices were higher costs of imported grain and an outbreak of a pig disease that caused shortages and pushed up pork prices. The Government's response was to encourage pork production, introduce more price controls and quotas, and reduce exports of food.

Housing prices have accelerated in many cities because of rising demand encouraged by excess liquidity. Sales of new houses jumped by 42.1% in 2007 in terms of value.

3.9.2 Growth of investment, selected industries

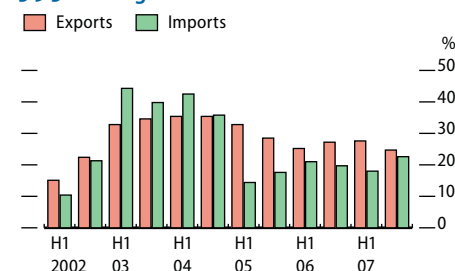


Note: Heat power refers to hot water and steam for city heating systems.

Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

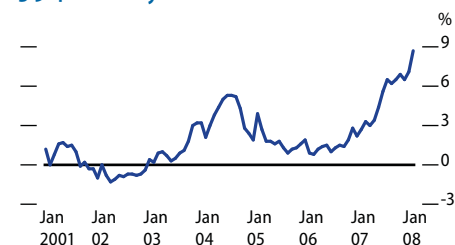
3.9.3 Trade growth



Sources: CEIC Data Company Ltd., downloaded 17 March 2008; staff estimates.

[Click here for figure data](#)

3.9.4 Monthly inflation



Source: CEIC Data Company Ltd., downloaded 13 March 2008.

[Click here for figure data](#)

Excessive liquidity in the financial system and relatively unattractive bank deposit interest rates spurred the stock market. The Shanghai A-share index (for shares available to domestic investors) nearly doubled in 2007, after a 131% leap in 2006. To curb market speculation, the authorities in May raised the stamp duty tax on stock transactions and brought in measures to curb the use of bank loans for stock market speculation. The stock market index reached a peak in October, and then declined.

Among its efforts to curtail liquidity and to fight inflation, the central bank tightened policy frequently in 2007, increasing its policy interest rate by 135 basis points and commercial banks' reserve-requirement ratio by 5.5 percentage points. The 1-year benchmark lending rate was raised to 7.47% and deposit rate to 4.14% (Figure 3.9.5). However, after taking inflation into account, the real deposit rate remained negative. Concerned about the weakening global economy and the possibility of more speculative capital inflows as the Federal Reserve cut US interest rates, the central bank in December raised the deposit rate by 27 basis points, well above the 18 basis point increase in lending rates. It also sold special bills to commercial banks six times to drain liquidity.

Fiscal revenues rose by 32.4%, reflecting rapid economic growth and buoyant corporate profits. Expenditures grew by 22.6%. The surge in receipts and a government-induced slowdown in public infrastructure spending helped produce a budget surplus equivalent to 0.7% of GDP in 2007, compared with a deficit (0.8% of GDP) in 2006.

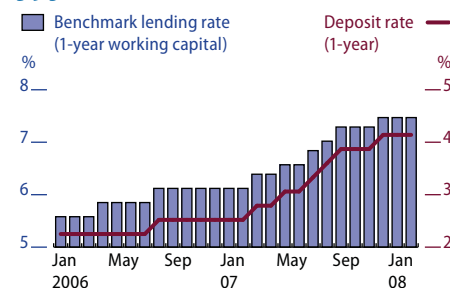
Economic prospects

The 2007 performance suggests strong momentum going further into 2008, maintaining a risk of overheating in some sectors and of inflation becoming more entrenched. The following forecasts rest on the assumptions that monetary conditions will tighten further; fiscal policy will be prudent; steps will be taken to improve energy efficiency and cut pollution; and the exchange rate against the US dollar will appreciate faster.

Interest rates are expected to trend up in 2008, before easing in 2009 when inflation is seen moderating. The central bank is also likely to further raise banks' reserve requirements, issue bills to sterilize liquidity inflows, and strengthen its so-called "window guidance" in an effort to reduce bank lending to overheated industries. In fact, it hoisted the reserve-requirement ratio from 9.0% to 14.5%, a 20-year high, in 2007, and in the first quarter of 2008 has raised this ratio twice more, by a total of 1.0 percentage point, to 15.5% (Figure 3.9.6). The accumulative impact of monetary tightening is expected to have greater effect this year. As the rising trade surplus and surging foreign capital inflows contribute to excess liquidity, the authorities are expected to permit faster appreciation of the yuan against the US dollar.

The fiscal position will be strengthened by higher stamp duty on share transactions, the reduction of export tax rebates, and the introduction of a requirement that central government-owned enterprises pay dividends. On the last point, the Government required state enterprises to pay dividends from October 2007, as a trial. Firms in the petroleum and petrochemicals, telecommunications, coal, electricity, and tobacco industries will pay dividends of 10% of their after-tax profits, and those

3.9.5 Interest rates



Source: CEIC Data Company Ltd., downloaded 13 March 2008.

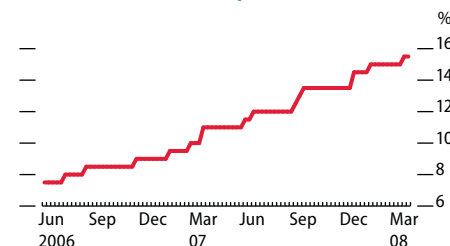
[Click here for figure data](#)

3.9.1 Selected economic indicators

	2008	2009
GDP growth	10.0	9.8
Inflation	5.5	5.0
Current account balance (% of GDP)	9.9	8.6

Source: Staff estimates.

3.9.6 Bank reserve-requirement ratio



Source: People's Bank of China.

[Click here for figure data](#)

in other sectors will pay 5%. (State enterprises in military industries and institutions involved in scientific research are excluded from any dividend requirement.)

On the expenditure side, the Government's goals of creating a "harmonious society" and stimulating growth of private consumption call for more spending on rural development, education, health care, and other social programs. As the authorities will also reduce spending on infrastructure, fiscal policy will play a more important role in structural adjustment. The fiscal balance this year and next is projected to show a small deficit of about 1% of GDP, suggesting policy will be slightly expansionary if these projections are realized. If the global economic situation deteriorates to a greater degree than expected, the authorities could change to a more expansionary stance.

Two important targets of 11th Five-Year Plan (2006–2010) are to cut energy consumption per unit of GDP by 20% and reduce major pollutants by 10% by 2010. In the forecast period, the Government is expected to be more active in taking steps to achieve these goals by, among other moves, increasing outlays on energy saving and environment protection, imposing new taxes on energy and natural resource consumption as well as on environmental pollution, and by tougher implementation of regulations on energy saving and pollution reduction. Official figures show energy consumption per CNY10,000 of GDP fell by 3.3% last year, following a 1.2% reduction in 2006. Sulfur dioxide emission was reduced by 4.7% and chemical oxygen demand cut by 3.1% in 2007.

Investment will continue to underpin the expansion of GDP in 2008 and 2009, with many of the drivers still in place: low cost of borrowing for state-owned companies, buoyant profits, and strong incentives for local governments to pursue high rates of growth.

The China Banking Regulatory Commission has strengthened the supervision of mortgage loans and raised the share of down payment for purchasing a second house from 30% to 40%, which should constrain credit for real estate developers and housing buyers (and speculators). The authorities also announced measures to force suppliers of housing to build on land rather than keep it vacant.

Domestic consumption will remain firm, supported by government spending on social and rural development and a new labor contract law that came into force in January 2008 that gives greater security to many employees. Furthermore, the threshold for paying individual income tax was raised from March, in effect lowering taxes. The summer Olympics are expected to give retail sales a fillip. (Nominal retail sales rose by 20.2% in the first 2 months of 2008, accelerating from the year-earlier pace of 14.7% as consumer demand remained strong and prices increased.)

Net exports will be hit by a combination of weaker external demand, domestic policies to restrict some exports, currency appreciation, and rising local costs for labor and land. The growth of merchandise exports is expected to slow to 19% this year and further to 18% next year, from 26% in 2007. The European Union, Japan, and the United States bought nearly half the PRC's total exports last year, and all three markets are expected to weaken this year. In contrast, import growth is likely to remain at around 20%, influenced by the appreciating currency, declining import tariffs, and introduction of other pro-import policies.

These forces are forecast to moderate GDP growth to 10.0% in 2008 and 9.8% in 2009 (Figure 3.9.7). The contribution to growth of investment is expected to decline slightly and that of consumption to rise moderately. As the contribution from the external side falls, GDP growth will be pulled down. Growth in the trade surplus is expected to decelerate but tourism-related inflows linked to the Olympics will narrow the services deficit in 2008. The surplus on the income account will continue to rise this year and next, reflecting higher earnings from the PRC's foreign-exchange reserves and income from overseas investment. The current account surplus is forecast to fall as a share of GDP to 9.9% in 2008 and to 8.6% in 2009 (Figure 3.9.8).

Inflation was propelled to an average of 7.9% in the first 2 months of 2008 when bad weather hit 21 provinces, damaging fruit and vegetable production and blocking transportation routes. Food prices are expected to stay at high levels until the third quarter, when supplies of pork and grain are likely to pick up. The Government in early 2008 froze prices temporarily for some goods and services and required official approval to raise other prices. The Government also scrapped tax rebates for grain exports and instead indicated that it would levy export taxes on grain, apparently to ease upward pressure on grain prices. Overall, inflation this year is forecast to average 5.5%, and 5% in 2009 (Figure 3.9.9).

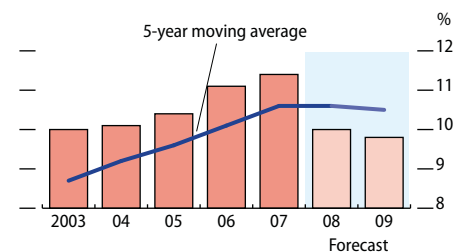
Those measures should reduce the risk that the public comes to expect rapid inflation, which would likely mean further upward pressure on wages and prices. However, if price controls are maintained too long, they may reduce incentives to increase production and so have an unintended upward impact on inflation in the medium term.

If food inflation eases as forecast, the temporary price controls might be ended. At that stage, though, the authorities are expected to consider price reforms for water, electricity, and fuel, which would likely lead to price increases for these items.

There are three major downside risks to this outlook. A more severe than expected deterioration in the global economic and financial position would cause a deeper erosion of PRC exports and economic growth. A major downturn in PRC property and stock markets could damage banks' balance sheets, leading them to tighten credit. Moreover, the resulting negative wealth effect for households could hamper private consumption, at least in cities. Lastly, an acceleration of inflation from current high level would likely prompt a more aggressive tightening of credit, potentially causing a drop in investment. If all three negative scenarios play out, economic growth could fall to perhaps 7%. In such circumstances, the Government would, though, have room to raise spending on welfare and urban infrastructure programs, as well as to relax its grip on monetary policy.

The National People's Congress in March approved a restructuring of government departments aimed at strengthening the central Government's ability to manage the economy. Five new "super ministries" were established for industry and information, human resources and social security, environmental protection, housing and urban-rural construction, and transport. A national energy commission was also established and the Ministry of Health was empowered to oversee food and drug safety.

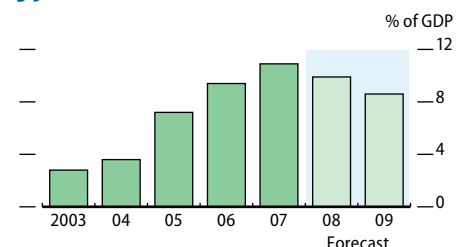
3.9.7 GDP growth



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

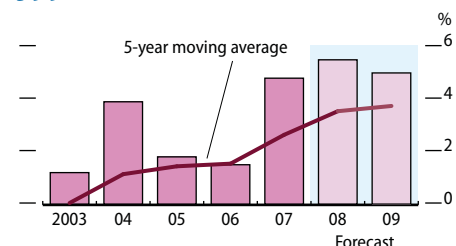
3.9.8 Current account balance



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

3.9.9 Inflation



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

Development challenges

Over the past 5 years, the economy has moved to a high-growth, high-investment, and high net export structure, which appears to be self-reinforcing. Yet three major imbalances in the economy indicate that the current growth model is not sustainable. The first is between internal and external demand. The large and rising current account surpluses have aggravated relations with major trade partners, while domestically the accumulation of foreign exchange reserves causes excess liquidity and signifies a suboptimal allocation of resources. Since 2003, the Government has been trying to restructure the economy toward a sustainable growth model by promoting consumption growth. But the share of consumption in GDP has continued to fall, while the share of capital formation and net exports has increased (Figure 3.9.10).

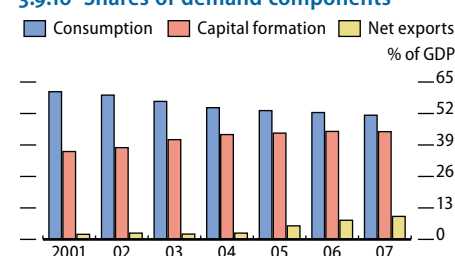
The second imbalance comes from energy and environmental strains. The country's heavy reliance on industry for growth has put increasing strains on energy supplies and the environment. The PRC improved the efficiency of energy use between 1978 and 2002 but the trend was subsequently reversed for a few years. The energy intensity of PRC industry is 1.5 to 2 times as high as in advanced economies and the current growth model results in steeply rising consumption of fuels and increasing imports of petroleum, triggering concerns about energy security. Heavy industry-dominated growth has also caused environmental problems. Reliance on coal for 70% of the total energy consumption and a rapid increase in the number of vehicles is intensifying air pollution and "greenhouse gas" emissions.

The third imbalance is rising income inequality. Whether measured in terms of the urban-rural income gap (Figure 3.9.11), differences between the top income groups and the bottom groups, or coastal versus interior regions, social inequality is worsening. Accumulation of capital in urban industry has led to large income inequalities.

To address these imbalances, the Government has launched a raft of new policies and programs since 2003, many of them aimed at helping the rural sector and giving stricter environmental protection. However, rebalancing faces several constraints. First, investment is still very much encouraged by high savings rates and local governments' incentives to pursue growth. A high level of domestic investment has been supported by an even higher savings rate. More important, the increase in savings did not come from households but mainly from enterprises, so that raising consumption might not solve the imbalance. Enterprise savings have soared in the past decade because state-owned enterprises have laid off excess staff and reduced their social functions at the same time as a rapid increase in the number of foreign and private firms has raised productivity. The decision to require central government-owned enterprises to pay dividends was an important step. However, considering that the share of these dividends in total enterprises' profits is small (5–10%) and that the dividends will be used for further reforms of state enterprises rather than for social programs, the policy looks unlikely to help remedy the investment-consumption imbalance.

Second, the evaluation system for local officials impedes rebalancing. Although the central Government has adopted a so-called "scientific approach to development," which emphasizes a balance between

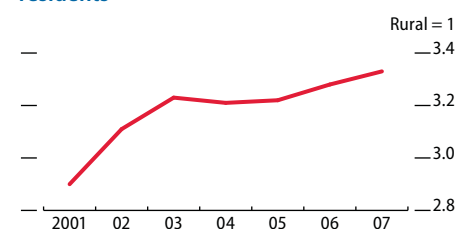
3.9.10 Shares of demand components



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

3.9.11 Income ratio of urban to rural residents



Sources: National Bureau of Statistics; staff estimates.

[Click here for figure data](#)

economic development and social and environmental sustainability, local officials sometimes still place GDP growth over more intangible social and environmental indicators because that is how their predecessors usually achieved promotion. This is likely to continue until local decision makers perceive stronger incentives to do otherwise.

Third, low energy prices and weak pollution-abatement measures hamper energy saving and pollution reduction. The authorities, concerned that higher energy prices and strict pollution control would push up inflation and raise costs for exporters, are reluctant to raise taxes on energy consumption and crack down heavily on pollution. But if they are to realize targets on energy efficiency and pollution reduction by 2010, it is likely that energy prices will have to be raised, taxes imposed on energy and natural resources, and the monitoring and evaluation systems strengthened.

Fourth, certain regulations such as the household registration (or *hukou*) system—which hinders the free movement of farm workers leaving their homes and seeking higher-paid jobs in cities—constrain rebalancing. Income inequality between urban and rural areas is the major contributor to widening national income discrepancies. One way to address this would be to allow more flexible movement of labor, especially farmers migrating to cities, which would require reforms to the *hukou* system.

Hong Kong, China

Robust economic growth continued in 2007, powered by strong domestic demand and supported by a vibrant services sector. The expected slowdown in the United States (US) and the People's Republic of China (PRC) will trim growth in 2008, with a slight pickup expected in 2009. Inflation, partly imported from the PRC, will accelerate this year. Longer-term challenges involve skills shortages, pollution, and an aging population.

Economic performance

The economy grew by 6.3% in 2007, decelerating from about 7% in the previous 2 years. Growth was driven by domestic demand (Figure 3.10.1). Private consumption increased by 7.8% and contributed 4.5 percentage points to GDP growth. This spending was supported by a strong labor market and buoyant asset markets. The unemployment rate fell to 4.0%, the lowest level since 1998, and average monthly wages rose by 4.6% in the third quarter from a year earlier (Figure 3.10.2). As a consequence of strong employment, rising incomes, and increasing tourist arrivals, the volume of retail sales rose by 10.5% last year, nearly double the rate of 2006.

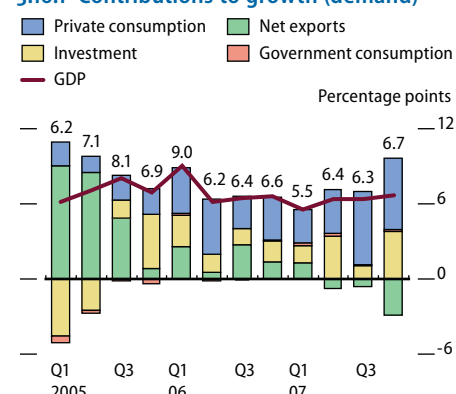
Buoyant asset markets boosted household wealth and thus supported consumption growth. The index of share prices rose by 39% in 2007, despite a market retreat in the last 2 months of the year. The property market also revived, helped by lower mortgage interest rates and improved incomes. House prices rose by 11.5% in 2007 and the number of residential property transactions surged by about 50% (Figure 3.10.3). Rents for offices, retail premises, and factory space also increased, reflecting rising demand by businesses.

Gross domestic fixed capital formation rose by 6.0% in 2007 and contributed 1.3 percentage points to GDP growth, reflecting strong business confidence and a need to expand productive capacity. Total investment, including changes in inventories, grew by 11.6% and contributed 2.4 percentage points to GDP growth. Investment in building and construction rebounded to register growth of 0.2%, after falling for several years, while investment in machinery and equipment rose by 6.6%.

Relatively low real interest rates supported both consumption and investment growth. Given that the US and Hong Kong dollars are linked, interest rates in Hong Kong, China generally follow those in the US. Consequently, nominal interest rates declined in the second half of 2007. Real rates tended to fall faster, especially in the fourth quarter when inflation started to pick up (Figure 3.10.4).

Net exports of goods and services in real terms, on the other hand, declined for the first time since 2001. Real exports of goods and services

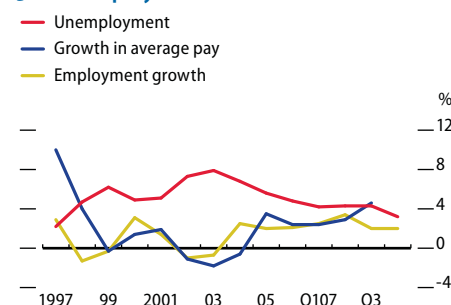
3.10.1 Contributions to growth (demand)



Source: Census and Statistics Department, available: <http://www.censtatd.gov.hk/>, downloaded 28 February 2008.

[Click here for figure data](#)

3.10.2 Employment indicators



Source: Census and Statistics Department, available: <http://www.censtatd.gov.hk/>, downloaded 21 February 2008.

[Click here for figure data](#)

increased by 7.9%, outpaced by real imports that rose by 8.9%. Domestic merchandise exports in nominal terms fell by 18.9%, partly as a result of softening demand from the US, the second-largest market for domestic exports. By contrast, reexports, accounting for 96% of total merchandise exports, grew by 10.8%, benefiting from the continuing surge in global trade with the PRC, the main source of the economy's reexports, and a gradual depreciation of the real effective exchange rate. Services exports, bolstered by rising tourism, financial market activity, and external trade, more than compensated for a widening merchandise trade gap and the current account surplus in 2007 rose to the equivalent to 13.3% of GDP (Figure 3.10.5). After accounting for investment flows, the overall balance of payments registered a surplus of 7.1% of GDP in 2007, well above the year-earlier level (Figure 3.10.6).

The services sector dominates the economy, producing over 90% of GDP, and it generated all the GDP growth on the supply side in 2007. Agriculture, manufacturing, and construction all contracted. Among services, finance and insurance grew by about 19% in 2007, reflecting strong expansion in banking and buoyant financial market activity, much of it involving fund-raising for PRC companies. Yuan-denominated banking services also expanded. Other services activities to perform well were real estate and business services; import and export trade services; and hotels, restaurants, and retail trading (the last group benefiting from healthy consumer and tourist spending).

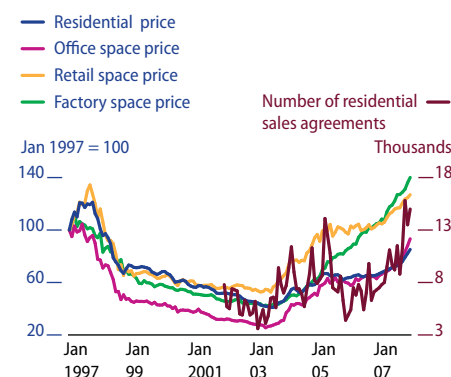
Solid economic growth strengthened the fiscal position in FY2007 (ended 31 March 2008). The fiscal surplus rose to an estimated 7.2% of GDP, even after income tax rates were cut and general rates (taxes) for properties were waived for 3 quarters, among other concessions. Government revenues surged by 22.6%, benefiting from much higher stamp duty receipts from stock and property transactions. Government spending rose by just 3.4%.

Inflation was about 1.5% for the first 9 months of 2007, but then accelerated to 3.5% in the last 3 months to average 2.0% for the year (Figure 3.10.7). The pickup after October was due to the ending of the waiver on property rates and an increase in food prices and services costs. Much fresh food is imported from the PRC, where prices of food, especially pork, jumped last year. A gradual depreciation of the Hong Kong dollar against the yuan also contributed to food price inflation. In addition, labor productivity growth trended down in 2007 (Figure 3.10.8), such that rising labor costs began to put some upward pressure on inflation.

Economic prospects

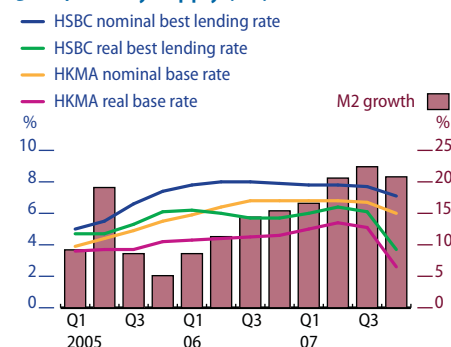
Key assumptions include a slowing in PRC economic growth in 2008 and a sharp pullback in US growth, followed by some recovery in the US in 2009. Others are that the yuan will appreciate gradually against the US dollar and that the Hong Kong dollar's link with the US dollar will be maintained. Domestic interest rates are expected to continue to decline this year alongside those in the US. The Government projects that the budget will turn to a small deficit in FY2008 and return to surplus the following fiscal year. The FY2008 budget lowers personal and corporate

3.10.3 Property price indexes and transactions



[Click here for figure data](#)

3.10.4 Money supply (M2) and interest rates

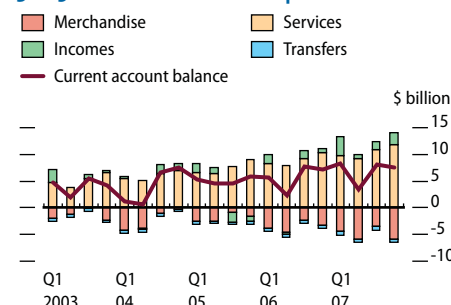


HKMA = Hong Kong Monetary Authority.

Source: Hong Kong Monetary Authority, available: <http://www.info.gov.hk/hkma/>, downloaded 21 February 2008.

[Click here for figure data](#)

3.10.5 Current account components



Sources: Census and Statistics Department, available: <http://www.censtatd.gov.hk/>, downloaded 25 March 2008; Hong Kong Monetary Authority.

[Click here for figure data](#)

income taxes by 1 percentage point to 15.0% and 16.5%, respectively. The projected budget turnaround to a deficit from last year's surplus is expected to provide support for domestic demand.

Domestic demand is expected to drive growth again, although it is unlikely to be as strong as last year. Private consumption will be underpinned by low real interest rates, buoyant consumer confidence, tax cuts, and wage increases. Investment, too, will be supported by low real interest rates as well as the strong property market. Furthermore, some large infrastructure projects are scheduled to start construction this fiscal year and next.

Merchandise exports are forecast to weaken because of the slowdowns in the PRC, US, and other markets. The likely appreciation of the yuan is also expected to erode real reexports originated from the PRC. However, in line with a weaker US dollar, the Hong Kong dollar is projected to depreciate against many currencies, supporting exports to Asian and other markets. On the balance of these influences, GDP growth is expected to decline to 4.5% in 2008 and then to lift to 4.8% in 2009 if a recovery gets under way in industrial economies.

Weaker merchandise exports in 2008 will widen the trade deficit, but another large surplus on services trade will outweigh this. The current account surplus is expected to decline, but remain substantial at 9.5% of GDP in 2008.

Rising food prices and rents will underpin higher inflation in 2008. Indeed, inflation jumped to 6.3% in February 2008, the highest rate in about 10 years, propelled in part by some one-time factors. Housing has the biggest weighting in the Composite Consumer Price Index and rents for private housing are rising sharply along with property values. The price of imported food, the second-largest component in the index, is also moving up. The expected weaker US dollar and firmer yuan will raise import prices and the tight labor market will put some upward pressure on inflation. Against this, another waiver on property rates for FY2008, a 1-month waiver on public housing rents, and a one-time grant to subsidize household electricity costs will moderate the increase in inflation to a forecast average of 3.4% this year. The Government estimates that inflation would increase to 4.5% without these budget concessions.

Changes in prices of petroleum products have a relatively mild impact on growth and inflation, since the economy is heavily services oriented (fuel accounts for only about 2% of total business costs). Just over half the electricity is generated by coal (the rest from oil). Fuel use has become more efficient over recent years, and fairly high taxes are imposed on private cars and gasoline. A 10% increase in global oil prices would reduce GDP growth by 0.28 percentage points and increase inflation by 0.14 percentage points, a milder impact than in many other Asian economies, according to the Oxford Economics quarterly global model.

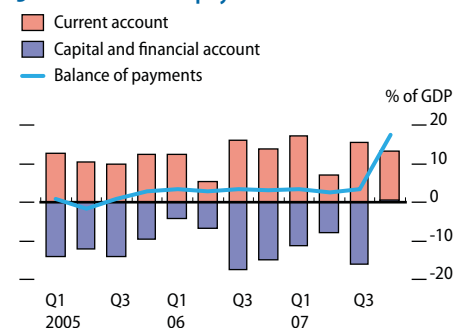
The forecasts are subject to various, interlinked downside risks. A steeper than expected slowdown in the US as well as the PRC would further damage global trade and thus Hong Kong, China's growth prospects. The overall impact would be much worse if there was also a general slump in financial and property markets. A more serious financial market slump than foreseen could also sharply weaken the US dollar, flowing through to the Hong Kong dollar and giving inflation an upward jolt.

3.10.1 Selected economic indicators

	2008	2009
GDP growth	4.5	4.8
Inflation	3.4	2.8
Current account balance (% of GDP)	9.5	12.0

Source: Staff estimates.

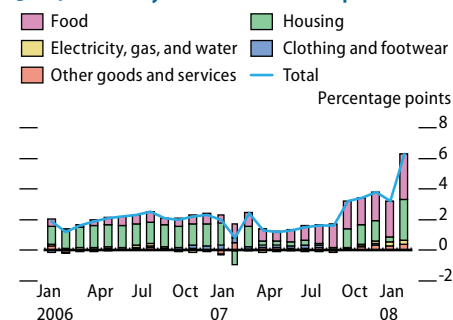
3.10.6 Balance-of-payments indicators



Sources: Census and Statistics Department, available: <http://www.censtatd.gov.hk/>, downloaded 25 March 2008; Hong Kong Monetary Authority.

[Click here for figure data](#)

3.10.7 Monthly inflation and components



Source: CEIC Data Company, Ltd., downloaded 20 March 2008.

[Click here for figure data](#)

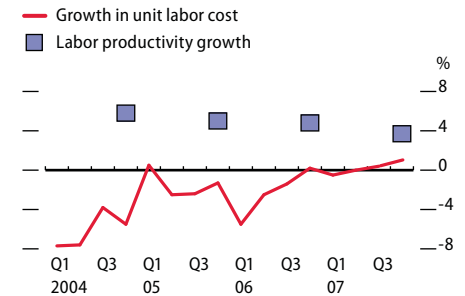
Development challenges

Shortages of skilled labor are a constraint on growth. With a booming economy, Hong Kong, China's demand for skilled labor such as accountants, construction specialists, and lawyers is on the rise. Many such skills are also lacking in the PRC, reducing the chances of companies sourcing staff there. As Hong Kong, China continues its drive toward a knowledge-based economy, there is a need to keep its education system under close review to ensure that it can meet the needs of students as well as produce enough skilled people to meet the growing demand.

The ability to attract internationally mobile professionals can be hampered by Hong Kong, China's reputation for air pollution. Pollutants come mainly from motor vehicles, industry, and power plants in both Hong Kong, China and neighboring Guangdong province. Some progress is being made in controlling emissions, though power companies must substantially reduce emissions if they are to achieve targets set for 2010.

A longer-term challenge is an aging population. The population division of the United Nations Secretariat projects that 52.7% of the population will be aged 50 and above by 2050, compared with 31.0% in 2007. This will raise the costs of subsidized health care and other aged care and could constrain government spending in areas such as education and infrastructure over the medium to long term. The Government is studying options for the private sector to bear a greater share of health care costs.

3.10.8 Labor indicators



Source: Calculations based on General Household Survey 2007.

[Click here for figure data](#)

Republic of Korea

Buoyed by robust domestic demand, growth picked up in the second half of 2007. Both private consumption and investment recorded solid gains. With business and consumer confidence rising, the economy is projected to maintain growth of around 5% this year and next. Continued strength of domestic demand is expected to offset weakness of external demand. Inflation will accelerate, but remain within the central bank's target band.

Economic performance

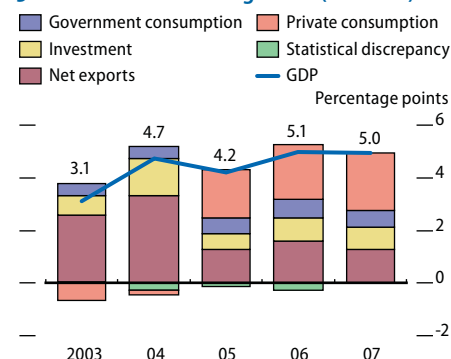
Powered principally by domestic demand, GDP grew by 5.0% in the Republic of Korea (hereafter Korea) in 2007, above the 5-year average of 4.8% in 2002–2006. Quarterly growth accelerated from 4.0% (year on year) in the first quarter to 5.7% in the fourth. Domestic demand accounted for around 75% of total GDP growth and net exports 25% (Figure 3.11.1). Within domestic demand, both private consumption and private investment made solid contributions to the economic expansion.

Growth in private consumption was 4.5% (Figure 3.11.2), led by purchases of household appliances, personal computers, and other durables. Consumer surveys by the Bank of Korea show that consumer confidence gained over the course of the year, and this was reflected in an acceleration in private spending into the fourth quarter. Consumer confidence was boosted by rising real wages and by a strong stock market—the Kospi index surged by around 30% in both local currency and United States (US) dollar terms.

Capital investment growth of 4.0% marked its fastest pace since 2003 (Figure 3.11.3). Investment was spurred by the robust expansion in both private consumption and exports. Corporate investment in plant and equipment climbed by 11% in the first half, partly a result of one-time factors, including the replacement of banks' automated teller machines because of the introduction of new currency notes. It then slowed in the second half, leaving growth for the full year at a solid 7.6%. Outlays on semiconductor-making machinery and precision machinery, along with transport equipment, were the key drivers of corporate investment. Construction investment grew by 1.2%, returning to positive territory for the first time in 3 years. The house price boom of recent years faded in 2007, with average house prices rising by a meager 2%.

The benign global economic environment through most of 2007 and enhanced labor productivity in manufacturing supported merchandise exports, which grew by 14.1% in nominal US dollar terms. Strong demand for Korean exports from the People's Republic of China (PRC), European Union, and Middle East more than offset a slowdown in exports to the

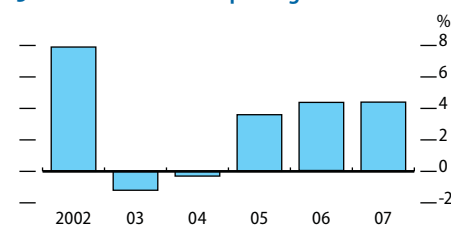
3.11.1 Contributions to growth (demand)



Source: Bank of Korea, Economics Statistics System, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 27 March 2008.

[Click here for figure data](#)

3.11.2 Private consumption growth



Source: Bank of Korea, Economics Statistics System, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 27 March 2008.

[Click here for figure data](#)

US in the second half. Exports of steel products and general machinery grew especially fast, while automobiles, semiconductors, and wireless communications equipment also maintained their export momentum. Merchandise imports rose by 15.3%. A healthy merchandise trade surplus helped produce a current account surplus estimated at 0.6% of GDP, despite a widening deficit in services trade. The financial account also posted a substantial surplus even with sizable net outflows of foreign direct and portfolio investment, owing to heavy short-term external borrowing by banks.

Labor market conditions remained broadly favorable. The unemployment rate averaged 3.2%, down from 3.5% in 2006, and real wages rose by 2.9%. New legislation that made it less attractive to hire temporary workers came into effect on 1 July 2007. Partly as a result, the number of workers on permanent contracts rose by about 400,000 during 2007. The greater sense of job security bolstered consumer confidence, although the labor market may lose some flexibility in the longer run. About 282,000 jobs were created in 2007, mainly in services, but jobs were shed in manufacturing as companies continued to relocate abroad and outsource work.

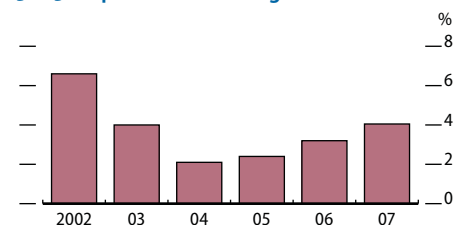
An acceleration in inflation was the main concern last year. Although it averaged a subdued 2.5%, the rate of price increases quickened from 2.1% in the first quarter to 3.3% in the fourth. Rising prices for imported oil was one reason. The strengthening of domestic demand also contributed, as did a second-half weakening of the won against the yen. Appreciation of the won against the US dollar, though, helped limit inflation pressure (Figure 3.11.4). This appreciation marks a continuation of a trend that began in 1998 (Box 3.11.1). The Bank of Korea further tightened monetary policy in response to the inflation pressure. As a result, bank lending interest rates have nudged up over the past 2 years.

Economic prospects

The upward momentum of the second half of 2007 is projected to continue in the first half of 2008, but taper off later in the year. The broad-based nature of the upswing, and the fact that it is based on domestic demand, suggest that it should survive the likely global slowdown. Although exports have remained strong so far, the global slowdown is likely to take its toll on them during the course of the year.

A critical assumption is that the newly elected Government that took office in February 2008 will spur further increases in business and consumer confidence. Indexes of both held up going into 2008 (Figure 3.11.5), despite a deteriorating global outlook. Business groups expect that the new administration will act on deregulation, privatization, and financial reforms. The Government has proposed to cut the corporate income tax rate from 25% to 20% over 5 years; one of the stated aims of the tax cut is to attract more foreign firms to Korea. It has also pledged to cut red tape for small and medium enterprises and provide them with more support. Such policies suggest that the efforts to encourage growth should benefit the broader businesses community, in addition to the large conglomerates. Another policy proposal is some large-scale public

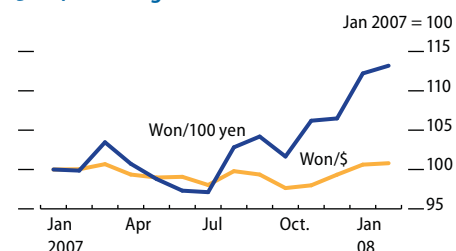
3.11.3 Capital investment growth



Source: Bank of Korea, Economics Statistics System, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 27 March 2008.

[Click here for figure data](#)

3.11.4 Exchange rate index



Source: Bank of Korea, Economics Statistics System, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 3 March 2008.

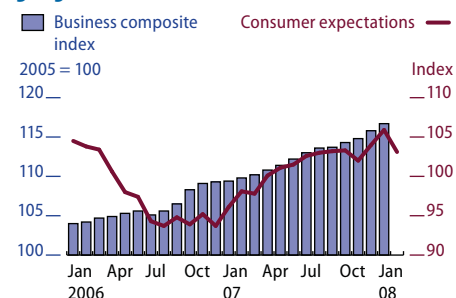
[Click here for figure data](#)

3.11.1 Selected economic indicators

	2008	2009
GDP growth	5.0	5.2
Inflation	3.4	3.0
Current account balance (% of GDP)	-0.2	-0.5

Source: Staff estimates.

3.11.5 Confidence indicators



Source: Bank of Korea, Economics Statistics System, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 10 March 2008.

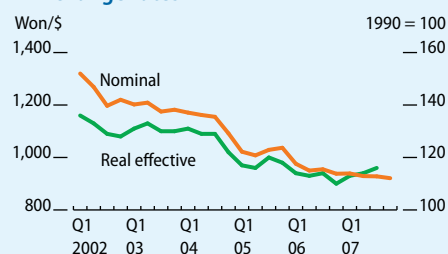
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3.11.1 Flexible exchange rates and export performance: Recent experience

Prior to the Asian financial crisis of 1997–98, most East and Southeast Asian countries pegged their currencies to the US dollar. Many economists believe that fixed exchange rates contributed to the crisis by creating a false illusion of zero exchange rate risk among investors. Reflecting this concern, the International Monetary Fund advocated more flexible exchange rates in the aftermath of the crisis. Indeed, exchange rates of these countries have generally become more flexible against the US dollar. Greater flexibility has often been accompanied by substantial appreciation against that currency, a trend that has been especially evident in the case of Korea.

The rise of the won is particularly striking since the first quarter of 2002 (Box figure 1), since when the won has risen by around 40% against the dollar, without any major interruption. Trends in the nominal won-dollar exchange

1 Exchange rates



Sources: Bank of Korea, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 29 February 2008; staff calculations.

[Click here for figure data](#)

rate can differ from trends in the real effective exchange rate (REER). The REER incorporates the exchange rates and prices of all Korea's major trading partners, and is therefore a more comprehensive measure. The REER appreciated by about 15% between the first quarter of 2002

and the third quarter of 2007.

National authorities usually worry that an appreciation of their currency will lead to a loss of export competitiveness. Yet the period of Korea's currency appreciation has been characterized by a rapid surge of exports (Box figure 2). One factor stands out as an explanation—the exceptionally robust world economy

2 Real exports



Source: Bank of Korea, Economics Statistics System, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 3 March 2008.

[Click here for figure data](#)

of 2002–2007. In particular, soaring demand from fast-growing emerging markets such as the People's Republic of China, Middle East, and Russian Federation has helped propel Korean exports of manufactured products. Improved labor productivity in manufacturing has also helped Korean exporters cope well with a rising won. This is especially true for producers of intermediate and capital goods.

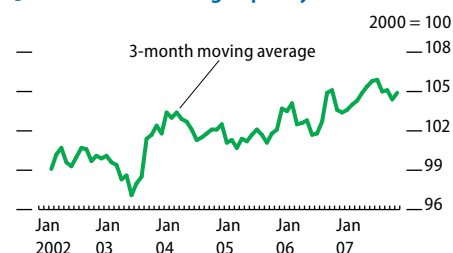
The main lesson from the Korean experience for other Asian countries seems to be that continually improving competitiveness is the only sustainable source of export growth that can withstand swings in the global business cycle.

construction projects. Whatever their long-term economic logic, the projects would bolster construction in the near term.

Rising consumer confidence, underpinned by favorable labor market conditions and the improvement in household incomes, will likely support further growth in private consumption. An upward adjustment in tax brackets from January 2008, which effectively reduces personal income taxes, provides further support for consumption spending. Sales of consumer durables are likely to benefit: televisions for the Beijing Olympics in August and cars from an unusually large number of new models on the market this year from Korean manufacturers. These positive factors are expected to outweigh the negative factors of rising inflation and interest rates.

Investment is also expected to show healthy growth in 2008. Corporate spending on plant and equipment will grow on the back of strong private consumption. A high rate of manufacturing capacity

3.11.6 Manufacturing capacity utilization



Source: Bank of Korea, Economics Statistics System, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 27 February 2008.

[Click here for figure data](#)

utilization (Figure 3.11.6 above) will also induce companies to invest in plant and equipment. Against this, the uncertain global economic environment will damp export-oriented investment. Construction is expected to accelerate due to a recovery of nonresidential construction and planned expansion of government construction projects. At the same time, the stagnation of housing prices (Figure 3.11.7) might limit residential construction activity, given that capital gains are an important motivation in demand for new housing.

The projected weakening in demand in major industrial countries for electronics and other manufactures will restrain export growth, although that will be somewhat cushioned by expected continuing robust sales to the PRC and other developing nations. High global oil prices will hurt, too. Taking these factors into account, GDP growth is forecast at 5.0% in 2008, edging up to 5.2% in 2009 if external demand picks up as expected (Figure 3.11.8). Data available for the start of 2008 point to solid growth in industrial production and services activity in January, as well as an unexpected surge in merchandise exports that month (up 15.1%) and February (up 18.8%). A contraction of exports to the EU and US was more than compensated by strong exports to the PRC, Middle East, Russian Federation, and other emerging markets. Imports jumped by about 30% in these 2 months.

Inflation will continue to be a concern. Its acceleration last year is likely to continue in the first half of 2008 because of strong domestic demand and high oil prices. Faster inflation in the PRC is raising concerns in Korea, in light of the country's heavy import dependence on PRC consumer goods. In the first 2 months of 2008, inflation accelerated to average 3.8%. For the full year, it is likely to average 3.4% (Figure 3.11.9), which would be just within the 3.5% upper limit of the Bank of Korea's inflation target band.

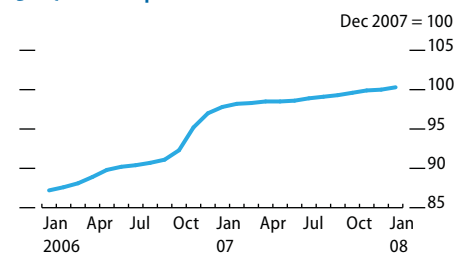
Containing inflation will be the focus of monetary policy, and the central bank could tighten further. Tightening so far has been partly to control liquidity, which has risen sharply since the second half of 2006. However, weaker global economic conditions will likely limit the extent of any rate increases. Fiscal policy is expected to remain broadly neutral in 2008. The proposal for large public construction projects involves using private capital for part of the funding. Import growth is projected to exceed export growth owing to the relatively strong domestic demand and the increased price of imported oil, leading to small current account deficits this year and next (Figure 3.11.10).

The main risk to the outlook is a deeper than expected downturn in the global economy, which would hit Korea's exports and manufacturing industries hard.

Development challenges

Falling fertility and rising life expectancy have given Korea a rapidly aging population. Foremost among the challenges this presents is the provision of adequate support for the elderly. On current demographic trends, the old-age dependency ratio (the ratio of the population aged 65 or more to the population aged 15–64) is projected to reach 65% by 2050 (Figure 3.11.11), making Korea one of the oldest countries in the

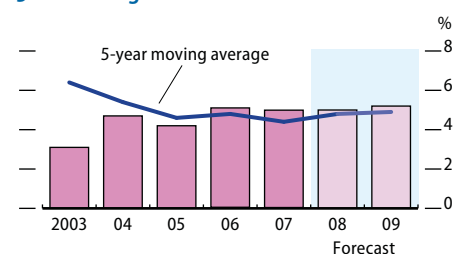
3.11.7 House price index



Source: Bank of Korea, Economics Statistics System, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 5 March 2008.

[Click here for figure data](#)

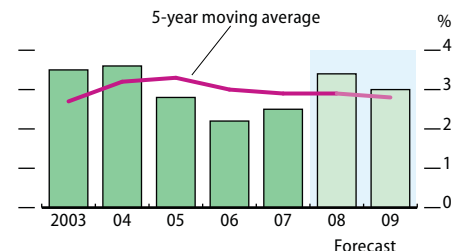
3.11.8 GDP growth



Sources: Bank of Korea, Economics Statistics System, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 27 March 2008; staff estimates.

[Click here for figure data](#)

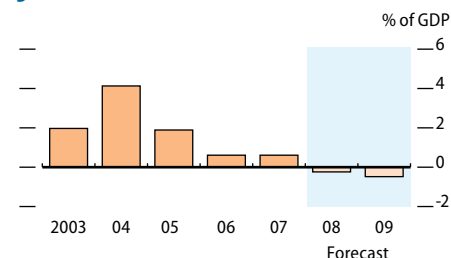
3.11.9 Inflation



Sources: Bank of Korea, Economics Statistics System, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 3 March 2008; staff estimates.

[Click here for figure data](#)

3.11.10 Current account balance



Sources: Bank of Korea, Economics Statistics System, available: http://ecos.bok.or.kr/EIndex_en.jsp, downloaded 1 February 2008; staff estimates.

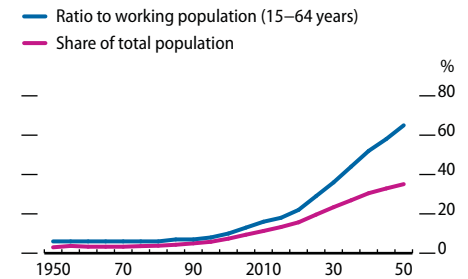
[Click here for figure data](#)

world. This has stark implications about the ability and willingness of the employed to support retirees in the future.

The centerpiece of the pension system—the National Pension Scheme (NPS)—was set up in 1988. It covers workers in the private sector, and equal contributions are made by employers and employees. NPS is wholly state managed and its funds are currently invested almost entirely in domestic financial assets. Demographic realities necessitated cuts in pension benefits and increases in contributions in both 1998 and 2007. Legislative passage of the second of these reforms took 3 years, illustrating the difficulty of reaching agreement on pension reform. Furthermore, while cutting benefits enhances sustainability of NPS, it compromises its ability to deliver adequate pensions.

Political leadership is needed to raise awareness of the urgency of pension reform. While adjustments of parameters such as contribution rates are a step in the right direction, they fail to address the issue of long-term solvency of NPS. More fundamental pension reform that directly strengthens sustainability and adequacy in the face of current demographic trends calls for bolder strategies. For example, in the long run, moving from the current partially funded pay-as-you-go system to a fully funded system would benefit both sustainability and adequacy.

3.11.11 Old-age indicators



Sources: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2006 Revision* and *World Urbanization Prospects: The 2005 Revision*, both available and downloaded from <http://esa.un.org/unpp>, 10 January 2008.

[Click here for figure data](#)

Mongolia

High international prices for export commodities and another mild winter induced further rapid economic growth in 2007. Inflation climbed, driven mainly by food prices, and is likely to be in double digits this year. Fast-paced economic growth is set to continue in the next couple of years, supported by an expansionary fiscal policy. The competing pressures to distribute gains from mining, and to control inflation and encourage investment elsewhere in the economy, will have to be reconciled.

Economic performance

Solid contributions from all sectors underpinned GDP growth of 9.9% in 2007, above the 2003–2006 average of 8.7%. Agriculture, which supports nearly half the population, had a strong year, expanding by 15.8% and contributing 3.7 percentage points to GDP growth (Figure 3.12.1). The livestock herd—mainly goats, sheep, and cattle—grew by 15% to about 40 million in response to higher cashmere prices, rising domestic demand for meat and other animal products, and good weather. However, this second straight year of large increase raises questions about the sustainability of livestock numbers at this level, particularly as goats, the most environmentally damaging of the three, now account for almost half the total number.

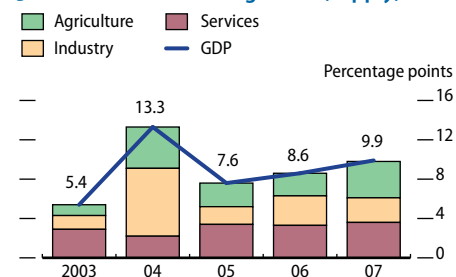
Services grew by nearly 9% and accounted for 3.6 percentage points of overall growth. Major contributors were construction, transport, trade, and tourism. Despite higher global prices for copper, gold, and coal and continued foreign investment in minerals, mining output rose only marginally, and copper concentrate by just 1.4%. Industry as a whole expanded by 7.1% and contributed 2.5 percentage points to growth.

Mining output was held back partly by uncertainty surrounding the terms of exploitation of some substantial mineral deposits. Government decisions are awaited, with regard among other things to the state's participation, particularly in the large Oyu Tolgoi copper and gold deposit to which rights are jointly owned by two foreign companies. The major issues center on the size and terms of the government stake in the deposit, the tax regime, and management. The uncertainty prompted some mining companies to reconsider investments for increasing production at existing mines and developing new resources.

A windfall tax imposed in 2006 on copper and gold exports beyond certain price thresholds has also damped expansion of mining. The value of recorded gold exports fell in 2007 despite substantially higher global prices, apparently a result of gold smuggling to evade the windfall tax. Nevertheless, mining continued to dominate exports last year, accounting for some two thirds of the total.

Robust economic growth and higher costs of imported food and oil

3.12.1 Contributions to growth (supply)



Source: Mongolian National Statistical Office.

[Click here for figure data](#)

drove a 41.3% jump in the nominal United States (US) dollar value of merchandise imports in 2007 compared with 2006. Mongolia imports almost 80% of its food, mainly from the People's Republic of China (PRC) and the Russian Federation. The value of food imports last year soared by 150%. The cost of oil imports also rose sharply and that of machinery imports, mainly for the mining industry, more than doubled.

On the export side, the value of copper concentrate shipments increased by 28%, nearly all of it coming from price rises, and the value of zinc and coal exports climbed steeply. However, exports of textiles and clothing fell, prolonging a decline caused by the end of global quotas in 2005. The growth rate of total exports at 22.5% was well below that of imports and the merchandise trade balance switched to a deficit of \$25 million. Inflows from grants and remittances kept the current account in surplus equivalent to 1.8% of GDP, although this was substantially lower than surpluses in the previous 3 years.

Inflation ramped up in 2007 to end the year at 15.1% (Figure 3.12.2). The year-average rate of 9.0% was above the average (8.0%) of the previous 5 years. The increase was mainly driven by higher prices of food, which has a 40% weight in the consumer price index; rapid monetary expansion and a near doubling of civil service salaries also played a part.

Prices of most imported foods rose. A spurt in the cost of imported grain and flour prompted the Government to exempt flour from value-added tax. The price of domestically produced meat, too, escalated sharply as demand continued to rise. Higher prices for imported fuel and transport costs further boosted prices. M2 money supply grew by 56.3%, well above the average rate of about 30% over recent years. Credit increased by about 70%, with more than 80% of total lending to the private sector.

A budget surplus of 2.2% of GDP reflected a large increase in revenues from the windfall tax on mining and from value-added tax collections, as well as an inability on the part of a capacity-constrained government to reach targets for capital expenditures. Even then, high levels of overall spending (approximately 40% of GDP) were maintained. Tax administration also appears to have improved. The 2008 budget is even more ambitious in terms of capital spending, but the capacity limitations remain.

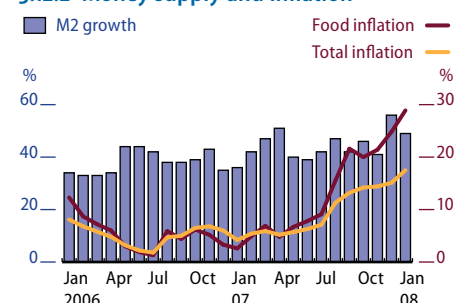
Actual inflows of foreign direct investment (FDI), mainly into mining, as well as remittances from workers abroad supported a 35.4% rise in international reserves to \$972 million, representing 24 weeks of imports (Figure 3.12.3). FDI increased by just over one third to \$500 million, some two thirds of it directed at mining. Significant FDI also went into banking and construction. Almost 70% of total FDI comes from the PRC.

The togrog depreciated by 0.4% against the dollar. The International Monetary Fund now classifies the exchange regime as a conventional peg rather than, as in the past, a float, even though the Government has made no express commitment to maintain parity against the dollar.

Economic prospects

The forecasts for 2008–2009 assume that prices will stay relatively high for the main export commodities, that the weather remains favorable for agriculture, and that economic growth in the PRC, Mongolia's main export market, slows but remains robust. The Government is expected

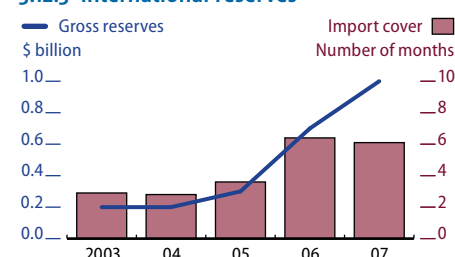
3.12.2 Money supply and inflation



Source: Bank of Mongolia, available: <http://www.mongolbank.mn>, downloaded 3 March 2008.

[Click here for figure data](#)

3.12.3 International reserves



Source: Bank of Mongolia.

[Click here for figure data](#)

3.12.1 Selected economic indicators

	2008	2009
GDP growth	9.5	9.0
Inflation	10.5	9.5
Current account balance (% of GDP)	2.0	2.0

Source: Staff estimates.

to maintain an expansionary fiscal stance while the revenue situation remains comfortable. A further assumption is that it reaches agreement on developing major mineral deposits, with the result that FDI inflows continue into mining. The financial sector, which has grown rapidly over the recent past, is expected to expand at a more stable rate as construction and rural borrowing revert to trend rates from recent spikes.

Taking these factors into account, GDP growth of 9.0–9.5% is projected for the forecast period (Figure 3.12.4). The current account surplus is seen increasing to 2.0% of GDP, on strong mineral exports and remittance inflows, and as recent spikes in the costs of imports dissipate.

Inflation pressures are likely to persist as the Government struggles to sterilize expected large capital inflows into mining and high export earnings resulting from the international commodity price boom. Additional public spending in advance of parliamentary elections in the middle of this year could add to these pressures.

Against this, the Government has negotiated agreements with exporters of petroleum products from the Russian Federation that should stabilize fuel prices. Moreover, government proposals to create reserves of petroleum products and grain (both imported primarily from the Russian Federation) could help smooth price volatility in these items. The Bank of Mongolia has adopted an inflation targeting policy, suggesting it will do more to drain liquidity (by selling central bank bills) and to introduce some measure of flexibility into the foreign exchange regime.

These factors are expected to lower inflation from the high end-2007 level, though the year-average rate is projected to remain elevated at 10.5% this year and 9.5% next year (Figure 3.12.5).

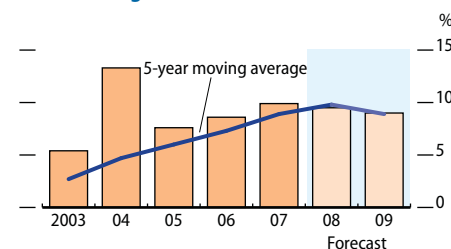
Development challenges

Balancing the pressures to distribute gains from mineral development with the need to control inflation and encourage investment in the wider economy will be a persistent challenge. Significant investment is required in social and physical infrastructure to help develop new sources of growth, given the narrow base of the economy. Diversification on the basis of price is limited by the country's geography and demographics—a small population spread over vast, often inaccessible areas, and a harsh climate. However, Mongolia can benefit from being a neighbor to two huge economies, from its mineral endowment, and—for tourism—from its natural beauty and unique rural lifestyle.

The potential to develop services, including logistics and auxiliary small manufacturing around mining, also offers an opportunity. Exploitation of this potential will require infrastructure that allows efficient transport, capital markets to channel resources to competitive enterprises, and a credible governance structure to maintain investor confidence.

At the same time, problems of urban development, such as worsening air pollution and overstretched urban services, require resolution if the country is to attract the necessary professionals from abroad that it needs to develop its potential. Damage to the natural resource base, such as toxic spills from mining and increasing desertification from overgrazing, poses serious problems not only through ruining the endowment for future generations but also through undermining economic growth.

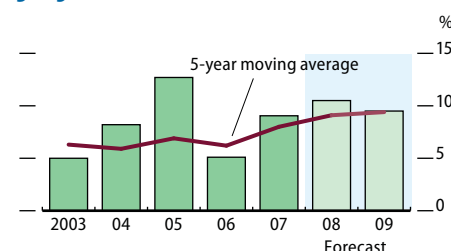
3.12.4 GDP growth



Sources: Mongolian National Statistical Office; staff estimates.

[Click here for figure data](#)

3.12.5 Inflation



Sources: Mongolian National Statistical Office; staff estimates.

[Click here for figure data](#)

Taipei, China

Growth accelerated in 2007, reflecting a recovery in domestic demand and continued strength in exports. Inflation quickened as global commodity prices rose. An expected slowdown in external demand will trim the expansion this year, although firm domestic demand is likely to support growth around the trend rate. The prospect of closer commercial ties with the People's Republic of China (PRC) is seen spurring growth in 2009.

Economic performance

Reflecting an improvement in domestic demand and strength in exports, GDP growth accelerated to 5.7% in 2007, 1 percentage point above the average for 2003–2006. Growth momentum was particularly strong in the second half of the year, supported by recovering private consumption and buoyant exports (Figure 3.13.1). For the year, net exports remained the primary demand-side driver. Merchandise exports, measured in nominal United States (US) dollars, decelerated to 10.1% from 12.9% in 2006. Although exports bound to the US fell by 0.9%, this was largely offset by strong demand from the PRC and other markets in Asia. Electrical machinery, chemicals, and basic metals led the growth of exports.

Import growth also moderated, to 8.2% from 11.0% a year earlier. Given that high global prices of food, oil, and raw materials lifted import prices relative to export prices, the growth of real imports was much more modest than for real exports. As a result, net exports expanded by 29.7% in 2007, contributing 3.7 percentage points to GDP growth.

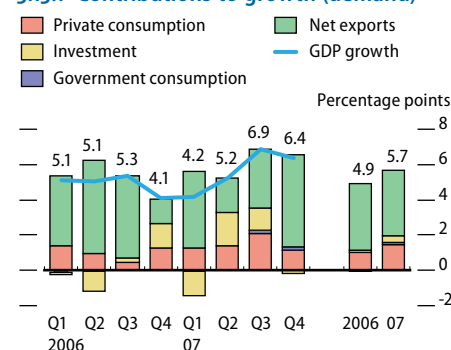
Private investment picked up to grow by 3.4%, largely thanks to a cyclical upturn in corporate spending on machinery and equipment that started in the third quarter of 2006. However, construction contracted by 0.4%. It was hit by two factors: first, concerns that a rapid rise in the price of houses might soon run out of steam; and second, soaring prices of building materials made construction investment more expensive.

The growth in total private investment was partly offset by a 3.9% decline in fiscal investment, which was dragged down by the authorities' efforts to rein in spending. Their encouragement of private participation in public projects has also contributed to a deceleration of public investment in recent years. Overall, total fixed investment rose by 2.4%, making a 0.5 percentage points contribution to GDP growth.

As the impact of a tightening in consumer credit, caused by the bursting of a credit-card bubble in late 2005, wore off, private consumption slowly recovered to grow by 2.6% in 2007. Employment rose and a buoyant stock market lent support to consumption growth.

Services grew by 4.3% and remained the main contributor to

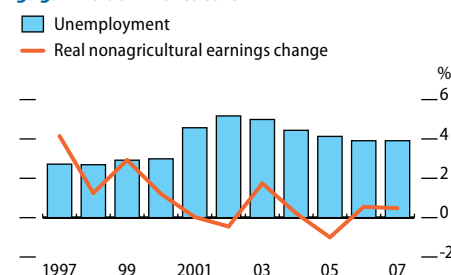
3.13.1 Contributions to growth (demand)



Source: Directorate General of Budget, Accounting and Statistics, available: <http://eng.dgbas.gov.tw>, downloaded 25 February 2008.

[Click here for figure data](#)

3.13.2 Labor indicators



Sources: CEIC Data Company Ltd., downloaded 17 March 2008; Directorate General of Budget, Accounting and Statistics, available: <http://eng.dgbas.gov.tw>, downloaded 7 February 2008.

[Click here for figure data](#)

GDP growth on the supply side, underpinned by the consumption recovery, expansion of foreign trade, and brisk financial market activity. Manufacturing put in its best performance in more than a decade. It expanded by 10.1%, led by electronics components, telecommunications products, and chemical materials. Construction growth moderated to 3.4% in 2007 because of the caution over the property market. Agricultural production, hit by a severe typhoon in the fourth quarter, contracted by 2.9%.

The lower farm production and increased pass-through of international commodity price increases pushed up inflation from 1.0% (year on year) in the first quarter of 2007 to 4.5% in the fourth. For the year as a whole, the consumer price index rose by an average 1.8%, compared with just 0.6% a year earlier. Excluding certain food and energy prices, core inflation rose to a decade-high 1.4%, suggesting some increase in domestic cost pressures. The pickup in economic growth bolstered the labor market: employment expanded by 1.8% and annual average unemployment remained at 3.9%. Average earnings of nonagricultural workers rose by 2.3%, slightly above the inflation rate (Figure 3.13.2 above).

Alongside a rising trade surplus, the current account surplus swelled to US\$31.7 billion in 2007, equivalent to 8.3% of GDP. Against this, the capital and financial account posted a record deficit of US\$39.0 billion owing to a sharp decline in portfolio capital inflow, as foreign investors sold shares in the local stock market during the US liquidity crunch (Figure 3.13.3). The balance of payments deficit contributed to weakness in the currency. Over 2007, the NT dollar depreciated on average by 0.9% against the US dollar (Figure 3.13.4), and its real effective exchange rate depreciated by 0.8%.

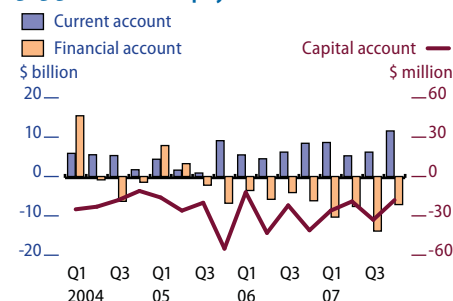
The monetary authorities, prompted by concerns over cost-push inflation and low real interest rates (they were negative in the fourth quarter), raised the benchmark discount rate in each quarter of 2007, by an aggregate 62.5 basis points to 3.375% at the end of the year. Given an abundance of loanable funds in the banking system, the cost of borrowing remained low. The base lending rate rose by 19.8 basis points to 4.31% over the year. The growth of broad money (M2) eased to average just 4.3% from 6.2% in 2006, largely reflecting the effects of net capital outflows and reduced public sector borrowing from domestic banks.

Solid economic growth and the authorities' fiscal consolidation effort strengthened the budget position. Tax revenues rose by 8.3%, driven by high corporate profits, the buoyant stock market, and implementation of an alternative minimum tax, which brings firms and individuals who had exemptions from income tax into the tax net. Revenue growth exceeded the pace of public spending, reining in the fiscal deficit to 0.2% of GDP.

Economic prospects

This economy is heavily dependent on external trade. The expected slowdown in the US and other major industrial countries and the impact on Asian economies is likely to damp demand for its exports. Consequently, economic growth is expected to decelerate to 4.2% in 2008 (Figure 3.13.5). Momentum is projected to pick up again in 2009, with growth of 5.6% that year, on the assumptions that domestic business

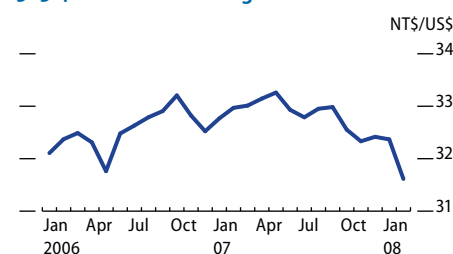
3.13.3 Balance-of-payments indicators



Sources: Data downloaded from <http://www.cbc.gov.tw/>, 13 March 2008; CEIC Data Company Ltd., downloaded 17 March 2008.

[Click here for figure data](#)

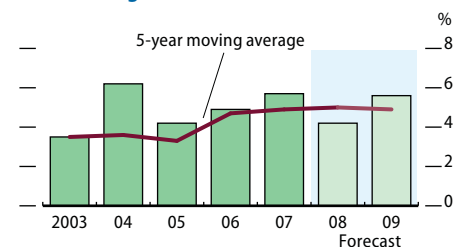
3.13.4 Nominal exchange rate



Source: Data downloaded from <http://www.cbc.gov.tw/>, 15 March 2008.

[Click here for figure data](#)

3.13.5 GDP growth



Sources: Directorate General of Budget, Accounting and Statistics, available: <http://eng.dgbas.gov.tw/>, downloaded 25 February 2008; staff estimates.

[Click here for figure data](#)

3.13.1 Selected economic indicators

	2008	2009
GDP growth	4.2	5.6
Inflation	2.3	1.6
Current account balance (% of GDP)	7.3	6.6

Source: Staff estimates.

sentiment receives a lift from a likely greater emphasis on growth and from closer commercial ties with the PRC, once the new administration takes office in May this year; also that the external environment turns more favorable with the global downturn bottoming late this year.

Resilient domestic demand will cushion the economy from the global economic slowdown. Private consumption is expected to continue to recover this year, against the background of a firm labor market, and grow by 3%. In regard to investment, businesses are likely to be cautious amid moderating external demand and volatile financial markets. Still, there are projects in the pipeline to expand production of liquid crystal display panels that should support growth in manufacturing investment. The buoyant property market is likely to ease because of higher interest rates and concerns over possible oversupply in some areas, acting as a drag on house construction. On the other hand, a push by the authorities for urban regeneration will support some types of construction. Overall, investment is projected to grow by 2.5% this year, similar to 2007.

Export growth is expected to slow by 4 percentage points to 6.0% this year. Import growth, driven by higher international commodity prices, is forecast to outpace export growth, rising by 6.5%. As a result, the current account surplus is forecast to decline to 7.3% of GDP. Taking the price effects into account, the contribution of net exports to GDP growth is forecast to fall by about 2 percentage points, to 1.6 percentage points.

A lag in the pass-through of rises in wholesale prices in 2007 and low base effects in the consumer price index will cause inflation to edge up to 2.3% in 2008. Currency appreciation will help to limit imported inflation. The NT dollar appreciated by 5.6% against the US dollar between January and mid-March 2008, partly a result of slower portfolio capital outflows, and is expected to remain firm. Given that forecast GDP growth is broadly in line with trend potential, the monetary authorities are expected to continue to raise interest rates at a modest pace in 2008 to contain inflation and bring interest rates to a neutral level.

The new administration is expected to ease controls somewhat on economic ties with the PRC, primarily in the areas of investment, trade, tourism, and transportation. Such changes would likely stimulate growth in these services, in part by reducing costs, and raise business and consumer sentiment. Extra public investment in infrastructure is also possible in the medium term. Going into 2009, therefore, firmer domestic demand, coupled with some recovery in external demand, is projected to support a robust economic expansion.

The main external risk is a sharper than expected slump in the US. On the domestic front, there is a risk that implementing the forecast improved links with the PRC will take longer than expected.

3.13.1 Development challenges

The most immediate challenge is to improve the policy environment to facilitate closer cross-strait economic integration. The PRC already accounts for 40% of Taipei,China's exports and 70% of its outbound investment. However, as there are no direct cross-strait transportation links, passengers and cargos transit Hong Kong, China or Macau, China. This raises business costs and hurts development of vertical integration of production and just-in-time supply lines. Direct transportation links with the PRC would facilitate the growth of the island as a research and development, logistics, and financial center.

Similarly, the authorities in Taipei,China prohibit banks based there from setting up branches in the PRC; these banks have only recently been allowed to invest in PRC banks. Limits on investment in PRC companies have led some firms to delist from the local stock exchange and pursue an overseas listing. A concrete policy framework toward broad cross-strait economic integration could help reduce the operating costs of local firms and facilitate their participation in regional and global production networks.

Longer term, industrial diversification is important. The economy relies heavily on electronics, the performance of which hinges on demand conditions in the US and on costs in the PRC, where much electronics production has been relocated. With production costs rising in the PRC and other lower-cost countries entering the industry, producers in Taipei,China are being squeezed.

The economy needs to diversify into high-end manufacturing and into services. Given the relatively small scale of the economy, progress in upgrading industry and services is likely to require closer ties with other economies.



South Asia

Islamic Republic of Afghanistan

Bangladesh

Bhutan

India

Maldives

Nepal

Pakistan

Sri Lanka

Islamic Republic of Afghanistan

Against a background of worsening security and a thriving opium economy, nondrug GDP growth rebounded strongly on postdrought recovery in agricultural production. Inflation moved into double digits, driven by higher prices for imported fuel and food. The Government continues to face severe human and institutional constraints as well as weak governance. The obstacles ahead remain daunting—strengthening security, reducing the opium economy, improving policy management and aid effectiveness, rehabilitating basic infrastructure (especially power), and fostering the private sector.

Economic performance

In FY2007 (ended 21 March 2008), GDP growth in the licit economy is estimated to have reached 13.9%, owing to a strong bounceback in agricultural production (from the prior-year's drought) (Figure 3.14.1). Industry and services remained dynamic, with estimated growth of 13.3% and 12.4%, respectively. Construction, up by 20.0%, was industry's main driver.

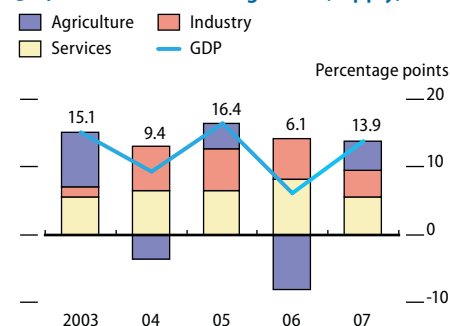
Because of increases in the price of imported fuel and basic commodities (mainly food), average inflation is estimated at 9.8% in FY2007, compared with 5.1% in FY2006, with the year-on-year figure reaching 17.0% in December 2007 (Figure 3.14.2).

A key indicator of fiscal sustainability is an improvement in the ratio of domestic revenues to the core operating budget, and the Government had already increased that ratio from 45.9% in FY2003 to 66.3% in FY2006; estimates put it at about 67% in FY2007. Although almost quadrupling in recent years, domestic revenues as a share of GDP (Figure 3.14.3) are still at the low end for developing countries. The apparent lack of any big improvement in the performance of domestic revenues in FY2007 suggests that the goal of them fully financing operating expenditures by FY2013 may remain elusive.

The external budget, which is directly executed by donors, continued to account for nearly half of total public expenditures in FY2007. Currently, more than two thirds of foreign assistance does not go through the treasury account. The large share of international assistance in the external budget remains a serious fiscal policy constraint, hampering expenditure prioritization, government development management, and overall aid effectiveness. Key fiscal policy challenges are the integration of the government and external budgets into a single core budget and further improvement in the absorptive capacity of line ministries. The external budget is projected to increase by about three quarters in FY2008 relative to FY2007 (Figure 3.14.4).

Monetary policy continues to focus on controlling inflation while

3.14.1 Contributions to growth (supply)

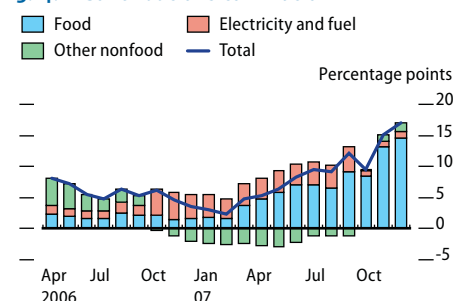


Note: Data for 2007 are estimated.

Source: Central Statistics Office data (unpublished).

[Click here for figure data](#)

3.14.2 Contributions to inflation



Source: Central Statistics Office, available at: www.cso-af.net, downloaded 22 February 2008.

[Click here for figure data](#)

seeking exchange rate stability. In FY2007, the nominal exchange rate remained stable at some AF50/\$1 (Figure 3.14.5), as the market continued to see significant inflows of foreign exchange from external assistance (as well as illicit exports). While there has been an appreciation in the real exchange rate since the introduction of the afghani, it appears not to have significantly affected the country's export competitiveness. However, a strong local currency encourages imports, thus slowing manufacturing and industrial growth as well as associated employment.

In November 2007, the Government awarded rights to work the Aynak copper mine to the Metallurgical Group, a state-owned enterprise in the People's Republic of China (PRC). The company plans to invest about \$3 billion in the project; related infrastructure development and operations could start in about 6 years. It is estimated that copper deposits at Aynak are at least 13 million tons, making it the world's largest undeveloped copper resource. Importantly, the Aynak deal represents the most important foreign direct investment (FDI) project to be signed to date, and could become an important source of income for the country. Security concerns surrounding such a large project cannot be dismissed, though.

The current account deficit, excluding grants, is estimated to have grown to 72.6% of GDP in FY2007, reflecting a trade deficit widened by higher than expected imports, which were associated with donor-financed activities outside the core budget (including both security and development projects). Including grants, the current account balance is expected to have recorded a deficit of 1.4% of GDP, financed by FDI and concessional loan disbursements. Together with support from the International Monetary Fund and debt relief, these inflows allowed for a further strengthening of gross international reserves to over \$2 billion, or about 5 months of official imports.

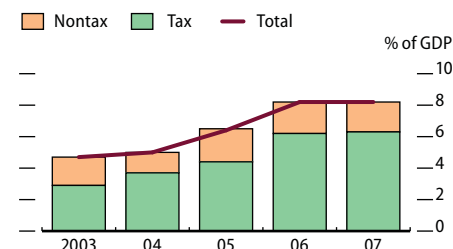
Despite counter-narcotics efforts, opium production may have increased by some one third in 2007, according to the United Nations Office on Drugs and Crime, to account for more than 90% of global supply. Efforts to reduce poppy cultivation varied markedly by region, reflecting security issues, attitudes of local authorities toward eradication, and the profitability of other crops. For farmers, the potential earnings from poppy cultivation remain far higher than for any other crop.

The budget execution rate climbed from only 31% in FY2004 to around 55% in FY2007, though the Government's implementation capacity remained extremely weak. After the early years' focus on emergency rehabilitation, starting in FY2005 national budgets were aligned to support the Government's medium-term objectives. The FY2008 budget will, for the first time, reflect the greater detail of the Interim Afghanistan National Development Strategy, expected to be completed by April 2008.

In July 2007, the International Monetary Fund and the World Bank determined that Afghanistan could be eligible for debt relief under the Heavily Indebted Poor Countries (HIPC) Initiative provided that it successfully carried out an economic program under a Poverty Reduction and Growth Facility arrangement.

Estimates show that unemployment in 2007 was 40% of the labor force. This high level is due to the inability of agriculture and the still-limited formal economy to fully absorb the rapidly expanding supply of labor. The recognition that decent and productive employment is

3.14.3 Domestic revenues

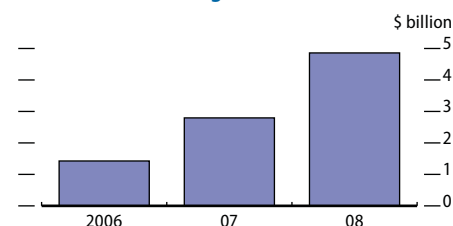


Note: Data for 2007 are estimated.

Sources: International Monetary Fund, *Country Report* Nos. 06/251, 08/72, and 08/76, available: www.imf.org, all downloaded 3 March 2008.

[Click here for figure data](#)

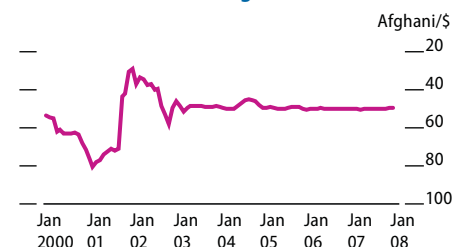
3.14.4 External budget



Source: Ministry of Finance.

[Click here for figure data](#)

3.14.5 Nominal exchange rate



Source: International Monetary Fund, *International Financial Statistics* online, downloaded 17 March 2008.

[Click here for figure data](#)

crucial to further development—as well as to security—has led to greater recognition of the importance of a pro-employment development strategy.

Economic prospects

Recent growth in the licit economy has derived largely from externally financed development efforts. Performance over the medium term will depend heavily on government success in combating corruption, overcoming infrastructure bottlenecks, and implementing further structural reforms, all of which are needed to stimulate private sector investment. Continued high growth rates will be attainable only if structural reforms are implemented decisively and public investment is targeted at key areas of infrastructure, notably transport and electricity.

Further growth in services and construction is expected, mainly reflecting donor support. On the assumption that such largesse is maintained and that no drought or other factors affect agricultural production, GDP growth is forecast to be around 9.0% in FY2008 and FY2009.

Average inflation is seen staying high in FY2008 at 10.2%, reflecting rising transportation costs, price increases in basic commodities, and the pass-through effects of higher energy prices. It is projected to moderate to 7.2% in FY2009 (Figure 3.14.6), on decelerating global price rises and steady growth in agricultural production.

The external position is expected to facilitate forecast growth and development objectives over the medium term, on the back of sustained large inflows of official transfers. Official loan development assistance and FDI, as well as interim debt relief through the HIPC Initiative, will finance the small deficits in the current account (once official transfers are included) (Figure 3.14.7).

Development challenges

After 6 years of combat against the Taliban and Al-Qaeda, insecurity is showing no signs of moving off the agenda of either the Government or the international community. The year 2007, by one estimate, was the deadliest since the defeat of the Taliban in 2001, with over 6,500 deaths, including 222 among foreign troops; 116 suicide bombings were recorded. The number of attacks was at least 20% higher than in 2006.

Security apart, Afghanistan faces huge challenges in achieving sustainable economic growth, including the prevalence of opium activity, a narrow formal economy, low government implementation capacity, and weak governance.

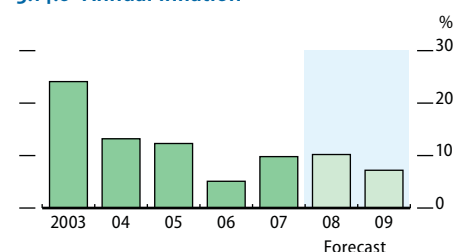
Private sector growth is needed for any economic resurgence, yet this is hampered by intermittent power supplies, poor land titling, corruption, and limited access to finance. These structural issues will take years to address. A possible short-term solution is to scale up the investment in industrial parks on an enclave basis. Development management and aid effectiveness also need to be strengthened.

3.14.1 Selected economic indicators

	2008	2009
GDP growth	9.0	9.0
Inflation	10.2	7.2
Current account balance (% of GDP)	-0.5	-1.2

Source: Staff estimates.

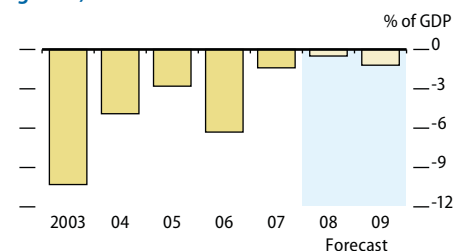
3.14.6 Annual inflation



Sources: International Monetary Fund, Country Report Nos. 08/72 and 08/76, available: www.imf.org; both downloaded 3 March 2008.

[Click here for figure data](#)

3.14.7 Current account balance (including grants)



Sources: International Monetary Fund, Country Report Nos. 08/72 and 08/76, available: www.imf.org; both downloaded 3 March 2008.

[Click here for figure data](#)

Bangladesh

Natural disasters have worsened growth and inflation indicators, but the uncertainty created among investors by the caretaker Government's anticorruption drive has started to ease. In macroeconomic management, the major goal is to curb inflation, which has been lifted by higher international prices and a domestic foodgrain shortfall. Sustaining higher growth and reducing poverty require, among other elements, large investments in physical infrastructure, especially power and transport.

Economic performance

Still robust, GDP growth in FY2007 (ended June 2007) decelerated to 6.5%, largely reflecting agriculture's moderation from the postflood outturn of the previous year (Figure 3.15.1). It was underpinned by steady expansion in manufacturing and continued buoyancy in services, on the base of rising domestic and external demand. Rapid growth in manufacturing and foreign trade aided services.

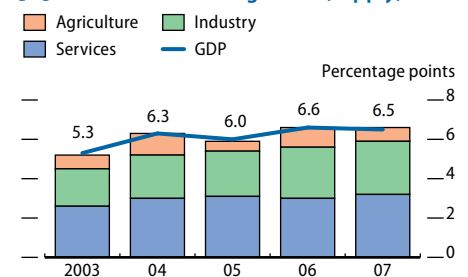
On the demand side, private consumption was the main driver of growth, bolstered by strong remittance inflows. At 24.3% of GDP, investment during FY2007 was marginally lower than in the immediate past, mainly due to a decline in public investment following a downsizing of the annual development program. Net exports of goods and services remained negative.

Inflation averaged 7.2% in FY2007 owing to rises in both food and nonfood prices (Figure 3.15.2). Domestic demand pressures on the back of higher incomes and strong monetary and credit growth were among the main causes. After June, however, escalating international commodity prices, especially for food, were dominant, taking inflation to 11.4% (year on year) in January 2008.

Reflecting the uncertainty created by the January 2007 declaration of a state of emergency and installation of a new caretaker Government, growth in monetary aggregates crawled downward in the second half of FY2007. Year-on-year growth in broad money fell from 22.3% in December 2006 to 17.0% in June 2007 (Figure 3.15.3), though still above Bangladesh Bank's target of 14.7%. Growth in credit to the private sector followed a similar trajectory, from 19.4% to 15.1%, and while this tended to relieve demand-side pressures, it led to some problems on the supply side, including curtailed imports and shortages of some products.

The central bank made no changes to policy rates and reserve requirements in FY2007. The weighted average yield of 28-day Treasury bills and the reverse repo rates for 1–2 day maturity remained unchanged. Nor was there much movement in weighted average lending rates, which stood at 12.8% at end-June 2007. The weighted average deposit rate of 6.9%

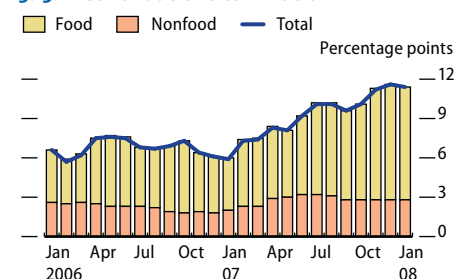
3.15.1 Contributions to growth (supply)



Source: Bangladesh Bureau of Statistics, *National Accounts Statistics*, June 2007.

[Click here for figure data](#)

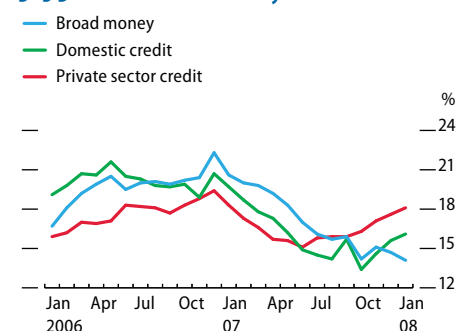
3.15.2 Contributions to inflation



Source: Bangladesh Bureau of Statistics.

[Click here for figure data](#)

3.15.3 Growth of monetary indicators



Source: Bangladesh Bank, *Economic Trends*, available: www.bangladesh-bank.org, downloaded 17 March 2008.

[Click here for figure data](#)

was negative in real terms while the interest spread of the banking system remained high at 5.9% reflecting banking's high nonperforming loans, inefficiencies, and market segmentation.

The downward pressure on the nominal exchange rate of the taka to the United States (US) dollar has subsided since April 2006 due to a strengthening capital account and a buildup of foreign exchange reserves. In fact, the taka appreciated by 1.3% against the dollar in the year to end-June 2007.

In FY2007, revenue collection slipped to 10.3% of GDP from 10.7% in the previous year (Figure 3.15.4). Despite an increase in current expenditures, total spending was contained by a reduction in outlays for the annual development program (which undermines public investment though). As a result, the fiscal deficit stayed at 3.2% of GDP.

In recent years, the low tax-to-GDP ratio has shown little improvement, despite efforts to upgrade tax administration, including the introduction of a large taxpayers' unit. This lack of buoyancy is attributed to fundamental structural problems, including extensive tax incentives and exemptions. Comprehensive reform of the system is required to lift the tax ratio meaningfully.

Exports grew by 15.8%, driven by robust performance in garments. Woven garments and knitwear still dominated, with a 75.6% share in total exports. Imports grew by 16.6%. The rise in the trade deficit was outweighed by a surge in workers' remittances of 24.5%, leading to a surplus of \$952 million or 1.4% of GDP (Figure 3.15.5). A large surplus in the capital and financial accounts (including a sizable negative errors and omissions item) further raised the surplus in the overall balance to \$1.5 billion. This boosted foreign exchange reserves to \$5.1 billion at end-June 2007 (Figure 3.15.6).

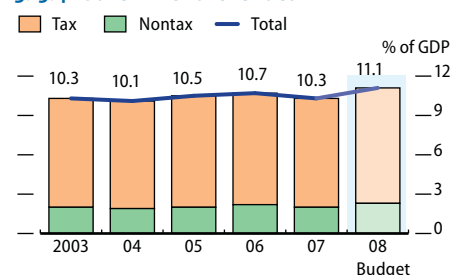
Based on a recent joint World Bank–International Monetary Fund debt-sustainability analysis, the risk of external debt distress is low, and that of total public debt distress (i.e., domestic plus external) is moderate. Total central government debt in FY2007 was 45.9% of GDP, a 3.1 percentage point decline from FY2003 owing to a 3.6 percentage point fall in external debt. Because of continued strong performance in exports and workers' remittances, the external debt service ratio amounted to just 3.6% of foreign exchange earnings in FY2007.

Even though banks' performance has improved a little in recent years, with strengthened regulation and supervision, their gross nonperforming loans remained high at 13.2% at end-December 2007. Restructuring and divestiture of four nationalized commercial banks has proceeded slowly, and the sale of Rupali Bank (one of the four) has been canceled. The remaining three have been transformed into public limited companies and their financial performance has improved.

Debt management was separated from monetary management in 2007, enabling the central bank to conduct open-market operations purely to manage monetary aggregates without considering government financing needs. An act was passed to improve the efficiency of the banking system; it includes provision for raising banks' minimum capital requirement to Tk2 billion.

The Dhaka Stock Exchange surged by 64% in the year to end-February 2008 (Figure 3.15.7), led by banking, power, and pharmaceutical

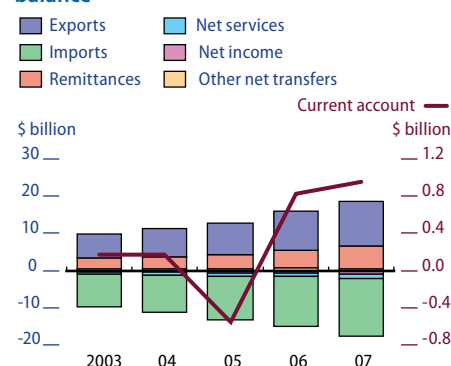
3.15.4 Government revenues



Sources: Ministry of Finance, *Budget in Brief 2007–08*, available: www.mof.gov.bd; International Monetary Fund, *Bangladesh Country Report No. 07/234*, available: www.imf.org; World Bank, *Bangladesh PRSP Forum Economic Update* November 2005, available: www.worldbank.org; all downloaded 5 February 2008.

[Click here for figure data](#)

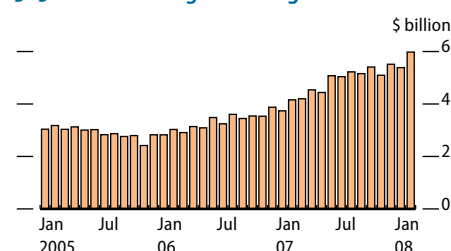
3.15.5 Components of the current account balance



Source: Bangladesh Bank, *Annual Report*, available: www.bangladesh-bank.org, downloaded 22 February 2008.

[Click here for figure data](#)

3.15.6 Gross foreign exchange reserves



Source: Bangladesh Bank, *Economic Data*, available: www.bangladesh-bank.org, downloaded 17 March 2008.

[Click here for figure data](#)

shares. In the same period market capitalization more than doubled to Tk648.3 billion. While greater activity is welcome, strong demand in the face of a limited supply of stocks may push prices too high. Deficiency in financial disclosure, weak corporate governance, and lack of investor confidence in fixed-income securities are deterring the growth of a vibrant capital market.

Economic prospects

The forecasts for FY2008 and FY2009 rest on several country-specific assumptions. The most important is that the caretaker Government will take measures to further boost business confidence. It is assumed that substantial external assistance will be available to cushion the flood and cyclone effects on economic growth, inflation, and external and domestic balances (Box 3.15.1).

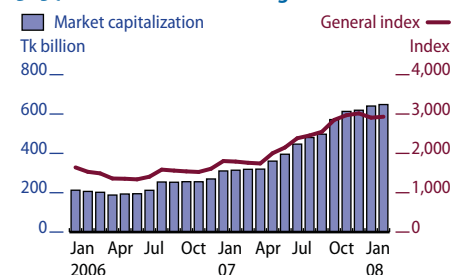
It is also assumed that the authorities will pursue well-coordinated fiscal, monetary, and exchange rate policies with a focus on curbing inflation and raising revenues. A final assumption is that the Government will at least partly rationalize fuel prices.

Based on the above assumptions, GDP growth is forecast to decline slightly to 6.0% in FY2008. The deceleration is attributed to the erosion of business confidence and the effects of the natural disasters. GDP growth in FY2009 is forecast to improve to 6.5% due to strengthening in external and domestic demand and, assuming normal weather, some recovery in agriculture. Strong remittance inflows are expected to continue to buoy consumer spending.

The caretaker Government (appointed in January 2007) has generally enjoyed widespread public support for its anticorruption campaign, measures for strengthening due electoral process, and reinvigorating stalled economic reforms, but the extensive campaign has caused some fear and uncertainty within the business and investor community. The Government has recognized the problem and is undertaking several measures, among others to safeguard from investigation those firms that follow “better practices.” A Better Business forum was set up to facilitate systematic feedback from the private sector on major issues affecting its development. It also set up a commission to streamline the regulatory and legal framework that governs business conduct. This has started to lift business confidence.

Industrial expansion in the 2 forecast years will depend heavily on a strengthening of export-oriented manufacturing and of business confidence. Growth in production and exports of garments and knitwear, the industrial mainstays, came in weak in the first 7 months of FY2008, with exports growing by only 9.9%, or well below the 21.2% gain for the year-earlier period (Figure 3.15.8). A combination of factors was responsible: very weak demand from the US, some buyers shifting to other countries because labor turmoil in Bangladesh disrupted their shipments in FY2006, and higher raw materials import costs. The price increases were especially important for woven garments, which (unlike knitwear) have few domestic backward linkages. Such increases not only raise costs but also make it harder for woven garments to meet domestic content requirements to qualify for low tariff rates in importing countries

3.15.7 Dhaka Stock Exchange indicators



Source: CEIC Data Company Ltd., downloaded 10 March 2008.

[Click here for figure data](#)

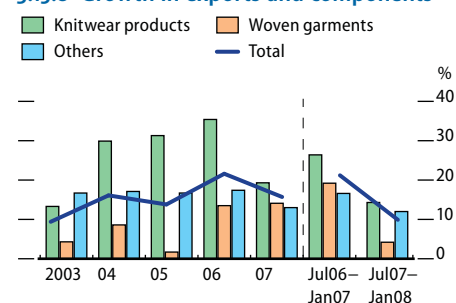
3.15.1 Natural disasters

In the span of a few months in the first half of FY2008, two devastating floods and a cyclone, as well as a tidal wave, hit the country. The combined loss is estimated at \$2.8 billion, or equal to about 4% of GDP.

The disasters heavily disrupted agriculture by affecting crops, livestock, poultry, and fish farms. The estimate of *aman* rice production (harvested in November–January) is for a crop of 9.6 million tons, 1.2 millions tons lower than the preceding year. The effect of this on agricultural growth, as well food availability and cost, will be substantial unless the loss is offset by a bumper *boro* crop (harvested in April–May).

The Government has striven to boost *boro* rice production by ensuring adequate supplies of agricultural inputs such as credit, diesel, fertilizer, and seeds to farmers. It has also tried to protect the poultry sector, which has been hit by a widespread outbreak of avian influenza.

3.15.8 Growth in exports and components



Source: Bangladesh Export Promotion Bureau.

[Click here for figure data](#)

under the Generalized System of Preferences. Woven garments have shown modest growth in the first 7 months of FY2008.

Though the garment subsector's order books are reported to be full for the remainder of the fiscal year, the lost ground cannot be fully recovered and this will be a drag on industry sector growth for the year. However, large expenditures for rehabilitation will boost construction output and be partly offsetting. Nevertheless, industry growth in FY2008 will likely slow to 8.7%. Agricultural growth, for its part, is likely to fall to 2.4% this fiscal year.

A continuation of strong remittance-driven consumption expenditure as well as a revival in bank advances to importers and the transport, communication, and trade subsectors indicate that services will continue to show strong growth at just over 6%, though somewhat below the rate of FY2007.

In FY2008, inflation is projected to rise to 9.0% before moderating to 8.0% in FY2009 (Figure 3.15.9). It has trended up so far in FY2008, to a 12-month average of 9.6% in January 2008 with food inflation rising to 11.1% and nonfood inflation to 7.3%. Higher international commodity prices, especially for foodgrains and oil, the domestic foodgrain shortfall, as well as the lagged effects of higher than programmed monetary expansion are pushing inflation higher. The Government has tackled the shortcomings of domestic supply by, for example, cutting import duty on food items, raising foodgrain imports, and launching an extensive flood and cyclone recovery program for crop production. Their impact should be felt in the latter part of FY2008. It has also widened social safety net programs.

The monetary policy statement (MPS) announced by the Bangladesh Bank in January this year projects inflation at 8.0–8.2% in FY2008 and stressed that rising inflation is attributed more to supply constraints than to significant demand pressures because banks continue to hold substantial excess liquidity. The MPS underscores the need for stimulating economic activity by encouraging adequate credit flows to all productive sectors including imports, especially for recouping the losses caused by the natural disasters.

Strong growth in overseas workers' remittances continues to provide a cushion to the external balance. Despite a higher trade deficit, the current account balance is projected to show a surplus of 0.7% of GDP in FY2008 and 1.0% of GDP in FY2009 (Figure 3.15.10).

Export growth during the first 7 months of FY2008 was only 9.9%. With recent strengthening and a better outlook for garment exports, growth in total exports is projected to reach 12.0% in FY2008—still lower than the rate of the preceding year. Imports in the first half of FY2008 rose by 15.9%. Higher import prices for foodgrains and fuel are boosting import growth, which is projected at 20.0% for the full year.

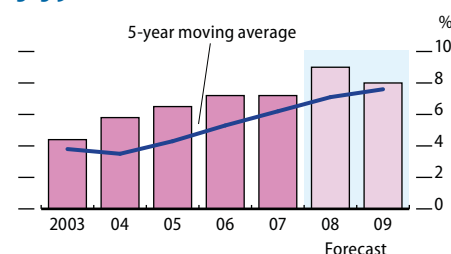
Data in the first half of FY2008 are consistent with the projected annual outcome. Despite a surge in the trade deficit, a sharp rise in current transfers, particularly workers' remittances, resulted in a surplus of \$287 million in the current account. Higher net foreign aid helped strengthen the overall balance-of-payments surplus and official foreign exchange reserves increased by \$437 million to \$5.5 billion at end-

3.15.1 Selected economic indicators

	2008	2009
GDP growth	6.0	6.5
Inflation	9.0	8.0
Current account balance (% of GDP)	0.7	1.0

Source: Staff estimates.

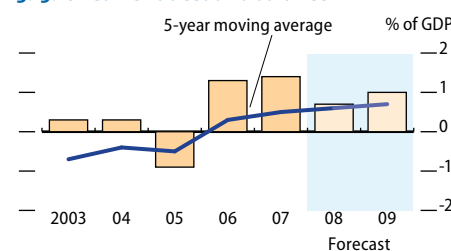
3.15.9 Inflation



Sources: Bangladesh Bank, *Economic Trends*, available: www.bangladesh-bank.org, downloaded 17 March 2008; staff estimates.

[Click here for figure data](#)

3.15.10 Current account balance



Sources: Bangladesh Bank, *Economic Trends*, available: www.bangladesh-bank.org, downloaded 17 March 2008; staff estimates.

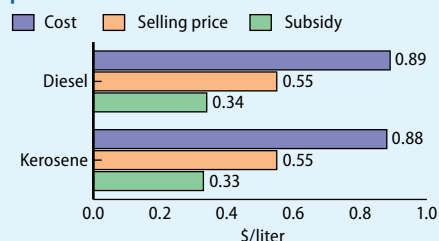
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3.15.2 Administered prices

Administered prices of fuel and fertilizer are a substantial fiscal and quasi-fiscal cost to the Government. In the budget for FY2008, it has assumed liabilities of Bangladesh Petroleum Corporation (BPC) amounting to \$1.1 billion and allocated the same amount in the budget as non-cashable bonds exchanged with BPC's creditor banks. In February 2008, BPC's current liabilities to domestic and international banks were estimated at about \$1.3 billion. If BPC fails to meet these obligations, the Government is liable for them.

In April 2007, the Government raised prices by about 21% for diesel and kerosene, and about 16% for premium and regular gasoline. Even after this adjustment, the implicit subsidy for diesel and kerosene remained high: using the average domestic and international prices of the two products for January 2008, it is estimated at \$1.2 billion, or 1.6% of GDP in FY2008. The implicit subsidy for diesel is \$0.34 a liter and that for kerosene \$0.33 a liter (Box figure 1).

1 Bangladesh Petroleum Corporation fuel price breakdown



Note: Based on average fuel prices in the international market as of January 2008.

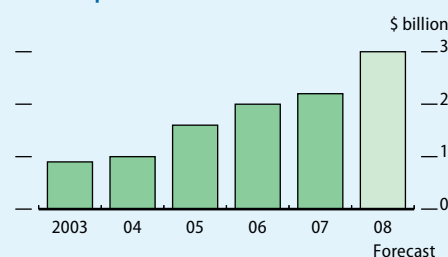
Sources: Bangladesh Petroleum Corporation; Ministry of Energy and Mineral Resources.

[Click here for figure data](#)

The Government has attempted to reduce the oil import bill by, among other steps, encouraging vehicles to use locally available compressed natural gas. The number of vehicles using this fuel rose to 123,573 by 30 November

2007. Consumption of oil marginally declined to 3.6 million tons in FY2007 from 3.8 million tons a year earlier. The oil import bill is projected to rise by 36% in FY2008 (Box figure 2).

2 Oil import bill



Sources: Bangladesh Bank, *Economic Trends*, available: www.bangladesh-bank.org, downloaded 5 February 2008; staff estimates.

[Click here for figure data](#)

The fertilizer subsidy is also inducing fiscal pressure due to the sharp rise in international urea prices. The Government is selling urea at \$77 a ton compared with its import cost of \$370 a ton, implying a subsidy in FY2008 estimated at \$400 million, as against \$172 million in the preceding year.

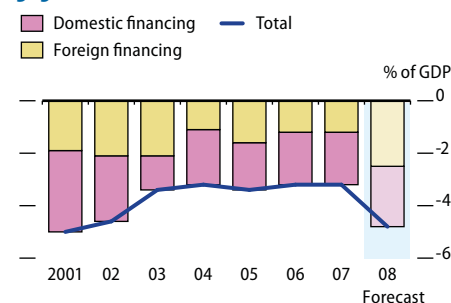
Continuing these high subsidies will undermine the domestic and external balances, resulting in reduced expenditures on social and physical infrastructure, thus markedly curtailing long-term growth. Funding subsidies through bank borrowing is much more inflationary than passing on international market price increases to domestic consumers. The hardships of the poor arising from any withdrawal of subsidies need to be carefully assessed against the likely macroeconomic imbalances of continuing subsidies. If the subsidies are scrapped, targeting mechanisms are needed, but in practice these are difficult to implement. To offset the impact of price adjustments on farmers and the poor, straight cash transfers through social safety net programs from the budget is often a better method.

December 2007 and, lifted by further foreign aid, to \$6.0 billion at end-February 2008.

Government revenues were highly buoyant, rising by 25.9% in July–January FY2008 compared with the same period of FY2007. The caretaker Government's drive to raise coverage of taxpayers and bringing undisclosed income under the tax net were important factors in this. But spending prompted by the floods and cyclone, and a rise in subsidies (Box 3.15.2) following the increases in oil and fertilizer prices in international markets is amplifying spending and fiscal pressures. For FY2008 the budget deficit is likely to be pushed up to 4.8% of GDP (Figure 3.15.11).

The economic outlook faces several downside risks that could derail

3.15.11 Fiscal balance



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

projections. The main risk is political developments in the leadup to the general elections scheduled to be held by end-2008, and their outcome. Growing infrastructure constraints, including worsening power shortages, could deter investment and crimp growth. The expiry of the European Union and United States safeguard quotas on the PRC at the end of 2007 and 2008, and growing weakness in the United States economy, pose significant risks for sustaining rapid growth in the country's garments industry. In macroeconomic management, the major risk is rapidly growing inflation: failure to rein it in could seriously undermine macroeconomic and political stability. The perennial vulnerability to natural disasters also presents a risk.

Development challenges

Still a poor country with 40% of the population below the poverty line, and per capita GDP of only \$482 in FY2007, Bangladesh needs productive employment for a labor force growing by 1.5 million a year. GDP growth must be raised to 7–8% for faster poverty reduction and job creation. Moreover, climate change increasingly looms as a major development challenge (Box 3.15.3).

Greater investment is required, especially in power and transport. Power needs faster progress in structural reforms as well. In FY2007, maximum served generation was only 3,717 megawatts (MW) as against peak demand of 4,500 MW, resulting in up to 1,212 MW of load shedding on 364 days. The Government estimates that \$6.4 billion of investment in generation and transmission will be required by 2015.

Recent reforms at Chittagong port have improved efficiency by 30% and cut costs by 40%, yet there is still much slack. The port needs to continue contracting out operations and management to the private sector, including those of the new mooring container terminal.

The country remains an underperformer in foreign direct investment (FDI). In FY2007, FDI inflows amounted to only \$760 million. The authorities have yet to decide on several large FDI proposals amounting to \$11 billion in important sectors, including coal mining, power, steel, fertilizer, tourism, and petrochemicals. Formulation of an appropriate coal policy is especially important, so as to expedite decisions on some of the other proposals. Yet long delays in obtaining decisions is likely to drive investors away, further dimming FDI prospects.

Corruption, too, holds back growth, and has been the most telling indicator of poor governance in Bangladesh for a long time. The caretaker Government has declared, and showed political willingness, to fight corruption and to institute systemic reforms. It reconstituted the Anti-corruption Commission and acceded to the United Nations Convention against Corruption. In a landmark development, effective 1 November 2007, it separated the judiciary from the executive. The public expectation increasingly is that the Government will not only punish corrupt people but will also put in place a mechanism to deter the pervasive corruption that has been the hallmark of public life.

3.15.3 Climate change

The recent severe flooding and cyclone are premonitions of future possible catastrophe in Bangladesh. According to the United Nations *Human Development Report 2007/2008*, a 1-meter rise in sea level would inundate 18% of the land area, directly threatening 11% of the population.

A rising sea level and exposure to climate disasters could result in over 70 million people being permanently or temporarily displaced. These impacts are envisaged to raise the country's vulnerability to natural disasters, thus stressing the need for improved disaster preparedness and risk mitigation.

Bhutan

Significant changes are afoot. The phased commissioning of the Tala hydropower project since July 2006 has more than tripled generation capacity, significantly boosting power exports to India as well as government revenues, and doubling GDP growth. Yet hydropower generates too few jobs for the growing number of young job seekers. More private sector activity is essential, both for jobs and economic diversification. Politically, the country is transforming itself from a monarchy to a multiparty democracy, a change that will likely be smooth. A continuation of prudent macroeconomic and development policies is foreseen.

Economic performance

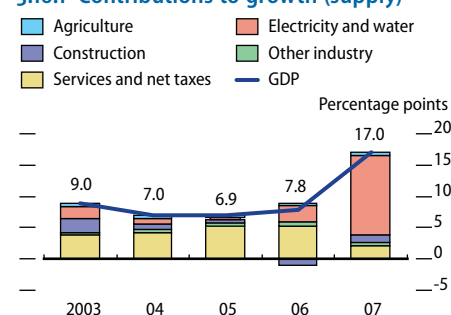
GDP growth in FY2007 (ended 30 June 2007) is estimated to have doubled to 17.0% (Figure 3.16.1). This was driven by the power sector (with a GDP share, including water, of 11.3% in FY2006) due to the commissioning of the 1,020 megawatt (MW) Tala hydropower station, which has been phased in since July 2006. Tala triples Bhutan's total power generation capacity to 1,480 MW from the combined 460 MW of three older power stations. As a result, sales from power project operations almost doubled in FY2007 (Figure 3.16.2); most power is exported to India. Although the completion of Tala and other major public projects had had a negative impact on construction in FY2006, the sector benefited from a boom in private housing in FY2007.

Broad money (M2) grew moderately by 8.6% in FY2007, down from 41.4% in the previous fiscal year. This was attributed to slower growth in net foreign assets. Growth in credit to the private sector, however, stayed rapid due to strong demand for housing loans (Figure 3.16.3).

The exchange rate peg of Bhutan's currency, the ngultrum, to the Indian rupee is working as an anchor to inflation. Since about two thirds of imports come from India, domestic inflation often reflects price changes there. The consumer price index nudged up to 5.2% in FY2007 from 4.9% the previous year. Although food prices jumped by 9.5% during April–June 2007 (the share of food is 31.7% in the consumer price index), the increase in overall inflation was limited by relative stability in the prices of nonfood items (Figure 3.16.4).

Preliminary estimates of the budget outcome for FY2007 show a 23.9% increase in total government revenues (including grants). Receipts from the Tala project were below budget due to a lower than expected power tariff setting. Government expenditures escalated by 33.0%, reflecting higher salaries for public servants, activities related to the national election, as well as capital spending such as land acquisition for a supreme court building and preconstruction work for the Punatsangchu I

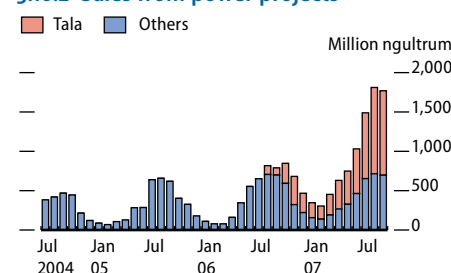
3.16.1 Contributions to growth (supply)



Sources: Royal Monetary Authority of Bhutan, *Annual Report 2006/07*; International Monetary Fund, *Country Report No. 07/350*; both downloaded 6 February 2008; staff estimates.

[Click here for figure data](#)

3.16.2 Sales from power projects



Source: Royal Monetary Authority of Bhutan, *Monthly Statistical Bulletin*, various issues, available: www.rma.org.bt, downloaded 15 January 2008.

[Click here for figure data](#)

hydropower project. The budget deficit, which varies widely (reflecting financing for power projects), widened to 3.4% of GDP.

The balance of payments improved markedly, mainly because of Tala, but other items were favorable as well (Figure 3.16.5). The trade balance turned to surplus in FY2007 as both power and nonpower exports shot up by 76.9% and 63.7%, respectively. Tourism growth stayed strong, with visitors up by 21.6% and income by 24.2%. The current account moved from deficit to a large surplus at 10.5% of GDP.

With a positive balance in the capital and financial accounts, the overall balance-of-payments surplus amounted to \$117 million, lifting gross international reserves to \$599 million, or equal to about 13 months of merchandise imports. External debt outstanding as of end-FY2007 was estimated at around 75% of GDP. About 60% of debt is rupee-denominated borrowing from the Indian Government for hydropower projects. The overall debt service ratio was only 4.2% as almost all debt was contracted on concessional terms.

Economic prospects

Prospects are good. Located in the Himalayas and close to India with its burgeoning demand for power, Bhutan is planning to capitalize on its huge untapped hydropower potential. Punatsangchhu I hydropower project (1,095 MW) is under construction, scheduled for completion in 2014. Mangdechhu (670 MW) and Punatsangchhu II (990 MW) projects will be built in 2009–2016. These three projects will eventually take total national generation capacity to 4,235 MW (Figure 3.16.6).

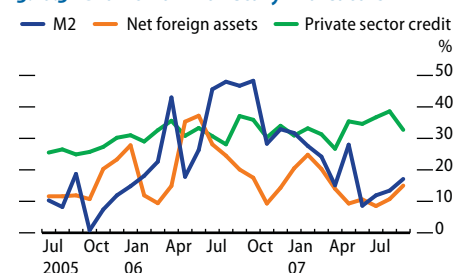
The economy follows a hydropower project cycle. After building began for Tala in 1997, construction led GDP growth until 2006 (the construction phase). With Tala now operating, additional power production is leading growth (the power production phase). In the medium term, the driver of growth will again be the construction of the three new hydropower stations. Assuming that Tala's full operation and the building of the new projects progresses on schedule, GDP growth should stay in double digits, at 14.4% in FY2008 but fall to 7.2% in FY2009.

The Tala project will have a huge impact on the fiscal figures in FY2008, in both revenue and expenditure terms. The budget for FY2008 anticipates an increase of about 17% in total receipts, mainly in the form of the corporate tax and dividends related to Tala. Expenditures are planned to rise by 12.4% and, though interest payments for Tala project borrowing will start, capital outlays will increase and account for about 52% of the total. As a whole, the fiscal deficit is expected to narrow to 1.8% of GDP in FY2008.

In FY2008, Tala's power exports to India will further push up exports, and offset imports and other payments mainly related to economic expansion outside the power sector. The current account surplus is seen remaining at 10.1% of GDP. The structure of the balance of payments in FY2009, however, will reflect a turn into the construction phase, and imports and other related payments will lower the current account surplus to a projected 2.4% of GDP.

Public sector debt is driven by the external borrowing for power

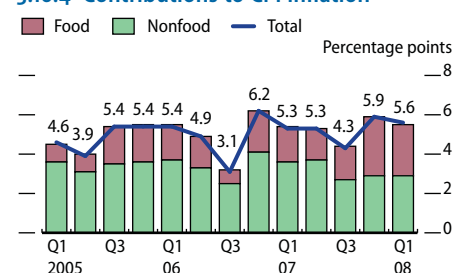
3.16.3 Growth of monetary indicators



Source: Royal Monetary Authority of Bhutan, *Monthly Statistical Bulletin*, various issues, available: www.rma.org.bt, downloaded 5 March 2008.

[Click here for figure data](#)

3.16.4 Contributions to CPI inflation



Source: Royal Monetary Authority of Bhutan, *Monthly Statistical Bulletin*, various issues, available: www.rma.org.bt, downloaded 5 March 2008.

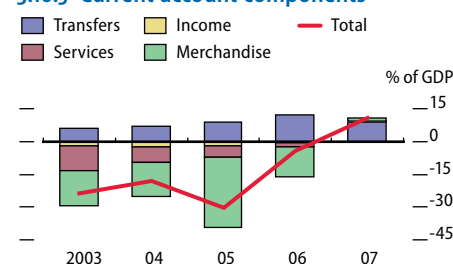
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3.16.1 Selected economic indicators

	2008	2009
GDP growth	14.4	7.2
Inflation	4.5	4.5
Current account balance (% of GDP)	10.1	2.4

Source: Staff estimates.

3.16.5 Current account components



Sources: Royal Monetary Authority of Bhutan, *Annual Report 2006/07*; International Monetary Fund, *Country Report No. 07/350*; both downloaded 6 February 2008.

[Click here for figure data](#)

projects. Based on a joint International Monetary Fund–World Bank debt-sustainability analysis in 2007, Bhutan’s debt dynamics are subject to only moderate risk of distress. Public sector debt is projected to stay at around 70% of GDP in the medium term, as repayment for Tala will be roughly balanced by loan disbursements for new hydropower projects. The analysis also assessed the power projects to be subject to low implementation risk because of Bhutan’s demonstrated experience in financing and running such projects. The relationship with India is maintained well, and therefore any commercial risk is virtually absent.

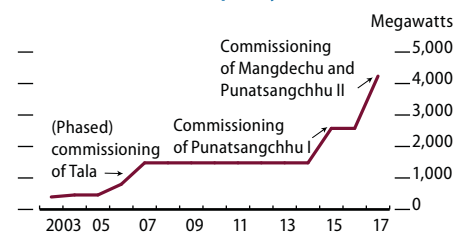
In the political sphere, Bhutan is scheduled to change from a monarchy to a two-party democratic system this year. An election for the National Council (the upper house) was held in December 2007, and the first National Assembly (lower house) election was held in March this year. The first written constitution will be discussed and passed by the new parliament.

Development challenges

Because the hydropower sector employs few people, job generation elsewhere will remain crucial, especially with the growing number of young entrants to the labor force. The private sector will be the key focus, but needs to tackle a variety of bottlenecks, including cumbersome labor practices, difficult access to land, inadequate infrastructure, high cost of finance, and lack of skilled labor. Tourism is the obvious area where the private sector can expand.

In rural areas, the forthcoming 10th Five-Year Plan (2008–2013) calls for measures to encourage farm households to shift from subsistence to a commercial orientation; develop agroprocessing; and expand off-farm employment in cottage industries, local handicrafts, and textiles. These measures are to be underpinned by improvements to transport and communications to integrate the national economy, improve the private sector enabling environment, boost the efficiency of the financial sector, and develop human resources.

3.16.6 Generation capacity



Source: Gross National Happiness Commission, Royal Government of Bhutan, Draft Tenth Five Year Plan (2008–2013).

[Click here for figure data](#)

India

Tight monetary policy to cool overheating slowed growth, but India remained among the fastest growing of the world's major economies. Though largely driven by domestic demand, the country is nevertheless vulnerable to the worsening global economic environment. Avoiding a deep downdraft in the next 2 years will primarily be shaped by the outcomes of three counteracting forces: keeping food price inflation moderate, lowering interest rates to sustain high levels of investment, and containing the fiscal deficit. The country's dynamism in recent years underpins the high growth path. Key structural challenges include establishing a new fiscal adjustment road map, raising labor productivity, and enhancing structural reforms.

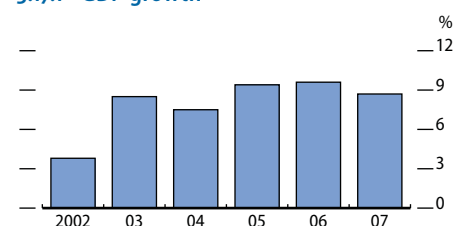
Economic performance

The impressive economic performance of the past few years continued, though growth slowed from 9.6% in FY2006 to 8.7% in FY2007 (ended March 2008) according to the official advance estimate (Figure 3.17.1). The deceleration, reflecting tightened monetary policies, touched all sectors (Figure 3.17.2). Industry, contributing about 29% of GDP—and a major driver of growth in FY2006—eased a little. The key factors were weaker growth in consumer spending, pinched by inflation pressure and higher borrowing costs. The slowdown was led primarily by a decline in consumer durables production, but other manufacturing industries as well as mining and energy (oil, coal, and electricity) also made weaker contributions (Figure 3.17.3). The trend prompted the Government to set up a high-powered committee to examine measures to sustain manufacturing growth over the next decade, with a focus on labor-intensive manufacturing exports such as textiles, leather, and handicrafts.

Agriculture, accounting for about 18% of GDP, saw a sharp drop in growth from 3.8% in FY2006 to 2.6% in FY2007. The reduction came mainly from a poor winter crop. The low growth rate also reflected underlying structural weaknesses stemming from falling levels of public investment and steady deterioration in public institutions that provide credit, inputs, and research and extension services. A “technology fatigue” has emerged, as the benefits from the Green Revolution of the 1960s and 1970s have waned. Yields of new crop varieties have reached a plateau and remain substantially lower both than yields in major producing countries and than potential yields possible with best cultivation practices. For instance, average wheat and rice yields in India's bigger states are about 25–50% lower than those achieved in experimental stations.

In response to falling agricultural growth, the Government has set a goal of doubling growth from 2% a year over the last decade to 4% in the 11th Five-Year Plan (2007–2012) by bridging the gap between potential and

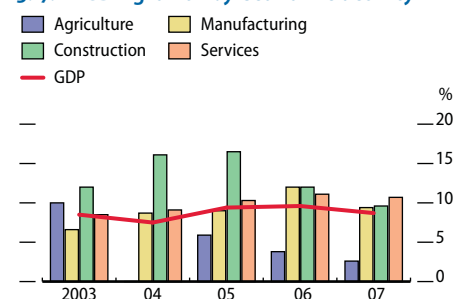
3.17.1 GDP growth



Source: Central Statistical Organisation, available: www.mospi.nic.in/cso.htm, downloaded 24 March 2008.

[Click here for figure data](#)

3.17.2 GDP growth by economic activity



Source: Central Statistical Organisation, available: www.mospi.nic.in/cso.htm, downloaded 24 March 2008.

[Click here for figure data](#)

actual yields. To improve credit availability to farmers, it is also providing Rs9 billion capital to strengthen 27 regional rural banks in 15 states.

The key contributor to growth is services, which generated about 53% of GDP and continued its rapid growth, at 10.7% in FY2007. It was led by the trade, hotel, transport, and communications subsector. The financing, insurance, real estate, and business services subsector remained healthy despite a decline in growth. Booming construction in particular took a hit, decelerating from 12% in FY2006 to 9.6% in FY2007 as a result of hardening lending rates and tightening prudential policies by the Reserve Bank of India (RBI), intended to avoid excessive credit expansion in what had been a growing speculative real estate market.

Growth in the economy is essentially driven by domestic demand, which remains strong despite rising inflation (Figure 3.17.4). Robust growth in real wages and remittances buttressed consumption. The growth rate of private final consumption expenditure fell marginally from 7.1% in FY2006 to 6.8% in FY2007. Demand for consumer durables, such as automobiles, motorcycles, and scooters, was particularly affected by the rising costs of borrowing. Government consumption spending also fell, from 6.2% in FY2006 to 5.5% in FY2007, in keeping with rationalization of expenditure and deficit commitments made under the Fiscal Responsibility and Budget Management Act of 2003.

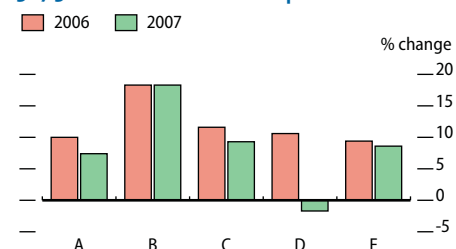
Investment was the fastest-growing component of domestic demand. The pace of gross fixed capital formation in FY2007 rose to 15.7%. Capital inflows, bank credit, reinvestment of profits, robust business confidence, and high capacity utilization bolstered private investment. Buoyant corporate profits in recent years allowed a large part of firms' investment to be financed from internal resources. Growth in bank credit to commercial enterprises subsided in the second half of FY2007 (Figure 3.17.5). However, the surge in capital inflows continued unabated on account of economic performance, healthy productivity growth, tightening financial integration with world markets, and a wide interest rate differential relative to the rest of the world.

RBI has been attempting to control money supply growth to maintain price stability, while seeking to ensure credit market and interest rate conditions that support investment in the context of relative stability in the exchange rate. But it has had limited success. The year-on-year money supply growth of 24% (to end-January) remains significantly higher than the target growth rate of 17–17.5% (Figure 3.17.6). Strong capital inflows have increased money supply, raising inflation pressure and rendering difficult the management of monetary and exchange rate policy.

In FY2007, RBI followed a dual-policy approach to allow greater exchange rate flexibility along with intervention in the foreign exchange market. This led to appreciation of the rupee against the United States (US) dollar (Figure 3.17.7), mainly in the early months of the fiscal year, and a large accumulation in RBI's foreign exchange assets over the full year. While the rupee weakened slightly in the latter part of FY2007, it appreciated by about 13% against the US dollar and by about 7% on average for the year in real effective terms.

Acknowledging the risk of excess liquidity at banks leading to resurgent inflation pressure, RBI has raised the cash-reserve ratio several times since late 2006, with the latest move (of 50 basis points)

3.17.3 Use-based industrial production



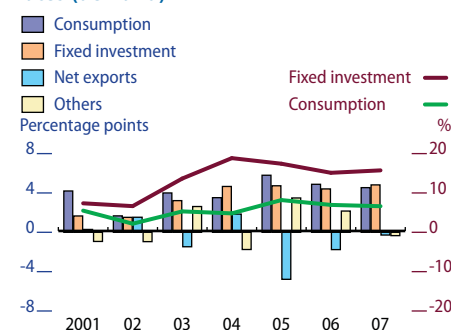
A = basic goods; B = capital goods; C = intermediate goods; D = consumer durables; E = consumer nondurables.

Note: Data refer to April–January of fiscal year.

Source: Central Statistical Organisation, available: www.mospi.nic.in/cso.htm, downloaded 24 March 2008.

[Click here for figure data](#)

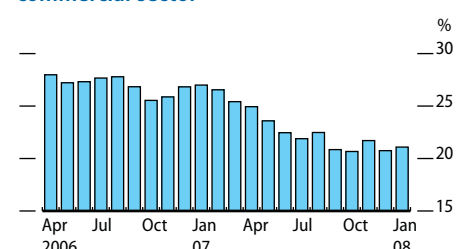
3.17.4 Contributions to growth and growth rates (demand)



Source: Central Statistical Organisation, available: www.mospi.nic.in/cso.htm, downloaded 24 March 2008.

[Click here for figure data](#)

3.17.5 Growth of bank credit to the commercial sector



Source: CEIC Data Company Ltd., downloaded 12 March 2008.

[Click here for figure data](#)

in November 2007, bringing the ratio to 7.5%. Concerns about inflation expectations have also led it to keep its key policy interest rate (the repurchase rate) unchanged at 7.75% in recent months. However, the steep and unexpectedly large cuts in US interest rates in early 2008 have created a much larger differential with Indian lending rates, which are among the highest in Asia. The pressure is mounting on RBI to cut its rates even though high inflation means that there is no room for easing its policy.

The tight monetary stance brought down inflation in manufactured goods but after October this was outweighed by rising food and energy prices. Inflation, as measured by year-on-year growth in the wholesale price index, reached 4.6% in February 2008 (Figure 3.17.8), creeping toward RBI's target limit of 5%. In early March 2008, the first of the monthly readings on inflation jumped to 5.9%, a 10-month high, driven by further food price increases.

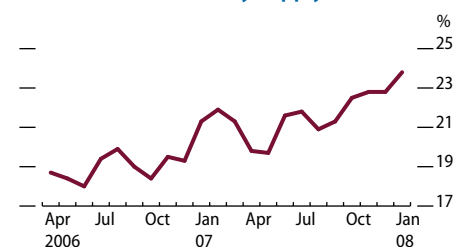
The federal Government has made partial upward adjustments (averaging 4.4%) in the retail prices of gasoline and diesel in FY2007 to accommodate increasing global prices, while keeping unchanged the prices of kerosene and liquefied petroleum gas, mostly used by lower-income groups. Figure 3.17.9 presents the rising discrepancy between the price India pays to import its fuel basket and the domestic composite price index of fuels—the above two fuels plus gasoline and high-speed diesel oil. The difference between ex-refinery costs and domestic selling prices (“underrecoveries”) of state-owned oil marketing companies has been offset through payments of oil bonds issued by the Government. Gross underrecoveries of these companies, an off-budget item, are estimated to be Rs718 billion in FY2007 (approximately 1.5% of FY2007 GDP).

World prices of foodgrains and edible oils have risen sharply owing to severe supply shortages and dwindling inventories. Some development agencies project that global food prices by 2017 could be 20–40% higher than the average of 2002–2006. India has emerged as the largest importer of edible oils in the world with more than 40% of its domestic demand met through imports. Reflecting the tight global situation and affected by domestic supply constraints, food prices have risen faster than overall inflation in recent months. The Government has responded by increasing subsidies on food items, controlling exports, and subsidizing imports.

Supporting the widening gap between world and domestic prices of food and fuel in the face of compelling spending pressures at the same time as meeting fiscal deficit targets has involved a delicate balance that cannot be kept indefinitely. This was acknowledged in the FY2008 budget speech when the finance minister indicated that he intended to ask the 13th Finance Commission to provide a revised road map for fiscal adjustment, which would take into account off-budget subsidies on oil, food, and fertilizer (which have been funded by bond issues).

Appreciation of the local currency against the US dollar has hurt Indian exporters. Merchandise exports (on a customs basis) grew by 21.6% in the first 10 months of FY2007 when expressed in US dollars (Figure 3.17.10). However, this reflects the sharp appreciation of the rupee more than the actual increase in exports, the growth of which, in rupee terms, was subdued at just 7.7%. The slowdown was evident most notably in chemicals, engineering goods, textiles, and readymade garments and handicrafts.

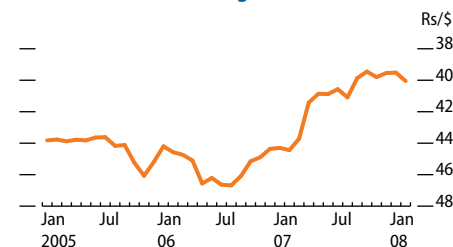
3.17.6 Growth of money supply



Source: CEIC Data Company Ltd., downloaded 12 March 2008.

[Click here for figure data](#)

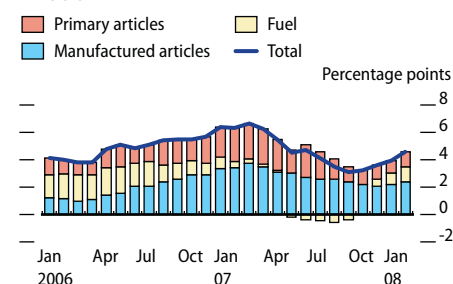
3.17.7 Nominal exchange rate



Source: CEIC Data Company Ltd., downloaded 24 March 2008.

[Click here for figure data](#)

3.17.8 Contributions to wholesale price inflation



Source: Reserve Bank of India Database on Indian Economy, available: <https://cdbmsi.reservebank.org.in/cdbmsi/servlet/login/>, downloaded 11 March 2008.

[Click here for figure data](#)

The growth of merchandise imports, at 29.6% in US dollar terms in the first 10 months of FY2007, is also overstated when compared to its rupee value (14.7%). Non-oil imports of capital goods, chemicals, edible oils, and precious and semiprecious stones provided the main stimulus for import growth, rising by 36.1%, while oil imports advanced by 16.5%. The net effect was a near 50% widening of the US dollar trade deficit from a year earlier.

Official estimates of the balance of payments for FY2007 are unavailable; however, preliminary estimates indicate that the current account deficit will be about 1.9% of GDP, higher than the 1.1% in FY2006. Although the trade deficit widened significantly, it was offset by a strong rise in the inflow of remittances and a growing surplus from exports of services such as software and business services, though their expansion in earnings was reduced from the rapid rates seen in previous years.

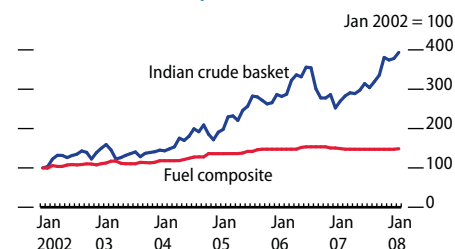
RBI's foreign exchange reserves (including valuation adjustments) saw a \$105 billion surge (through mid-March 2008) to \$296.5 billion (Figure 3.17.11). This indicates that the capital account surplus in FY2007 has apparently doubled in a year, primarily because of a large rise in net portfolio investment and continued large net inflows from commercial borrowing, short-term credit, and other capital.

RBI interventions in the foreign exchange market brought greater stability and a slight weakening in the currency in the latter part of FY2007. Measures are being implemented to cushion the impact of the exchange rate appreciation on exporters. These include interest subsidy on export credit, increases in duty drawback rates, refund of tax charged on services related to exporting, and lower customs duty on some raw materials for textiles. Some of these measures are ad hoc and may be difficult to sustain if the rupee continues to appreciate.

The stock market kept up its 3-year bull run in FY2007 (Figure 3.17.12), which featured a substantial increase in portfolio investment by foreign institutional investors, though they remain relatively small players (owning roughly 5% of market capitalization but accounting for about 15–20% of the trading). However, the Sensex has shown increased volatility since early January 2008 and the market has fallen by about 25% through 24 March from end-December. The downturn broadly mirrors the same anxieties (caused by the global financial market turmoil and fears of recession) that have been seen in most markets elsewhere. Still, the Indian market was up by about 15% over the year to 24 March. Since valuations in India are high, priced on the assumption of continued rapid corporate growth, a deep and prolonged slide in the market would likely undermine business confidence and add to downward pressures in the economy.

The federal Government's budget position has improved markedly since its adoption of the Fiscal Responsibility and Budget Management Act, which envisages an annual reduction of at least 0.3 percentage points in the fiscal deficit (Figure 3.17.13). Buoyancy in tax collections allowed for a reduction in the deficit in FY2007 to an estimated 3.1% of GDP, marginally below target. The federal budget for FY2008 has projected a further decline to 2.5%, and has proposed a rationalization of the income tax structure by raising tax exemption limits and by restructuring tax slabs. The corporate tax rates remain the same. More needs to be done though, such as broadening the tax base, rationalizing subsidies, reducing tax exemptions,

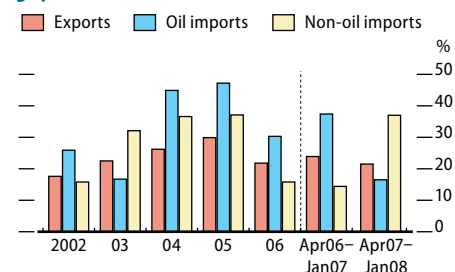
3.17.9 Oil and fuel price indexes



Sources: Datastream; CEIC Data Company Ltd.; both downloaded 17 March 2008.

[Click here for figure data](#)

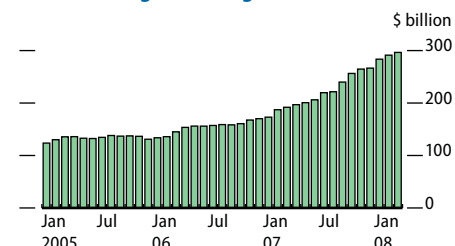
3.17.10 Growth of trade



Source: CEIC Data Company Ltd., downloaded 24 March 2008.

[Click here for figure data](#)

3.17.11 Foreign exchange reserves



Note: Data for March 2008 is until 14 March only.

Sources: CEIC Data Company Ltd.; Reserve Bank of India, *Weekly Statistical Supplement*, 7 March 2008 and 21 March 2008, available: www.rbi.org.in; downloaded 24 March 2008.

[Click here for figure data](#)

and improving tax administration. The fiscal consolidation strategy has to date been led by revenue growth in a rapidly expanding economy, but the quality of expenditure may at times be questioned.

This last budget before the general elections in 2009 had a populist stance on spending for health, education, and rural infrastructure, which is also in line with the 11th Plan strategy of inclusive growth. A central feature of the stance was a farm-loan waiver estimated at Rs600 billion, or almost 1% of GDP. This proposal, however, could generate moral hazard. Moreover, the waiver does not address the issue of this problem resurfacing in the future. Funding of the waiver was not included in the budget.

These federal deficit numbers do not present India's complete fiscal picture of FY2008 for four key reasons. First, the deficit incurred by state governments is excluded (a much higher deficit emerges if it is included). Second, the civil service pay increase recommended by the Sixth Pay Commission (announced after the budget), which would cost the federal Government \$3.1 billion in FY2008 if implemented, was not provided for. Moreover, it will have knock-on effects for state budget deficits. Third, the cost of various off-budget items, such as oil bonds and losses of state-owned electricity companies, are excluded. Fourth, isolating domestic prices from rising international food prices needs additional budget financing during the year.

Adding all four items would lift the total general government deficit significantly. Not only is fiscal consolidation hindered by these exclusions, they continue to add to a public debt that is equivalent to about 80% of GDP, among the world's highest. Debt service squeezes the fiscal space needed for essential public infrastructure investment. Indeed, interest payments are projected to rise by 11% in FY2008 and equal just over 30% of expected total revenue receipts.

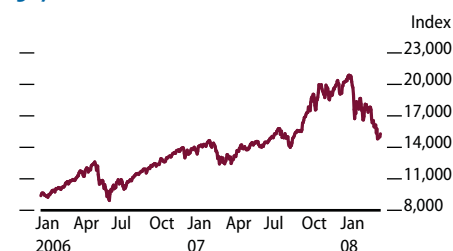
Economic prospects

Forecasts for FY2008 and FY2009 are based on five assumptions for the economy: the domestic food supply position will remain tight though manageable in FY2008, but improve in FY2009; RBI and the federal Government will take all steps necessary to contain inflation in FY2008, largely because of the general elections due by early 2009; monetary conditions will be relatively more accommodative during FY2009; substantial revisions in domestic price of petroleum products will likely be made only in FY2009 (that is, after the elections); and the rupee-US dollar exchange rate will remain relatively stable throughout the period.

Following the slowdown that began in FY2007, economic growth will likely moderate further to 8.0% in FY2008. Overall GDP growth in FY2009 is predicted to return to around 8.5%, nudged along by a broad-based pickup in spending (Figure 3.17.14). Even though growth has faltered, the economy has built up considerable momentum in recent years and this sense of dynamism should help pull up the pace again. However, major macroeconomic challenges need to be met in order to ensure that the current deceleration remains mild in the face of turmoil in global financial markets and of the marked economic slowdown in industrial countries.

The growth outcomes in the economy over the next 2 years will depend in part on the timing and scope for relaxing the present tight

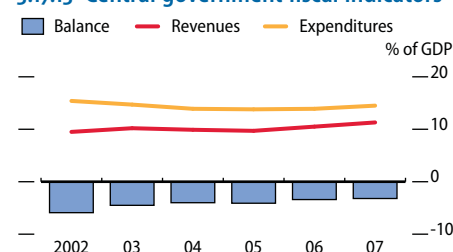
3.17.12 Sensex



Source: Datastream, downloaded 25 March 2008.

[Click here for figure data](#)

3.17.13 Central government fiscal indicators



Sources: Reserve Bank of India, *Handbook of Statistics on Indian Economy*, available: www.rbi.org.in; Ministry of Finance, *Budget at a Glance*, available: <http://indiabudget.nic.in/>; Central Statistical Organisation, available: www.mospi.nic.in/cso.htm; all downloaded 25 March 2008.

[Click here for figure data](#)

3.17.1 Selected economic indicators

	2008	2009
GDP growth	8.0	8.5
Wholesale price inflation	4.5	5.0
Current account balance (% of GDP)	-2.2	-2.6

Source: Staff estimates.

monetary policy. Exactly when this will be feasible will be determined by success in containing inflation, which in turn depends on two uncontrollable factors: the outturn in domestic food production and the course of international commodity prices. The good news is that global oil prices have come off historical highs and are showing signs of returning to levels assumed for the projections.

Growth in international commodity prices is expected to flatten in FY2008 and fall in FY2009, taking the pressure off inflation and allowing domestic demand to pick up in FY2009. Private consumption expenditure will remain relatively buoyant in FY2008 at just over 6%, supported by continued strong wage gains in a skills-short formal economy, larger income tax exemptions, the debt waiver for farmers given in the FY2008 budget, higher prices for cash crops in the rural economy, and higher pay for civil servants. Government consumption expenditure will also rise, to support the ambitious social sector development agenda of the 11th Plan.

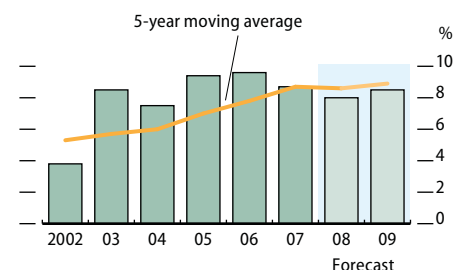
Reinvestment of corporate profits, capital inflows, and credit availability will continue to support investment growth. But while investor enthusiasm remains high, drawing on a broad range of new business opportunities and high capacity utilization in existing plants, expansion in fixed investment is projected to slow in FY2008. It will account for about half of the decline in economic growth, although this will be partly offset by some cyclical building of inventories. Postponement of initial public offerings in early 2008 is one indicator that the expansion plans of many Indian companies are being scaled back. Much of the deceleration in investment is expected to stem from slowing property development.

Easing of lending rates and revival of the consumer durable goods sector and construction activities are important for achieving a pickup in industrial growth. But despite the current slowdown in demand, lending rates cannot be reduced because stabilizing inflation at a moderate level remains the priority of RBI during FY2008, even at the cost of growth. A more accommodative monetary policy stance is expected only after the general elections. After that, RBI is likely to move to ease its tight policy stance by reducing policy rates if food inflation is relatively well controlled. A fall in borrowing costs, together with growing consumption demand, would lift industrial production in FY2009 after an initial hitch in FY2008.

Agricultural growth will continue to be driven by monsoons until better infrastructure and institutional set-ups are in place. The 11th Plan emphasis on agriculture, coupled with a Rs2,800 billion target set for agricultural credit in FY2008, as well as a host of reform measures for agriculture and water resource management announced in the FY2008 budget, should take hold and lead to the needed improvement in agricultural performance in FY2009. This would be supported by additional measures likely to be proposed by the committee established by the Government for that purpose.

Domestic prices, especially of food and fuel, will be critical in determining wholesale price inflation, which is projected to be at a moderate level of 4.5% in FY2008 (Figure 3.17.15). Inflation pressure, however, will persist as the domestic output of foodgrains and vegetables is expected to remain tight in FY2008 due to subdued sowing of the winter crop in October 2007. The tight supply position of wheat, pulses,

3.17.14 GDP growth



Sources: Central Statistical Organisation, available: www.mospi.nic.in/cso.htm, downloaded 24 March 2008; staff estimates.

[Click here for figure data](#)

edible oil, and coarse cereals appears due to diversification to cash crops and water shortages in parts of the country. Easing of international prices of nonfuel commodities, including foodgrains, will help in augmenting domestic supply.

It is unlikely that the federal Government will significantly revise the domestic prices of petroleum products before the general elections. After the large increase in the average price of the Indian crude basket in FY2007, it is expected to rise further by about 10% in FY2008. The required level of subsidy would then be so large as to prompt several rounds of small revisions in domestic prices of petroleum products with some cascading impact on the prices of other commodities. Domestic oil-price adjustments would be relatively modest, as gaining political support for any increase is difficult. With an easing in food inflation in hand, overall inflation is projected to be held to 5% in FY2009.

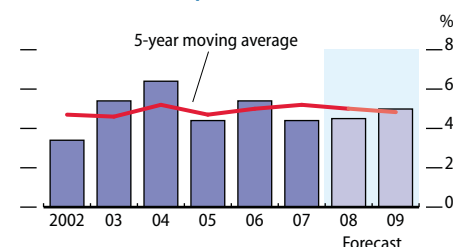
Several low-profit-margin exports such as textiles and handicrafts were hurt by the rupee's appreciation in 2007, but exports of more sophisticated products such as capital-intensive manufactured goods, as well as sales of business services, continued to expand. However, the rupee-US dollar exchange rate is assumed to remain relatively stable during FY2008 and FY2009. In the outlook, exports are therefore expected to grow at about 16–18%, partly due to the sizable share in the total (nearly 20%) of refined petroleum products, whose prices are on the rise.

Moreover, markets other than the US are also opening up to India's high-tech service exports such as information and communications technology and business process outsourcing, which provide a cheaper source of supply to increasing demand from industrial economies. Indian exporters have started diversifying to other major export markets, notably Europe, People's Republic of China, and the rest of Asia. Import growth will continue to be rapid, reflecting both high international oil prices and expansion in non-oil imports, especially of capital goods and intermediates that have become necessary to sustain high levels of investment. These factors have been incorporated in the projection of a widened current account deficit, which is likely to be around 2.2–2.6% of GDP.

Realized performance may of course depart from this outlook for a raft of reasons. Monetary management may have to deal with the possibility of supply shocks beyond the 2007 and 2008 sowing seasons. The loan waiver can be effective in augmenting food supply provided that farmers are also supported with a comprehensive package of technology, services, and public policies related to input and output pricing. Rising food prices, especially of commodities consumed by the broad public, would damp their general purchasing power and GDP growth. Moreover, in the event of high food prices, monetary conditions would need to remain tight, and the assumed move to lower lending rates would not occur and growth would be less.

More generally, the global slowdown may more adversely affect India's engineering and other high-end exports as well as earning from sales of software and other business services than projected. While this would raise the negative impact of "net exports," the main damage would be seen in the erosion of the exuberant business outlook. If a larger part of the private sector turns cautious and waits to see what happens next, investment and growth would fall below those projected.

3.17.15 Wholesale price index inflation



Sources: Reserve Bank of India Database on Indian Economy, available: <https://cdbmsi.reservebank.org.in/cdbmsi/servlet/login/>, downloaded 19 February 2008; staff estimates.

[Click here for figure data](#)

Development challenges

Over the past decade, India has undergone a transformation and climbed to a high-growth path as macroeconomic and structural reforms reduced regulation, improved the business environment, and opened the economy to greater competition. Yet it still needs to focus on certain key areas with the potential to push growth to a higher plateau. The most crucial are enhancing the policy and regulatory framework to encourage the private sector and reining in fiscal deficits. A dynamic private sector that creates jobs, increases productivity, and invests in the economy plays a crucial role in bolstering growth. Removing the bottlenecks to private sector growth and competition in India could well generate an additional 2% of GDP growth.

All levels of government need to reengineer their laws and procedures to reduce barriers to entry of firms into any product area; modernize outdated and excessive regulations, and introduce more flexibility in the labor code; eliminate the roadblocks that hinder free interstate movement of goods to achieve a competitive national market; and end the present lengthy process required to restructure or close bankrupt companies. Archaic management structures and institutions still prevail in much of the daily working of government. Thus reengineering needs to be introduced into institutions at all levels through adoption of the management and operating techniques so successfully developed by India's computer software and business services industries. These changes would be especially effective in local government.

Fiscal consolidation, by targeting combined state and federal government deficits, including off-budget and contingent liabilities, is needed to create the fiscal space for essential social and infrastructure spending. Yet the Government's decision to keep domestic prices artificially suppressed in response to rising international food and oil prices has distorted product prices and generated large, annual off-budget liabilities that are rapidly increasing the already heavy deadweight of interest payments.

Aligning food prices with the international market would raise farmers' incomes and set prices that would not distort land allocation to crops. A similar move for oil will likewise give consumers the right price signal to save energy and to demand more energy-efficient products. A part of the saving from ending these subsidies could then be available for direct cash payments in well-targeted safety net programs. This would eliminate the large diversions and losses involved in the present price-subsidy schemes.

Declining labor productivity is a key issue in sustaining India's long-term growth. Defined as output per worker, it fell from an average of 5.8% from FY1993 through FY1998 to 3.6% from FY1999 through FY2004. One reason is an increasing shortage of appropriate skills (Box 3.17.1).

3.17.1 Attacking shortages of skills and infrastructure

Although 90% of employment opportunities require vocational skills, only 10% of educated young people are equipped with them. Almost two thirds of young workers have below primary or no education and about 90% of them hold low-quality, informal sector jobs.

An estimated 80 million young workers need up to 2 years of training for skills "repair." Only about 15% of manufacturing firms provide on-the-job training, which raises their productivity by a quarter above those that do not.

The bottleneck needs to be addressed at three levels: training for informal sector skills, entrepreneurial and managerial competency, and high-end professional skills.

The Government has embarked on a skills development mission to impart the required training, but covering the entire gamut of skills required through public funding may be neither financially feasible nor economically desirable. A new approach is needed to leverage the private sector for investment in education and training, on-the-job training programs in firms, and increasing private participation in higher education.

However, it is poor infrastructure that has emerged as the most important constraint to growth, and needs an estimated \$500 billion of investment. The Government has undertaken several initiatives in power, national highways, and urban infrastructure, but public resources alone will not suffice. What is required is a streamlining of regulations and a facilitation of competition in infrastructure markets, in order to encourage private sector participation.

Maldives

The economy resumed normal growth after the post-tsunami contraction in 2005 and the sharp rebound in 2006, though it experienced an unexpected drop in the fish catch. The deteriorating fiscal balance, prompted by the tsunami, is a major concern. With narrow economic concentration and openness keeping the country vulnerable to external shocks, the authorities need to diversify activity by fostering private sector initiatives. Developing human resources and institutional capacity as well as establishing stronger financial sector institutions are also required.

Economic performance

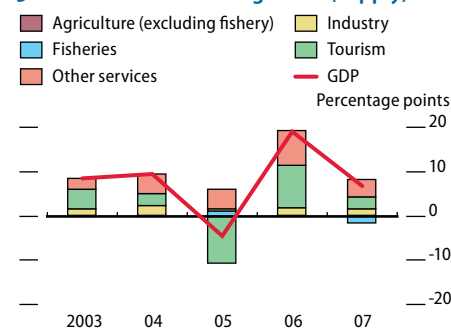
The economy grew by 6.6% in 2007, reverting to its historical growth path after the post-tsunami contraction in 2005 and the rebound in 2006 (Figure 3.18.1). Performance in 2007 would have been even better were it not for a sharp drop in the fish catch that took 1.5 percentage points off overall GDP growth. Tourism, the leading sector with a near one-third share of GDP, grew by 10.0% as a result of growing tourist arrivals that, in 2007, finally exceeded the pre-tsunami peak level of 2004 (Figure 3.18.2). A 14.8% expansion in transport and communications and 19.3% growth in construction underpinned continued strong contributions to growth by services and industry, respectively. Value added in fisheries, which has only a GDP share of 4.5% in 2007 but is important in terms of employment and exports, dropped by 23.7% due to a fall in the fish catch of nearly 70,000 metric tons.

Inflation, as measured by the national consumer price index, averaged 7.4% in 2007 compared with 3.5% in the previous year. It accelerated in the second half, and exceeded 10% year on year in the fourth quarter. The pickup was due to food prices (food has a weight of one third in the index), which came in nearly 30% higher in the final 3 months of the year than a year earlier (Figure 3.18.3). As the country imports almost all the commodities it consumes, such as petroleum, food, and construction materials, global commodity prices, especially of petroleum, affect domestic inflation and tourism's cost structure.

Although the rufiyaa's peg to the depreciating United States (US) dollar has contributed to tourism's sharp recovery by benefiting Europeans (three quarters of tourists in 2007), the weakening of the US dollar has added pressure to prices.

Deterioration in the fiscal balance is worrisome. The Government included large reconstruction project expenditures in the budget after the tsunami, but also pushed up current expenditures to raise public sector wages and continue power and water subsidies in the capital, Malé. Limited implementation capacity reduced capital spending such that

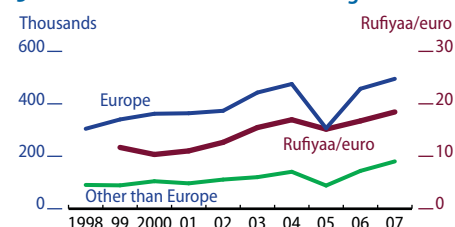
3.18.1 Contributions to growth (supply)



Source: Maldives Monetary Authority, *Monthly Statistics*, Vol. 9, No. 2, February 2008.

[Click here for figure data](#)

3.18.2 Tourist arrivals and exchange rates



Source: Maldives Monetary Authority, *Monthly Statistics*, Vol. 9, No. 2, February 2008.

[Click here for figure data](#)

the 27.6% of GDP budgeted deficit for 2007 was reduced to 7.9% of GDP. However, even this level of borrowing cannot be sustained in the medium term. The 2008 budget has an expenditure plan of 73.5% of GDP with a deficit of 10.2% if implemented as planned (Figure 3.18.4).

Stronger policy measures should be adopted for fiscal consolidation to keep government debt at a sustainable level, including a reduction in domestic expenditures, together with introduction of the business profit tax and adoption of additional lease charges related to tourism development. Moreover, the current, fixed, bed tax should be converted into an ad valorem tax.

The increase in public debt from 37.6% of GDP in 2000 to 56.4% in 2007 raises sustainability concerns. Debt would jump to 59.7% of GDP in 2008 to finance the budgeted deficit if expenditure plans are fully implemented. A debt-sustainability assessment by the Asian Development Bank in 2007 concluded that it is essential to pursue policy reforms for balancing the budget and reducing the country's debt burden.

The trade balance deteriorated significantly after 2003, mainly due to growing imports of construction materials and petroleum products, which amounted to 67.1% of GDP in 2007. While import growth moderated to 14.8% in 2007, because of the 20.7% drop in exports of fish and fish products (about half of all exports), the trade deficit failed to improve, with exports showing only a 2.8% rise.

A net surplus in services trade, most of which comes from tourism, had financed the trade deficit until 2004. Even though tourism earnings recovered to exceed the pre-tsunami level in 2007, larger services payments and the expansion in imports meant that net services covered only about 40% of the trade deficit. The current account deficit therefore widened further to 45.0% of GDP in 2007 (Figure 3.18.5). The financial account, however, saw large inflows in 2007, led by advanced lease rents for new resorts, to cover the current account deficit.

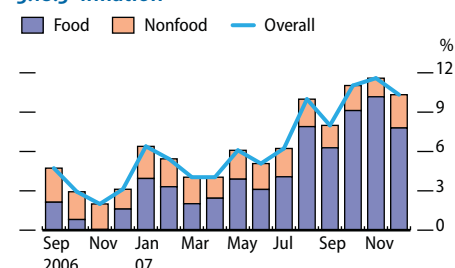
Economic prospects

GDP is projected to grow by 8.0% in 2008, bolstered by additional resorts becoming operational and a consequent steady increase in tourists. A rebound in the fish catch to normal levels is also assumed. Growth will likely moderate to about 7.0% in 2009. With higher global oil prices, inflation is penciled in at about 6.0% in 2008 and 2009. With continued growth in tourism and a rebound in fish exports, the current account deficit as a share of GDP will stabilize and then improve in 2009.

The deteriorating fiscal indicators are a concern, and pose a major risk. Unless the Government rationalizes its capital spending and improves targeting of the large subsidy for its social services, in order to keep the public debt at a sustainable level, rapid economic growth just cannot be maintained. External shocks will continue to be a downside risk for the country, as economic openness and a narrow base—with a heavy reliance on tourism—will leave it vulnerable.

The country is in a political transition. Since the Majlis (parliament) opted for multiparty democracy and lifted a ban on political parties in 2005, four parties have been formed. Parliamentary elections are scheduled for mid-2008, and a new constitution is being drafted for

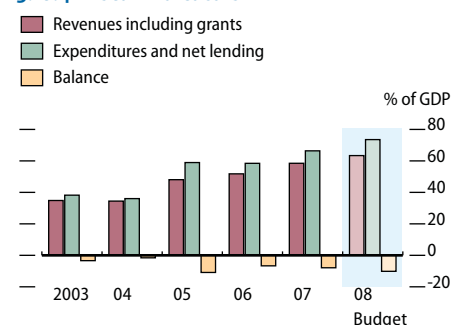
3.18.3 Inflation



Source: Maldives Monetary Authority, *Monthly Statistics*, Vol. 9, No. 2, February 2008.

[Click here for figure data](#)

3.18.4 Fiscal indicators



Source: Maldives Monetary Authority, *Monthly Statistics*, Vol. 9, No. 2, February 2008.

[Click here for figure data](#)

3.18.1 Selected economic indicators

	2008	2009
GDP growth	8.0	7.0
Inflation	6.0	6.0
Current account balance (% of GDP)	-45.0	-40.0

Source: Staff estimates.

approval before that date. Maldives has, however, decided to maintain its current presidential system in a referendum on the form of government held in August 2007.

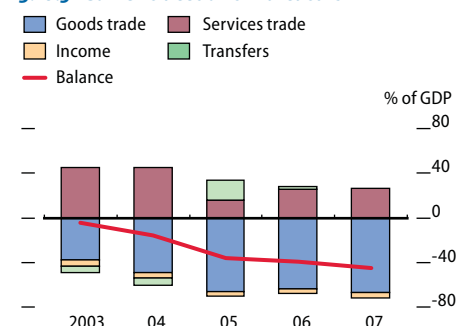
Development challenges

To mitigate the vulnerability that comes from the narrow economic base, the authorities need to diversify economic activity by promoting the private sector. Improving the legal framework to provide a conducive business environment is needed. The most serious constraints are, however, a shortage of skilled labor and weak public institutions. Since vocational and skills training is underdeveloped, the education system cannot provide the human resources that the labor market requires. This results in high youth unemployment (22% for men and 41% for women in 2005), and heavy reliance on expatriate workers (around 45% of the workforce, according to the 2006 census).

Government plays a large role in the economy through state-owned enterprises, including processing and export in fisheries. This role should be reconsidered, with the state changing from being a main producer of goods and services to that of a facilitator. This will require a well-defined regulatory mechanism, with means for enforcement of contracts and development of the present shallow financial sector.

Although the economy has reached middle-income status, with a per capita income estimated at \$3,400 at end-2007, people in remote islands have been left behind in the distribution of gains. Efforts to narrow regional disparities between the growth center around Malé and the outer atolls are crucial.

3.18.5 Current account indicators



Source: Maldives Monetary Authority, *Monthly Statistics*, Vol. 9, No. 2, February 2008.

[Click here for figure data](#)

Nepal

Contrary to expectations of an economic revival in the wake of the historic political breakthrough in April 2006 to end the decade-long Maoist insurgency, economic growth slowed in FY2007 owing mainly to unfavorable weather and renewed political unrest. The political transition is complex and remains the key risk to growth and development prospects. However, the renewed commitment of the main political parties to the peace process offers hope that the country can continue to make headway in its aspirations for social and economic transformation and in the delivery of a tangible peace dividend.

Economic performance

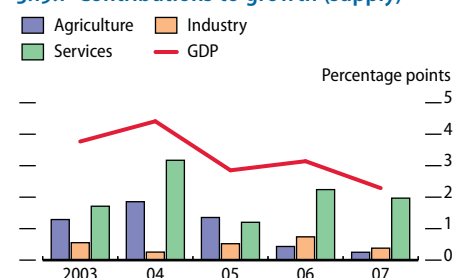
The peace process was set back by two major developments in 2007: violent unrest in the Terai region (the lowlands bordering India) over political, economic, and social exclusion of the Madhesi (Terai-based) people; and postponement, twice, of the constituent assembly elections due to differences among the coalition partners over the proclamation of a republic and the electoral process. Still, the prospects for the constituent assembly elections—a key milestone in the peace process—improved significantly following a December 2007 agreement among the political parties on the main issues. The twice-postponed polls were rescheduled for 10 April 2008 and the Communist Party of Nepal–Maoists, in the wake of this agreement, rejoined the interim Government, which they had left in September 2007. A political deal reached with Madhesi groups in late February 2008 enhances the likelihood that the elections will proceed in April.

The improved security conditions in the wake of April 2006's cease-fire are expected, in time, to lead to a more stable environment for the economy. However, the peace dividend has been slow to materialize and overall GDP growth slackened to 2.3% in FY2007 (ended mid-July 2007) from 3.1% in FY2006 (Figure 3.19.1). The deceleration stemmed from poor weather and renewed political disturbances, which crimped the performances of agriculture and industry, respectively. However, activity in services was reasonably robust due in part to a rebound in tourism.

Inclement weather continued to hamper agriculture (with a 36% share in overall GDP—Figure 3.19.2) in FY2007, which decelerated to 0.7% from 1.1% the previous year. Poor monsoon rains caused paddy output to fall by 12.5%, and affected other major crops, such as potatoes and oilseeds. Agriculture's contribution to GDP growth in FY2007 was thus limited to only 0.3 percentage points.

Long-standing structural weaknesses, such as low productivity and input supply and transport disruptions, slowed industrial activity. Industry expanded by only 2.2% in FY2007 (contributing 0.4 percentage points to GDP growth), compared with 4.3% in the previous year.

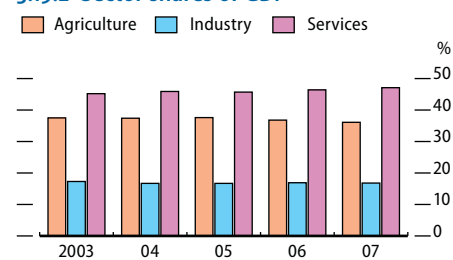
3.19.1 Contributions to growth (supply)



Source: Ministry of Finance, available: <http://www.mof.gov.np>, downloaded 7 March 2008.

[Click here for figure data](#)

3.19.2 Sector shares of GDP



Source: Ministry of Finance, *Economic Survey Fiscal Year 2006–07*, available: www.mof.gov.np, downloaded 1 February 2008.

[Click here for figure data](#)

Construction, manufacturing, and utilities were particularly hard hit by labor agitation, political unrest, and oil supply and electricity disruptions, all of which raised transaction costs.

While services also slowed for many of the same reasons, the sector maintained a reasonable pace at 4.1%, contributing 2.0 percentage points to overall growth. Its performance was underpinned by expansion of the transport, real estate, storage, and communications subsectors, which benefited from the improved mobility of people and goods. Hotels and restaurants also grew, albeit more slowly, reflecting a sharp increase in tourist arrivals after a 5-year slump.

On the demand side, the economy came to depend even more heavily on private consumption as investment remained dormant due to the continued political uncertainty. The share of gross fixed capital formation (in GDP) fell to 20.3% in FY2007 from 20.9% a year earlier, while private consumption continued to increase its share of GDP on the basis of sustained remittance inflows.

Average consumer inflation moderated to 6.4% from 8.0% in FY2006 despite higher food prices. The unwinding of the base effect of the hike in petroleum products in March 2006 kept the growth of nonfood goods and services in check at 5.5%, while the Nepalese rupee's appreciation also made imports cheaper. Monthly inflation increased to 5.7% by mid-December 2007, from a July low (Figure 3.19.3).

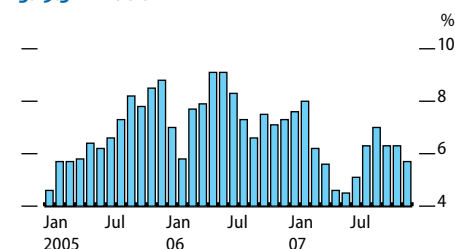
The central bank kept the bank rate unchanged at 6.5% in FY2007, and maintained the exchange rate peg to the appreciating Indian rupee, damping inflation pressure to some extent. A slower rise in net foreign assets, partly caused by the appreciation of the Nepalese rupee and slowing remittance inflows, also helped rein in the surge in banking system liquidity. Broad money (M2) growth therefore slowed to 14.0% compared to 15.4% in FY2006. Reserve money also slowed to only 7.8% in FY2007, down from 14.0% in FY2006.

The budget deficit widened marginally to 2.0% of GDP in FY2007, from 1.6%, despite a significant increase in expenditures (Figure 3.19.4). While recurrent spending swelled by 20%—on account of costs related to rehabilitation of former Maoist combatants, compensation to victims of the conflict, and a hefty pay rise for civil servants—it was lower than budgeted on savings from the deferred constituent assembly elections. Capital spending surged by 32%, reflecting the increased scope for development activities following the initiation of the peace process.

Total receipts grew by 19% owing to improved revenue collections. Tax revenues went up by 22%, mainly on improvements in tax administration and a broadening of the income and excise tax bases. As foreign aid receipts fell short of the budgeted amount by nearly 1% of GDP, domestic financing rose to 1.6% of GDP, marginally exceeding the budgetary provision.

The current account surplus declined to 0.5% of GDP in FY2007 amid a widening trade deficit and slower remittance inflows. With capital inflows also slowing, the overall balance of payments surplus declined from 4.3% of GDP in FY2006 to 0.9% of GDP in FY2007. Foreign exchange reserves stood at \$2 billion in mid-December 2007 (Figure 3.19.5), equivalent to about 8 months of imports of goods and services.

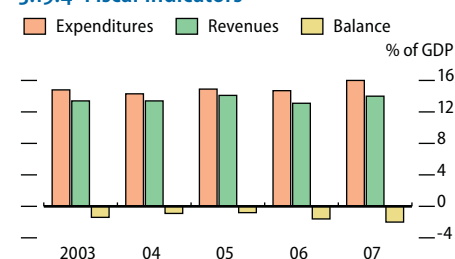
3.19.3 Inflation



Source: Nepal Rastra Bank, available: <http://www.nrb.org.np>, downloaded 6 March 2008.

[Click here for figure data](#)

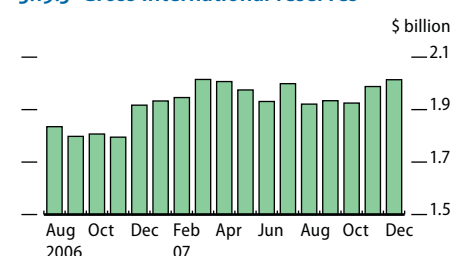
3.19.4 Fiscal indicators



Source: Ministry of Finance, *Budget Speech*, various years.

[Click here for figure data](#)

3.19.5 Gross international reserves



Source: Nepal Rastra Bank, *Current Macroeconomic Situation*, 2007 and 2008.

[Click here for figure data](#)

The trade deficit remained large at 17.3% of GDP in FY2007 as merchandise export growth remained sluggish at 4.3% (though up from 2.6% in the previous year). This was caused mainly by decelerating exports to India, from 6.5% in FY2006 to 2.8%. Exports to third countries declined by 1.3%, continuing the contraction of 1.4% a year earlier, reflecting reduced competitiveness in readymade garments, pashmina, woolen carpets, and other handicrafts. Imports (of which oil imports from India constituted 22%) rose by 11.3%, compared with growth of 17.8% in the previous year.

Travel receipts grew by 8% to reach \$143.5 million, switching from the previous year's 8% decline, but overall net services remained negative at 1.2% of GDP. Workers' remittances—a major source of foreign exchange earnings, which had jumped by 49% in FY2006 reflecting a significant rise in overseas migration as well as increased remittance receipts through official channels—slowed to just over 4% in FY2007 to reach \$1.4 billion (14.2% of GDP). Even then they remained nearly high enough to cover the trade deficit (Figure 3.19.6).

The Nepalese rupee appreciated by 14.3% against the US dollar during FY2007 as a result of the domestic currency's peg to the Indian rupee. However, the trade-weighted real effective exchange rate appreciated by 6.9%.

Economic prospects

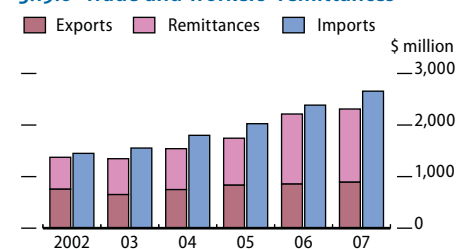
Medium-term growth and development prospects hinge on achieving lasting peace and stability, preserving macroeconomic stability, and effectively implementing key structural reforms in the fiscal, financial, labor, and governance sectors (Boxes 3.19.1 and 3.19.2). Further scaling up capital spending, especially on infrastructure and social sectors in rural areas, is also required to stimulate economic activity and support the peace process. The FY2008 budget is appropriately focused on boosting infrastructure and social sector spending within the framework of the Three-year Interim Plan (FY2008–FY2010). Rehabilitation, reconstruction, and recovery from the decade-long insurgency are key priorities of the Plan, which targets annual GDP growth of 5.5%.

The rise in global oil prices could constrain Nepal's prospects somewhat as the country is fully dependent on imported oil. Timely adjustment toward a market-oriented pricing mechanism (including a move toward their deregulation) would be important to overcome chronic fuel supply disruptions and give impetus to the ailing industry sector. Power shortages have also hit domestic industries hard, lowering their capacity utilization. Hence, it is encouraging that the Government has recently taken steps to attract private investment to hydropower.

Assuming normal weather conditions and continued progress in the peace process, GDP is forecast to rise by 3.8% in FY2008 and 4.3% in FY2009. Agriculture is likely to expand by 4.0% in FY2008 on the basis of strong growth in rice output, with a similar performance expected in FY2009 if weather patterns remain favorable. Improved security conditions in rural areas should facilitate transport of agricultural inputs and greater output.

Industry can be expected to pick up marginally with the probable

3.19.6 Trade and workers' remittances



Source: Nepal Rastra Bank, *Recent Macroeconomic Situation*, available: <http://www.nrb.org.np>, downloaded 14 February 2008.

[Click here for figure data](#)

3.19.1 Selected economic indicators

	2008	2009
GDP growth	3.8	4.3
Inflation	7.0	6.5
Current account balance (% of GDP)	1.0	1.0

Source: Staff estimates.

3.19.1 Development challenges

Taking the ongoing peace process to a logical conclusion and establishing lasting peace and stability are undoubtedly the immediate challenge to Nepal's development. However, Nepal also faces a number of other longer-term development challenges, even assuming a smooth transition to a new political order. Among these is the need for labor market reforms, which are long overdue given the existence of a low-skilled workforce compounded by rigid labor laws.

political stability and some improvement in the business environment. However, a significant upturn is unlikely in view of the lingering political uncertainties, long-standing structural weaknesses of low productivity, underemployment, and persistent economywide infrastructure bottlenecks. While manufacturing is likely to remain subdued, construction and utilities (such as predicted generation of 70 megawatts of electricity from the Middle Marsyangdi Hydroelectric Project by late 2008) could contribute to a modest increase in industrial output. On this basis, industry is forecast to grow by 2.5% in FY2008 with modest pickup to 3.0% in FY2009.

Expansion in services is seen continuing, on the back of a sustained recovery of tourism. The renewal of air service agreements with the People's Republic of China, Malaysia, and Thailand, as well as additional local air services, should help lift tourist arrivals further. The overall boost to services by the rebound in tourism, its knock-on effects on other subsectors, and continued increase in construction and real estate activities can, however, be expected to be moderated by the impact of fuel and power shortages, especially on the transport and communication sub-sector. On balance, services growth is forecast to be sustained at 4.2% in FY2008 and pick up moderately to 5.0% in FY2009.

On the demand side, remittances will remain the main driver of consumption. New labor agreements with Asian and Gulf countries, such as Republic of Korea, Malaysia, and Qatar, last year should keep pushing up employment numbers abroad. However, the rapid growth in emigration underscores the limited job creation in the country. Raising investment in activities that could boost employment growth will depend on a conducive business climate in which disruptions are minimized and economywide bottlenecks resolved.

Inflation is expected to remain above the central bank's targeted 5.5% in the next 2 years given the rising fiscal imbalances and the need for further upward adjustments of fuel prices. Despite its salutary impact on paddy production, the 2007 monsoon flooded some parts of the country, destroying vegetable crops. This, combined with the rice shortages caused by India's temporary restriction on foodgrain exports, could lift food prices. The 17% hike in civil servants' salaries in the FY2008 budget is also likely to contribute to inflation pressure. Inflation is, therefore, forecast to increase to 7.0% in FY2008, but moderate to about 6.5% in FY2009.

On the external front, the trade deficit is expected to widen further as the domestic currency's appreciation would make imports cheaper while exports are forecast to gradually recover following the renewed bilateral trade treaty with India, which exempts Nepalese exports from certain customs duties. However, until persistent economywide bottlenecks are eased and exports are diversified, export performance is likely to remain sluggish. Imports are projected to rise, reflecting economic recovery and appreciation of the Nepalese rupee. Higher tourist arrivals and a sustained inflow of remittances should help offset the trade imbalance and sustain a current account surplus of about 1% of GDP in the forecast period. The overall balance of payments is also expected to remain in surplus on account of increased aid flows.

3.19.2 Employment and labor reform

While the Labor Act of 1992 provides limited flexibility for employers to rationalize business operations, the rights and interests of workers are also inadequately protected. For instance, under the Act, a worker performing 240 days of work is guaranteed a permanent position irrespective of productivity, thus encouraging employers to resort to contractual employment or foreign labor to avoid the costs associated with regular employment. Yet there is no mechanism in place for reviewing minimum wages or ensuring proper working conditions.

Largely because of these constraints, productive job creation has lagged far behind the large number of new entrants to the labor force each year. Fortunately, overseas migration has emerged as a major source of employment for Nepalese workers over the past decade, providing significant remittance income (rising from \$641 million in FY2001 to \$1.4 billion or about 14.2% of GDP in FY2007), which far exceeds the combined earnings from exports and tourism.

Further, remittance income was the key contributor to the 11% decline in poverty between FY1996 and FY2004. However, there is still much scope for policy and administrative reforms to better manage overseas migration, improve overall conditions for migrant workers, and upgrade their skills for more remunerative employment.

Poor labor relations remain a key constraint to achieving higher and more broad-based economic growth, even with the rapid expansion in overseas employment. With the end of the conflict and the integration of leftist parties into mainstream politics, trade union activities have in fact escalated, resulting in frequent disruption of business activities.

This recent deterioration in labor relations therefore suggests an urgent need for a comprehensive reform of the labor laws, to ensure adequate flexibility required by private businesses while protecting the rights and interests of employees in the new political context.

Pakistan

Improved economic fundamentals have enhanced the resilience of the economy and helped it absorb shocks, including higher global oil prices and 2005's devastating earthquake. But growth has generated a heavy imbalance in the external current account, which could affect economic momentum. The current account deficit has been financed largely by strong incoming foreign investment. External sources have also been employed, increasingly, to finance the fiscal deficit. Issues of long-term sustainability therefore arise, especially in a context of high global oil and commodity prices and domestic political uncertainties.

Economic performance

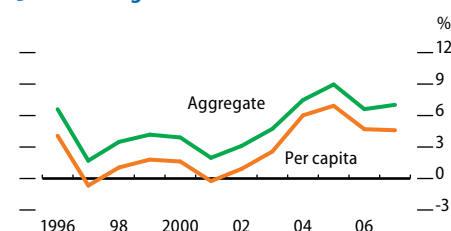
At 7.0%, growth was strong in FY2007 (ended June 2007) for the fourth consecutive year (Figure 3.20.1). This trend has lifted per capita income and consumption levels, and reduced poverty incidence by 10.5 percentage points between FY2001 and FY2005 (Figure 3.20.2). Employment increased steadily according to labor force statistics, with 8.6 million new jobs created between FY2002 and FY2006. The resulting decline in unemployment from 8.3% to 6.2% compensated for the sharp rise in the latter half of the 1990s. However, the high level of youth unemployment remains worrying (Box 3.20.1), and income distribution deteriorated between FY2001 and FY2005 with the Gini coefficient rising moderately from 0.28 to 0.30.

Having remained the main contributor to economic growth in FY2004 to FY2006 (Figure 3.20.3), real consumption growth decelerated to 3.8% in FY2007 (having peaked at 11.7% in FY2005), on account of tightening monetary policy, rising interest rates, and declining consumer lending. Moderating but still-buoyant consumption, coupled with rising investment, bolstered aggregate demand.

Total investment increased to 23.0% of GDP in FY2007 from 21.8% the year before, to become the primary contributor to growth for the first time. Private investment increased to 16.2% of GDP from 15.4%, supported by improving business confidence and an increase in public investment. Private savings increased between FY2005 and FY2007 but, given continued strong consumption, the rise in savings was not enough to finance the expanded private investment. This pushed the private savings-investment gap to 3.4% of GDP in FY2007 from 2.9% in FY2006 (Figure 3.20.4).

Foreign direct investment (FDI) reached a record \$5.1 billion in FY2007, or 3.6% of GDP, up from 2.7% of GDP a year earlier. The privatization program provided the early impetus for the rise in FDI, centered on services (primarily banks and telecommunications). Even without privatization, FDI flows averaged healthy annual growth of

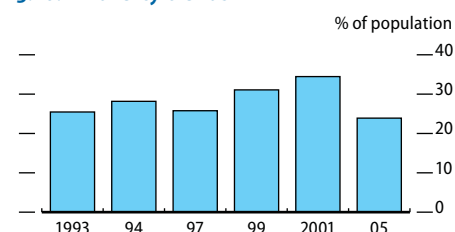
3.20.1 GDP growth



Source: Ministry of Finance, *Pakistan Economic Survey*, various issues.

[Click here for figure data](#)

3.20.2 Poverty trends



Source: Ministry of Finance, *Pakistan Economic Survey*, various issues.

[Click here for figure data](#)

3.20.1 Demographic transition and youth unemployment

The Government has placed a priority on achieving a “demographic dividend” from falling fertility rates and child dependency ratios, and from a rising share of young entrants into the labor force. Fertility rates have declined from over six in the 1970s to four in FY2006, and the share of the young (0–14 years) in the total population from 44.5% in 1981 to 36.8% in 2006. The share of the working age group (15–59 years) increased from 48.5% to 57.2% over this period.

This demographic transition could catalyze the country’s economic transformation, provided that the growing population in the working age group can be meaningfully absorbed in the labor force and can increase its productivity levels by acquiring improved education and training.

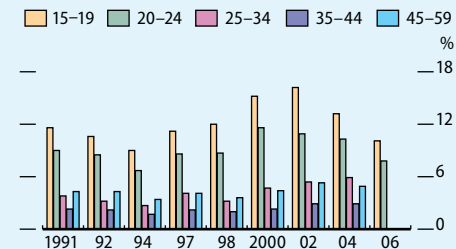
A demographic dividend is often accompanied by a rapid rise in the participation rates of the younger working age population. The overall labor force participation rate showed a modest gain of 2.3 percentage points between FY2004 and FY2006, reaching 32.2% in the latter year. The increase in the participation rate of the younger working age population subgroup (15–29 years) ranged from 1% to 2.5%, and on average grew less than the overall participation rate. The female participation rate also climbed, but remained low (13.3% in FY2006). It needs to rise faster for the country to reap the benefits of the demographic transition.

Unemployment has declined in recent years. But an age-group data breakdown shows that the younger

population has consistently experienced higher than average unemployment. In FY2004, the rates for age groups 15–19 years and 20–24 years, of 13.2% and 10.3%, respectively (Box figure) were well above the overall rate of 6.2%. Youth unemployment, therefore, remains a leading contributor to total unemployment.

That such a significant proportion of the young population is unemployed is a concern if the demographic dividend is to be secured. The apparent mismatch between the requirements of the labor market and the skills and qualifications of young labor force entrants needs to be reconciled, to improve these entrants’ employability prospects.

Unemployment by selected age group



Source: Federal Bureau of Statistics, Pakistan Labour Force Survey, various issues.

[Click here for figure data](#)

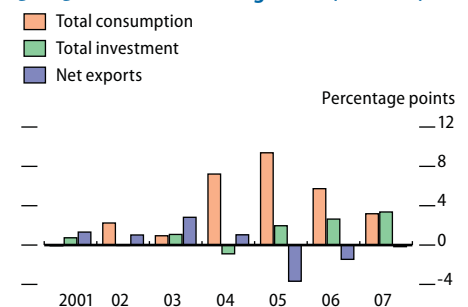
Source: G.M. Arif and Nusrat Chaudhry. 2007. “Demographic Transition, Education, and Youth Unemployment in Pakistan.” Asian Development Bank, Pakistan Resident Mission.

72% over the 5 years FY2003 to FY2007, reflecting improved investor confidence in services (since very little foreign investment went into goods-producing sectors). Domestic investment in manufacturing grew by an annual average of 25% over the 4 years FY2004 to FY2007 and partly made up for the lack of foreign interest. Still, the slowing in textile exports in FY2007, for example, may in part stem from the failure to attract sizable FDI. As a result, manufacturing largely failed to realize any complementary advantages of FDI in terms of improved business management practices or modern technologies.

Even though stimulated by domestic investment, overall manufacturing growth decelerated to 8.4% in FY2007 from 10.0% in FY2006, due to slowing automobile, electronics, engineering, and textiles subsectors and to contraction in the fertilizer and paper subsectors. Weakening domestic demand and a rising power supply deficit were factors in manufacturing’s deceleration, such that its contribution to real GDP growth fell to 23% from a peak of 31% in FY2004 (Figure 3.20.5), when in fact structural transformation of the economy would have required the reverse.

Posting 5.0% expansion, agriculture rebounded on the back of strong wheat and sugarcane crops and robust performance of livestock: benign

3.20.3 Contributions to growth (demand)



Source: Ministry of Finance, Pakistan Economic Survey, 2006/07.

[Click here for figure data](#)

weather and strong uptake of agriculture credit catalyzed the sector's performance. Yet the economy's main growth driver remained services, with finance, insurance, and community and social services showing especially high expansion. The sector's contribution to GDP growth rose to 60.0% in FY2007.

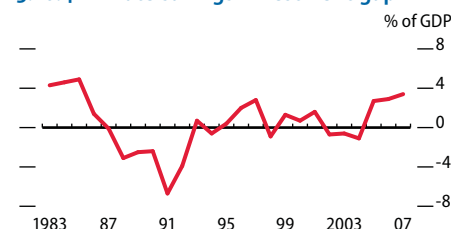
High growth in the services sector and the still-robust performance of industry strengthened government revenues. Direct tax collection leaped by 48% in FY2007 (resulting in an 18.2% increase in total tax collection), underpinned by an increase in corporate profits and overall improved tax administration. The resulting rise in the share of direct taxes in total taxes to 40% from 31.5% in the fiscal year improved the progressivity of the tax system. However, the tax base remained narrow with agriculture, retail trade, and other sectors significantly undertaxed. Consequently, the tax-to-GDP ratio continued to decline to 10.2% in FY2007 from 10.7% in FY2002, with the growth in nominal GDP outstripping the rise in tax revenues.

Nontax receipts strengthened by over 26% in FY2007. The impact of the overall improved revenue position on the fiscal situation was, however, checked by a sharp increase in current expenditures led by interest payments and continued expansion in development spending, the latter of which rose to 5.0% of GDP in FY2007. Total expenditures rose to 19.2% of GDP, overshooting the 17–18% band that, in recent years, had been achieved through prudent fiscal management. The fiscal stance remained expansionary (Figure 3.20.6), and the fiscal deficit in FY2007 stayed at around 4.3% of GDP for the second year, in part to meet the additional requirements for earthquake reconstruction, but also on account of increased development and current expenditures. The revenue balance and the primary balance continued to register deficits in FY2007, such that the development budget was financed through borrowing.

With expansionary investment and fiscal stances, the trade balance has been in deficit since FY2005, and rapidly rising imports have outpaced exports (Figure 3.20.7). Imports in FY2007 rose sluggishly, however, amid tighter credit conditions and slowing international oil price rises. Machinery imports slackened their pace, recording a decline in textile machinery and telecommunications imports after the completion of substantial investment to modernize these subsectors. However, imports of power-generating and construction machinery climbed strongly. Food imports declined, given buoyant domestic wheat production. Exports performed poorly, slowing to only 4.4% growth, down from an average of 16% over the previous 4 years. Decelerating textile exports and shrinking nontextile exports were the main factors. Consequently, the trade deficit in FY2007 rose sharply to 6.8% of GDP.

This, alongside the deficits in the services and income accounts, exacerbated the current account deficit. On services, the continued United States contribution (\$1.2 billion in FY2007) to the Government for military logistics did not offset the impact of higher shipping and transportation costs, and the deficit rose to \$4.2 billion. The income account deficit suffered from increased repatriation of investment income flows and grew to \$3.6 billion. Even though workers' remittances rose to \$5.5 billion in FY2007 from \$4.6 billion in FY2006, the current account deficit widened sharply to \$6.9 billion (4.8% of GDP) in FY2007 from \$5.0 billion in FY2006 (3.9% of GDP).

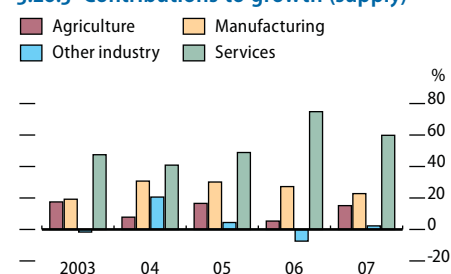
3.20.4 Private savings-investment gap



Source: Staff estimates based on data from Ministry of Finance.

[Click here for figure data](#)

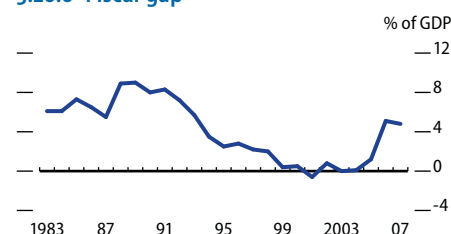
3.20.5 Contributions to growth (supply)



Source: Ministry of Finance, Pakistan Economic Survey, 2006/07.

[Click here for figure data](#)

3.20.6 Fiscal gap



Note: Tax revenues less current and development expenditures equal the fiscal gap.

Source: Staff calculations based on data from Ministry of Finance.

[Click here for figure data](#)

The key issue with managing the external current account deficit (and its counterpart savings-investment gap) as well as the fiscal deficit, is whether these twin deficits can be financed sustainably over time. The present pattern of financing relies heavily on external inflows to the financial account, which are of course volatile.

With a record-breaking surplus of \$10.1 billion in FY2007, the financial account financed the current account deficit (Figure 3.20.8). FDI jumped and portfolio investment tripled to \$3.3 billion. Official development assistance, too, remained significant. External resources financed as much as 53% of the fiscal deficit, or about \$3.3 billion, in FY2007 (Figure 3.20.9). This allowed the Government to diversify its borrowing base and reduce its reliance on domestic banks, but also created adverse implications for the external account through increased interest payments for loan-based financing and profit repatriation for investment-based financing. The savings-investment gap was financed with external resource inflows, the need for which may further rise if investment continues to climb at rates higher than that of national savings.

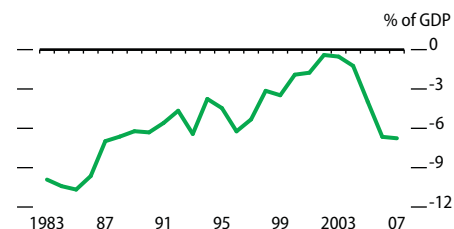
High external inflows have put upward pressure on the exchange rate and complicated monetary policy management. The State Bank of Pakistan (SBP) stabilized the exchange rate by purchasing excess foreign exchange, securing only a modest appreciation in the real exchange rate in FY2007 (Figure 3.20.10). This, however, led to an almost fourfold increase in net foreign assets of SBP, which despite the sterilization efforts, failed to restrain M2, which grew by 19.3% in FY2007, much higher than SBP's target of 13.5% (Figure 3.20.11).

Higher than targeted growth in M2 was seen even though SBP had, in view of the inflation pressure, tightened monetary policy at the start of the fiscal year by raising the reserve requirements for banks, increasing the policy rate, and draining excess liquidity from the market. Nonfood and core inflation fell during the year. But this was largely offset by an increase in food prices, resulting in a rate of inflation that continued to hover around 8% in FY2007 (Figure 3.20.12). While economywide data on wages are unavailable, evidence from construction activity indicates significant real wage growth on the back of that industry's ongoing boom.

Besides external financing, domestic financing of the fiscal deficit also created problems for monetary policy management as the Government raised its borrowings from SBP in the first half of FY2007, though most of this debt was retired in the second half with the availability of eurobond and other foreign receipts. The Government also resorted to higher nonbank borrowings from the National Saving Scheme and long-term Pakistan Investment Bonds, which together helped contain monetization of the deficit.

The overall experience with monetary management in FY2007 compelled SBP to adopt a new monetary framework to improve its control over reserve money growth and inflation. In August 2007, it imposed quarterly ceilings on its lending to the Government, curtailed its role in export refinancing, and raised its discount rate by a further 50 basis points. For this framework to work, the fiscal deficit needs to be contained and its financing arranged through balanced recourse to domestic and external sources. On the domestic side, bank borrowing by government requires restraint, with greater nonbank financing through

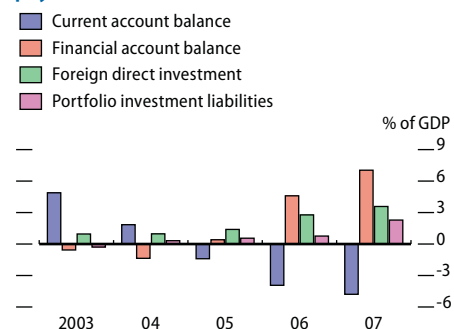
3.20.7 Trade balance



Source: Staff calculations based on data from State Bank of Pakistan.

[Click here for figure data](#)

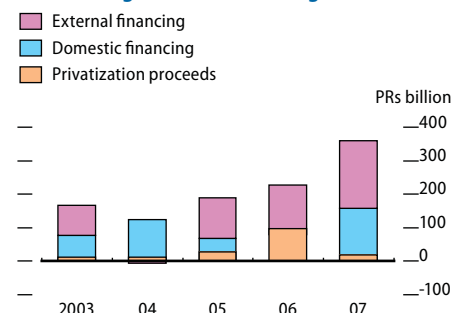
3.20.8 Selected components of balance of payments



Source: State Bank of Pakistan, Annual Report 2006/07.

[Click here for figure data](#)

3.20.9 Budget deficit financing



Source: State Bank of Pakistan, Annual Report 2006/07.

[Click here for figure data](#)

Pakistan Investment Bonds and other instruments. The tax base itself needs to widen considerably to enhance revenue collection.

Equally, the pressure on the external account to finance the deficits should not be allowed to erode the sustainability of the external debt trajectory. External debt rose from \$34.0 billion in FY2005 to \$38.7 billion in FY2007 in response to the buildup of the twin deficits. Debt sustainability, however, continued to improve, with the ratio of external debt to GDP declining from 46.1% in FY2002 to 26.9% in FY2007 (Figure 3.20.13).

The ratio of external debt to foreign exchange earnings had also fallen for several years until FY2006, but the rising debt level and lackluster export earnings that year resulted in a small increase in this ratio. In view of this and the ending of the debt relief obtained by Pakistan from the Paris Club in FY2002, with debt repayments due to restart in 2008, continued careful management and monitoring of external debt become critical.

Economic prospects

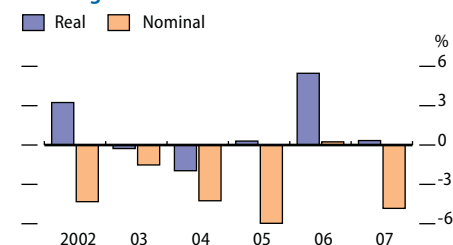
Growth is expected to moderate to 6.3% in FY2008 and then pick up slightly to 6.5% in FY2009, underpinned by consumption expenditures. These forecasts are lower than the average 7% growth rate of recent years, as the ongoing power and gas shortages caused by an aging energy infrastructure, chronic underinvestment in expansion and maintenance, and unsustainable pricing regimes slow production and constrain domestic and foreign investment.

Political uncertainty and the security environment in the lead-up to the recent general elections and the subsequent formation of a new Government have impacted capital inflows, and may curtail investment, dragging down performance. Revenue shortfalls produced by slowing economic activity and expenditure overruns may limit fiscal space and reduce public investment, which in turn may affect private investment and growth. In addition, continued tight monetary policy conditions in view of persistent inflation could serve to damp demand and limit any expansion.

The growth of agriculture will be lower than earlier expected because of pest attacks and floods. Accompanying the resulting shortfall in cotton production is moderating textile manufacturing sector growth and an overall slowdown in large-scale manufacturing in the first half of FY2008. Textile exports continue to grow slowly. The projected softening of the global economy and ongoing power shortages could rein in exports further. Services are expected to maintain robust growth, buttressed by a strong performance from private telecommunications companies.

Despite tight monetary conditions and moderating growth, inflation is expected to overshoot SBP's target of 6.5% and reach 8.0%, reflecting continued pressure on food prices and the pass-through of some higher global oil prices. Recognizing that continued monetary policy tightening will have only a limited impact on controlling food inflation, the Government has announced various administrative measures, such as banning export of wheat and allowing its import, cracking down on hoarding, expanding the network of utility stores that provide subsidized

3.20.10 Change in average effective exchange rate



Source: State Bank of Pakistan, Annual Report 2006/07.

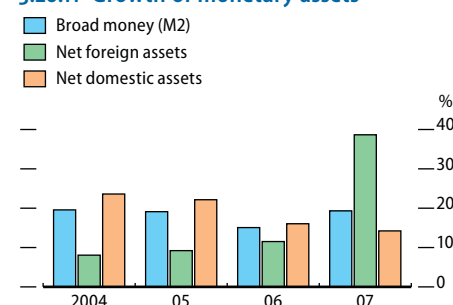
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3.20.1 Selected economic indicators

	2008	2009
GDP growth	6.3	6.5
Inflation	8.0	6.5
Current account balance (% of GDP)	-6.3	-5.8

Source: Staff estimates.

3.20.11 Growth of monetary assets



Source: State Bank of Pakistan.

[Click here for figure data](#)

food items, and most recently raising the procurement price of wheat to improve the supply response.

Still, inflation pressure has persisted, with food prices rising to 11.6% in January 2008 (based on a 12-month moving average), compared with 8.5% a year earlier. The broadening of this pressure to nonfood, non-oil items visible in the first half of FY2008 and the increase in utility prices in January 2008 could add to inflation. In FY2009, it is projected to decline to around 6.5% as food prices stabilize with easing of supply-side constraints.

The fiscal deficit will likely exceed the Government's target of 4.0% of GDP for FY2008 (it slipped to 3.6% of GDP in the first half of FY2008 from 1.9% in the same period a year earlier), mainly on higher interest payments and a rise in development expenditures. In an election year, the Government deferred the pass-through of the higher international oil prices to consumers until 1 March. But as this was small relative to the international oil price rise, the subsidy expanded to an estimated PRs60 billion (0.6% of GDP) in the first half of FY2008.

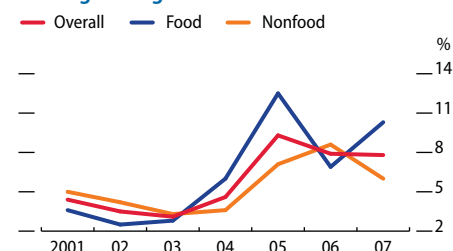
On the revenue side, as a result of slowing economic activity in the first half of FY2008, tax collection by the Federal Board of Revenue stayed below the target for the first half of the fiscal year. Direct tax collection fell relative to the same period of FY2007.

With the fiscal deficit widening, and external inflows remaining subdued, the Government's borrowings from SBP in FY2008 had risen more than threefold by 19 January 2008 relative to the same period in FY2007. This led to a 90% increase in the net domestic assets of the banking system and resulted in annualized growth of 19.2% in M2 (as against a targeted 13.6% for FY2008). The purpose of the August 2007 tightening of monetary policy to control monetary aggregates was thus frustrated and inflation persisted. Fearing accelerated inflation pressure, SBP once again tightened monetary policy in February 2008 by raising the policy discount rate by 50 basis points and increasing the cash-reserve requirements for 1-year deposits.

The current account deficit in the first 7 months of FY2008 worsened by 47% compared with the same period in FY2007, and is likely to widen to 6.3% of GDP for the full year. The deficit is under pressure because of a higher oil import bill and deteriorating income and services accounts, despite moderate growth in exports and continued strong receipts of workers' remittances. The trade gap widened by over 25% in the first 7 months of this fiscal year. Textile exports remained, and will continue to be, weak, on expected lower cotton production and increased regional competition as the effect is felt of the ending of safeguard measures imposed on clothing exports from the People's Republic of China by the European Union and the United States.

Higher shipping costs following increases in oil prices will affect the services account further, which had already widened by almost 52% in the first 7 months of FY2008. The income account may also feel the strain of larger external borrowings by the Government to finance the deficits, the increased cost of commercial borrowing resulting from the downgrading of Pakistan's credit rating outlook from stable to negative in early November 2007, and the start of payments in 2008 on the rescheduled Paris Club debt.

3.20.12 Consumer price index, 12-month moving average



Source: State Bank of Pakistan.

[Click here for figure data](#)

3.20.13 Selected debt-sustainability indicators



Source: State Bank of Pakistan, Annual Report 2006/07.

[Click here for figure data](#)

The financing of the current account deficit remains a key issue given the deterioration in the financial account caused by the halt in foreign portfolio investment in the first 7 months of FY2008. Difficulties in global financial markets could further affect capital inflows. In addition, planned issues of global depository receipts may not materialize. The declaration of emergency on 3 November 2007 and the downgrading of Pakistan's credit rating outlook resulted in a net outflow of \$243 million from special convertible Pakistan rupee accounts held by foreigners during the month. Altogether, net foreign investment tumbled by 34.9% in the first 7 months of FY2008 relative to the same period in FY2007, caused by a slowdown in FDI growth and virtually no portfolio investment as foreign investors shied away from the stock markets—a demonstration of the high level of volatility of such inflows.

With a weakened financial account, the burgeoning current account deficit led to a drawdown on SBP's foreign reserves of almost \$1.5 billion between 31 July 2007 and 15 February 2008. External debt rose by another \$2.5 billion in the first half of FY2008 as a consequence of the rising current account and fiscal deficits. The position needs to be closely monitored.

Development challenges

The economy has to build greater capacity to finance its investment needs with internal resources, namely savings. It can do this through structural improvements in three key areas. The first is to strengthen and diversify the manufacturing export base in view of the current concentration of exports in too few sectors, namely textiles, rice, leather, and petroleum products, and too few destinations, namely the United States, European Union, and United Arab Emirates.

Strengthening the competitiveness of exports through infrastructure improvements, particularly via investing in and reforming the power sector, ensuring higher product quality standards with improved labor force training, strengthening export presence in new markets such as the People's Republic of China and Central and South Asia, and attracting FDI in important manufacturing industries, will be key for developing a diversified export base.

The second improvement is to expand the tax base by bringing undertaxed sectors into the tax net. It is critical to mobilize greater domestic resources to reduce the call on external financing for balancing the budget and to sustainably enhance development expenditures.

The third is to boost national savings and reduce the savings-investment gap, and control excessive accumulation of external debt.

Sri Lanka

The resurgent conflict has not yet had an impact on growth, which has been driven by strong domestic demand and buoyant private sector activity, but global food and oil price increases, in combination with expansionary macroeconomic policies, have doubled inflation. Growth is forecast to decelerate over the next 2 years, as the global slowdown affects key export markets, and as the Government takes steps to cool the economy. Further out, achieving the 10-year development plan's goals depends crucially on the success of policies to improve productivity.

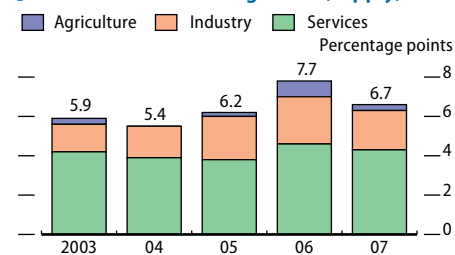
Economic performance

After expanding rapidly in 2006 the economy slowed in 2007, but still showed robust growth of an estimated 6.7%. Several important characteristics emerge from these 2 years, which were marked by a renewed, and escalating, civil conflict. First, the economy has proven more resilient than expected by most observers (both local and international). Second, post-tsunami reconstruction, rising credit expansion, and public sector investment continued to fuel growth in construction, which now accounts for almost 7.4% of GDP. Third, expansionary fiscal policies, largely negative real interest rates, and high remittances also substantially boosted aggregate demand.

On the supply side, services remained strong (especially telecommunications, finance, international port services, and logistics), contributing 64% of GDP growth in 2007 despite the conflict-related slowdown in tourism (Figure 3.21.1). While tourism contributes only 1–2% of GDP, the social costs of fewer tourists are high, as an estimated 300,000 jobs are linked to the industry. Agriculture fell back to its lackluster performance of the past, unable to sustain the post-tsunami recovery of 2006. The garment industry—the industrial mainstay—continued to weather difficult conditions. It grew by 7%, increasing exports to the European Union (EU) by 24%, taking advantage of the GSP Plus concessions granted in 2005, while its exports to the United States (US) decreased by 3.4%.

Soaring global prices for fuel and food and high government bank borrowing were the main causes of the doubling of inflation in the Sri Lanka Consumer Price Index (SLCPI), from 9.6% to 20.2% (Figure 3.21.2). Inflation was 5 percentage points higher than the targeted rate in the Monetary and Financial Policy Road Map published by the central bank in January 2007. The bank largely met its targets of reserve money and broad money growth by the end of the year, although there were sizable deviations during the course of it. As in 2006, monetary policy was conducted primarily through open-market operations, which

3.21.1 Contributions to growth (supply)



Sources: Central Bank of Sri Lanka, *Annual Report*, various years; staff estimates.

[Click here for figure data](#)

pushed interest rates higher with the 91-day Treasury bill rate climbing by 7 percentage points over the year to 19%. To implement tightening, the central bank restricted access to the reverse repo window (for lending to commercial banks), but left its rate unchanged at 12.0%. Unlimited access to this window by some banks was a major factor fueling high credit growth in 2006. However, after interbank rates began to fluctuate, peaking at 40%, the central bank changed its policy in August. Access to the reverse repo window is now liberalized, though a penal rate ensures that its use is limited.

Higher interest rates reduced private sector credit growth from 24% to 20% year on year. However, the central bank cautioned in its Road Map that the success of its policies to bring down inflation would depend on government borrowing being kept within limits set by the central bank. During 2007, such borrowing varied substantially (Figure 3.21.3), complicating implementation of the Road Map.

Inflation in Sri Lanka is sensitive to public-sector credit expansion that causes an increase in the money supply. The continued heavy government borrowing from the banking system will exacerbate inflation pressure. The inflation impact of past modes of deficit financing is corroborated by the findings of the Government's think tank for economic policies, the Institute of Policy Studies of Sri Lanka, as well as the International Monetary Fund.

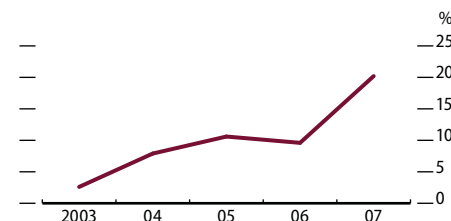
The sharp rise in inflation also reflects global food and fuel price increases, with their impact magnified by depreciation of the local currency against the US dollar for most of the year. Due to the global wheat shortage, wheat import prices rose by over 60% (in Sri Lanka rupee terms) in 2007. Reflecting both this and rises in other inputs (such as labor, transport, and marketing costs that are not solely supply driven), bread prices alone rose by almost 200%. The large share of food in the SLCPI (71.2%) is therefore a policy concern.

There were also substantial changes in government-administered fuel prices. Figure 3.21.4 shows the contribution to inflation of the food; transport; and housing, electricity, and fuel price subgroups in the new Colombo Consumer Price Index (CCPI-N), which shows that food was the prime source for the run-up in prices during the year. Inflation as measured by the CCPI-N, however, is slightly below that of SLCPI because of a lower weight for food.

Continued modernization of revenue administration broadened the tax base with the opening of 79,000 new tax files in 2006 and 2007. Lowered tax thresholds and increases in some import duties also raised revenue collection. These moves, in combination with lower than expected expenditure, contributed to a further reduction of the fiscal deficit to an estimated 7.7% of GDP.

The Government continued to focus on expanding public investment as a share of GDP, in line with its 10-year development plan (Figure 3.21.5). In the past, when the Government had not been able to secure financing for all projects in its ambitious investment pipeline, this underspending was shifted in part to current spending, causing it to be higher than anticipated in the budget plan. Both primary and current fiscal deficits, after peaking in 2004, continued to contract as a result of strengthening revenues, but remain in negative territory, which means that the

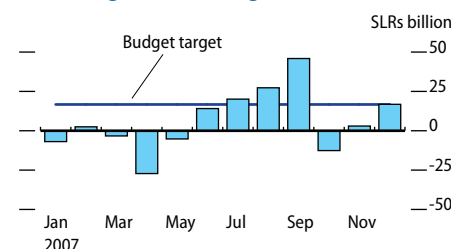
3.21.2 Annual inflation



Sources: Department of Census and Statistics; staff estimates.

[Click here for figure data](#)

3.21.3 Cumulative new government borrowing from banking sector



Source: Central Bank of Sri Lanka, *Weekly Economic Indicators*, various issues.

[Click here for figure data](#)

Government continues to borrow to fund part of current expenditures. Civil servants' salaries and pensions have grown as a share of GDP, while transfers and subsidies have fallen (Figure 3.21.6).

The costs of transfers and subsidies as a share of GDP have fallen since 2005, mainly the consequence of an end to fuel subsidies through the adoption of a formula for automatically adjusting domestic prices to import cost. However, wage costs have been increasing as a share of GDP, a result of an expanding civil service, upward salary and pension revisions, as well as an increase in the number of ministries (which now number 91). The average civil servant's salary, for example rose by 22% in 2006, more than twice the rate of inflation that year.

National defense spending (excluding civil security, internal administration, and law and justice) for 2007 is estimated at SLRs118 billion, taking up 15% of total government expenditure, or 2.6% of GDP. Yet this is still substantially lower than the level seen in 2000, when the Government was involved in an earlier major confrontation with the Liberation of Tigers of Tamil Eelam (LTTE).

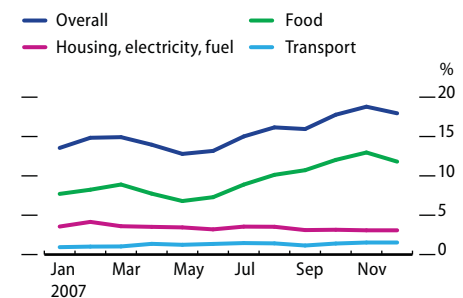
The trend of strong remittance growth since 2004 continued in 2007 to support the current account balance of payments. Remittances counterbalanced the continued high trade deficit, which fell slightly from the 2006 level, on account of lower import growth and a strong export performance (mainly garments). Notably, consumer imports fell by about 1%, reflecting the impact of higher duties and tariffs effective during the year (taxes on mid-range cars, for example, now are at 267% of the cost, insurance, freight value). For 2007, the current account balance-of-payments deficit amounted to 4.3% of GDP, compared with 5.3% in 2006.

The overall balance of payments, however, improved considerably in 2007, recording a surplus of \$570 million. This was largely due to a \$500 million sovereign bond issue. The government securities market was liberalized to allow foreign investors to participate (resulting in a net inflow of \$470 million in 2007) and official foreign exchange reserves increased (Figure 3.21.7). The central bank continued to intervene in the foreign exchange market during the year to stabilize the Sri Lanka rupee; however, in sharp contrast to 2006, total net sales of foreign currencies amounted to only \$5 million for all of 2007, compared to \$453 million in 2006. In the first 2 months of 2008, net purchases of dollars by the central bank amounted to \$360 million—a result of considerable foreign inflows driven by the sharp easing of monetary policy in the US.

Four years after starting preparations to obtain a sovereign credit rating, the Government made its first ever sovereign bond issue in September 2007. The issue was substantially oversubscribed, raising \$500 million at 8.25%. The yield on the bond has implications for the private sector, as it will now be used as a benchmark in pricing private sector borrowing from abroad. The Government used the \$500 million to retire its domestic debt held by the central bank. This lowered money supply growth and aided central bank monetary control, while bolstering foreign exchange reserves.

The Government has identified the decades-long neglect of infrastructure investment as a key obstacle to economic growth and countrywide development. Since it came to power, it has embarked

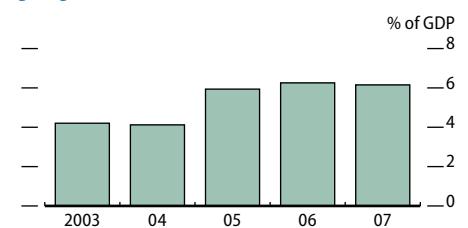
3.21.4 Inflation contributors



Source: Department of Census and Statistics.

[Click here for figure data](#)

3.21.5 Public investment



Source: Central Bank of Sri Lanka, *Weekly Economic Indicators*, various issues.

[Click here for figure data](#)

on implementing an ambitious infrastructure program to ensure the benefits of growth reach down to the poorer households and regions. Major investment projects that were embroiled in controversy over the last 20 years have taken off. Perhaps most important is a major coal-fired power-generating plant where construction started in 2007. Other projects where the Government is close to reaching financial closure include a major irrigation project (financed by the Islamic Republic of Iran), and another coal power plant (financed by India).

The Government in 2008 is expected to eliminate the large electricity subsidy. In early February this year, the Ceylon Electricity Board (CEB), invited public comments on a proposed substantial revision of the tariff structure, coupled with a large increase in the average price that is charged. The new tariff would eliminate the past subsidy element for wealthier households and set rates to provide a significant cross subsidy from these high-user households to the poorest 1 million households. The new tariff schedule increases the average weighted tariff by about 30%, ending CEB's quasi-fiscal losses. At present costs, the unrevised tariff rates would result in a subsidy ultimately costing the Government about SLRs25 billion, or 0.7% of GDP, for the year. Reflecting past losses, CEB's short-term debt amounts to SLRs60 billion, or 1.8% of GDP.

The Government, for the second year, largely maintained its policy of not providing retail fuel subsidies. It is the only country in South Asia to have done so, saving the Government the equivalent of approximately 0.7% of GDP annually since 2006. However, global price changes are quickly catching up with domestic price adjustments. Despite the latest hike in January 2008, gasoline prices are only partially cross subsidizing kerosene prices to make it SLRs14, and diesel SLRs11 per liter cheaper than it would be according to the formula that has been used to set retail prices (Figure 3.21.8), leading to renewed losses at the Ceylon Petroleum Corporation.

Economic prospects

The anticipated economic slowdown in both the EU and US and the escalating conflict at home add to the downside risks to economic growth in 2008–2009. The more protracted the military campaign against the LTTE, the higher its negative impact on economic growth, as it would strain government finances (unless public investment is cut), lead to more crowding out of private sector investment, and further increase inflation pressure.

The following forecasts rest on five major assumptions. First, the intensity of the conflict (and thereby defense spending) will not be substantially above levels experienced at the time of writing (March 2008), and any disruption to economic life in the south and Colombo caused by LTTE attacks will be relatively short-lived. Second, the slowdown in the US will continue to dent garment exports to that destination. Third, oil prices will rise to an annual average of about \$85 per barrel and then \$95 per barrel over the forecast years. Fourth, foreign investors will continue to invest in government securities denominated in the Sri Lanka rupee, and remittance growth will not slow. Fifth, the central bank will continue to gradually tighten monetary policy to rein

3.21.6 Government spending



Sources: Central Bank of Sri Lanka, *Annual Report 2006*; staff estimates.

[Click here for figure data](#)

3.21.1 Selected economic indicators

	2008	2009
GDP growth	6.0	6.0
Inflation	16.2	14.0
Current account balance (% of GDP)	-4.3	-4.2

Source: Staff estimates.

in private sector credit growth while bank financing of the budget deficit moves within Road Map limits.

On the basis of these assumptions, economic growth is forecast at 6% for 2008 and 2009, higher than the average trend of 4.0% (1997–2007), but lower than in 2007 alone. Growth will be held back by a slowdown in private sector investment as investors are currently hesitant; a weaker performance of the crucial garment industry because of the projected global deceleration in growth; higher oil prices; and the conflict.

Inflation will stay relatively high in 2008, and taper off slightly in 2009, for three reasons: high inflation expectations (which will lead to significant pressures to increase wages in the government sector with a likely knock-on effect for private sector wages); robust aggregate demand (sustained by high government expenditure and private remittances); and continued upward adjustments of fuel and electricity tariffs.

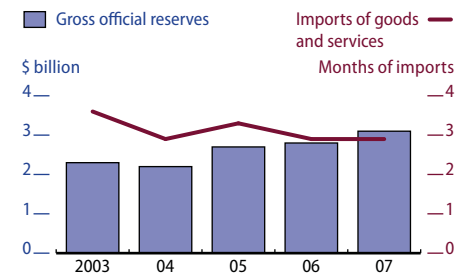
Managing inflation and the rising cost of living entails a difficult trade-off between short-term options to bring down the cost of living (such as controlling food prices) and medium-term policies (reducing inflationary deficit financing) to rein in inflation. A \$10 per barrel increase in the price of diesel (free on board) would increase the price of this politically most sensitive fuel by SLRs8 a liter. A full pass-through—while necessary to contain the fiscal deficit—involves considerable political costs. Conversely, government efforts to bring down the cost of living by forgoing taxes and duties on key foodstuffs and fuel, if continued, will also ultimately add to inflation pressure by increasing the budget deficit.

Continued tightening of monetary policy will restrict the growth of private sector credit, but is unlikely to reduce inflation pressure unless it dovetails with fiscal policies that reduce bank borrowing to the levels outlined in the Road Map.

The budget for 2008 envisages a reduction in the overall deficit to 7.3% of GDP. Government current expenditures are unchanged in real terms from a year earlier, while capital spending is to be substantially increased. A buoyant revenue forecast, underpinned by new tax measures, provides the resources to cover the increase and slightly reduce deficit financing in relation to GDP, relative to the 2007 estimated outcome. While there has been a material increase in revenue collection over the last 5 years, achieving the planned modest fiscal consolidation will be difficult. Problematic assumptions include maintaining discipline on current expenditures when measures to provide relief to the public from high inflation are proposed, the burden of any escalation in the conflict, and the risk that economic growth and global commodity price assumptions are over-optimistic. Containing the fiscal deficit as outlined in the 10-year development program are, however, crucial measures given the recent expansion of commercial foreign-denominated borrowing.

The balance of payments will continue to be strained by the costs of oil imports in the current account and a bunching of foreign debt repayments in the capital account. A slowdown of consumer and intermediate goods imports, in conjunction with an expected moderate expansion in exports and continued strong growth in remittances, should keep the current account deficit to 4.3% of GDP in 2008. A modest reduction of the deficit might be achieved in 2009 as global demand improves and as garment export growth picks up.

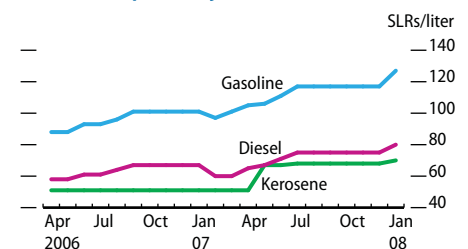
3.21.7 Gross official reserves



Sources: Central Bank of Sri Lanka, *Annual Report*, various issues; staff estimates.

[Click here for figure data](#)

3.21.8 Fuel price adjustments



Source: Ceylon Petroleum Corporation.

[Click here for figure data](#)

Development challenges

It is unlikely that Sri Lanka will experience a protracted period of very low growth, despite the conflict. At the same time, it is entering a difficult phase in its economic development, that of improving its low-middle-income country status. A recent World Bank study shows that middle-income countries have to adopt different policies if they are to prosper, as their incomes have consistently risen less fast than either their poorer, or richer, peers. Middle-income countries cannot compete anymore on price and cheap labor; at the same time they do not yet have the capacity to attract key talent and be at the forefront of innovation and rapid technological change.

How well equipped is Sri Lanka to compete? On the one hand, it has a remarkably sophisticated private sector (its garment sector, for example, is very successful in a high-value market niche, and its business process outsourcing industry conducts market research for international banks). On the other hand, its education system still presents serious obstacles, which a “brain drain” might make more difficult to resolve.

A recent survey of the biggest 20 listed companies by stock market capitalization and of key companies in the information technology and banking industries shows that, in many sectors, the trend of qualified, skilled people emigrating is increasing, with the pace of migration generally accelerating in 2007.

It is difficult to clearly differentiate between “push” and “pull” migration factors. The reasons for leaving include a slowdown in recruitment by key companies and better job opportunities elsewhere (such as rapidly expanding financial and tourism centers in the Middle East, especially Dubai); the pursuit of higher education abroad; and a general feeling that the situation in the country may not improve in the medium term. Those with skills (among the 20 companies) migrate because they are offered considerably better-paid jobs abroad, among other things enabling them to provide an international education for their children.

The category where the “brain drain” is sharpest is information technology, accounting, finance, banking, and the travel and tourism industry. The last group particularly is hard hit, losing both low-skilled staff (such as waiters and cooks) and managers. Many companies report that they find it increasingly difficult to recruit qualified staff, and that replacements are not on a par with the person who left (though this is in part due to internal wage policy constraints, as companies cannot substantially increase wages offered to new outsiders).

This trend of losing skilled people is worrying but has not reached a crisis point. However, it would need to be reversed or at least halted to enable Sri Lanka to maintain its middle-income status, and move up the income ladder.

Southeast Asia

Cambodia

Indonesia

Lao People's Democratic Republic

Malaysia

Myanmar

Philippines

Singapore

Thailand

Viet Nam



Cambodia

Strong economic growth continued in 2007, driven by garment exports, construction, and tourism. Rising food prices helped lift inflation. The prolonged economic expansion is forecast to slow, both this year and next, in large part reflecting reduced external demand for domestically made clothes. The major challenges are to diversify sources of growth, by such means as greater rural development, and to reduce poverty faster.

Economic performance

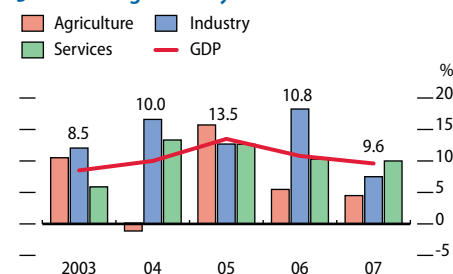
Robust GDP growth of 9.6% is estimated for 2007, slightly below the average of about 11% in the 3 previous years. Growth continued to rely on garments, construction, and tourism. The moderation in growth stemmed from a sharp slowdown in garment exports and a pullback in the expansion of agriculture. Clothing exports grew by an estimated 7% in United States (US) dollar terms, reflecting increasing competition in US and European Union (EU) markets. In agriculture, rice production rose by about 5% to 6 million tons, of which 2 million tons were exported. But weaker growth in fisheries and forestry brought overall agriculture growth down to an estimated 4.5% (Figure 3.22.1), lower than in recent years.

A robust services sector was underpinned by a sustained increase in tourist arrivals (up by 18.5% to about 2 million—Figure 3.22.2), combined with a pickup in finance and trading. Construction activity—much of it financed by foreign investment—remained relatively strong due to a boom in residential and commercial building in Phnom Penh and Siem Reap. On the demand side, consumption and private investment contributed to GDP growth, but a contraction in net exports subtracted from it.

Inflation accelerated to an average of 5.9% in 2007, mainly as a result of increases in food prices. Rice prices rose owing to some domestic supply shortages, and prices of other food items also rose, reflecting rising consumption, including that of imported food items (mostly from Thailand). The price of meat (pork and chicken) also increased, in part following a ban on meat imports from Viet Nam to prevent the spread of animal diseases. Higher global fuel prices added to inflation pressure, as did the weakening of the US dollar, which is widely used in Cambodia (its depreciation against the Thai baht contributed to imported inflation).

Government estimates put the overall budget deficit in 2007 at 3.2% of GDP, narrower than the 2006 gap after excluding a one-time impact of debt forgiveness granted by the International Monetary Fund (IMF) in 2006. This improvement reflected higher tax revenues and lower capital spending. Preliminary data indicate that tax receipts increased to about 9.0% of GDP, up from 8.6% of GDP in 2006, largely a result of better tax

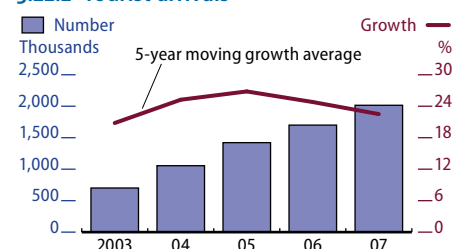
3.22.1 GDP growth by sector



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

3.22.2 Tourist arrivals



Source: Ministry of Tourism, available: <http://www.mot.gov.kh>, downloaded 28 February 2008.

[Click here for figure data](#)

administration and collection. Total budget expenditures declined to 13.9% of GDP (from 14.4% in 2006), as a fall in capital spending recorded in the budget (which does not record all externally financed capital expenditures) outweighed a modest increase in current expenditures. The overall deficit was financed by concessional loans and grants.

Demand for money is rising rapidly in this expanding economy. Broad money growth accelerated to 63% in 2007, owing to sharp increases in private sector credit and a buildup of net foreign assets. Credit to the private sector surged by 76% (Figure 3.22.3), fueled by greater demand for credit by the services sector, especially tourism, followed by wholesale and retail trade, and construction. Nevertheless, the ratio of private sector credit to GDP remains low, at around 19% of GDP. The central bank continued to smooth volatility in the exchange rate, while not resisting adjustments that reflect fundamental factors. The average exchange rate of the riel against the US dollar appreciated by 1.2% in 2007, to 4,060/\$1.

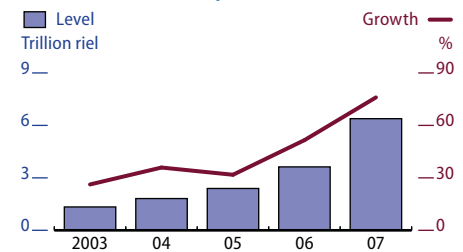
Merchandise exports rose by 9.5% last year, damped by the slowdown in clothing exports (about 70% of the total), according to preliminary data from the National Bank of Cambodia. In contrast, imports are estimated to have increased by 14.1% (Figure 3.22.4), mostly reflecting the impact of higher oil prices. The trade deficit was partially offset by growth in receipts from tourism in the services account, but the current account deficit (excluding official transfers) widened to an estimated 8.5% of GDP (Figure 3.22.5). This gap was readily covered by aid and inflows of foreign direct investment, leading to a larger overall balance-of-payments surplus. Gross international reserves were estimated at \$1.6 billion at year-end (3.2 months of imports).

According to a debt-sustainability analysis conducted by the World Bank and IMF in mid-2007, external public debt is sustainable and the risk of debt distress is moderate. At end-2007, external public debt was estimated at \$2.4 billion (30% of GDP), of which 54% was owed to multilateral institutions and around 35% to the Russian Federation and the US. Most external public debt is concessional and there is no external private debt other than that related to trade financing. Domestic public debt amounts to only about 2% of GDP and is all denominated in local currency. The debt service ratio relative to exports of goods and services at end-2007 was estimated at 0.5% on a cash basis, while the net present value of external debt outstanding to exports is estimated to be 32%.

Pushing ahead with structural reforms, the Government achieved some important milestones in adopting laws and regulations to improve the business environment, in addressing impediments in the judicial system, in fulfilling its World Trade Organization (WTO) commitments, and in implementing its public financial management reform program. Following the enactment of a Commercial Arbitration Law in 2006, it started work on establishing an arbitration center and a commercial court.

In the financial sector, a Law on Secured Transactions was passed and the Government launched an on-line filing registry that extends collateral instruments beyond land title to other forms of property, and thus increases access to finance. A law on government securities and a law on the issuance and trading of nongovernment securities were passed, allowing the Government to issue debt securities and helping set the stage for the development of a capital market.

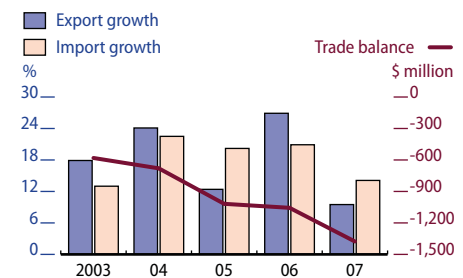
3.22.3 Credit to the private sector



Sources: Asian Development Outlook database; staff estimates.

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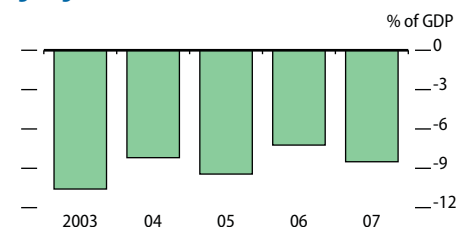
3.22.4 Trade indicators



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

3.22.5 Current account balance



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

A new regulation requiring medium to large enterprises to have their financial accounts audited by external auditors should improve corporate governance and tax administration, as well as help pave the way for the establishment of a stock market, targeted for 2009. Moving to support economic diversification, the Government launched its trade development strategy that focuses on promoting the export of 19 products (including a variety of agricultural products, rubber, silk, and footwear) and approved 15 special economic zones around border and urban areas.

Economic prospects

The outlook for 2008 and 2009 is generally good provided that macroeconomic stability is maintained and that further progress is made in implementing structural reforms in the National Strategic Development Plan 2006–2010. More specifically, the following forecasts are predicated on the Government maintaining fiscal discipline—fiscal policy is the main macroeconomic policy instrument in the highly dollarized economy—by further strengthening revenue collection and public financial management. Such improvements, together with better fiscal planning, would enable higher and more efficient spending on social sectors and rural development.

It is also assumed that the central bank will closely monitor financial sector developments, including potential vulnerabilities related to credit concentration and exposure to the booming real-estate market. Finally, the forecasts presuppose further progress in improving the functioning of institutions and enhancing the investment environment for private sector development. However, some investment might be put on hold ahead of national elections scheduled for July this year.

Given these assumptions, GDP growth is projected to ease from the high rates in recent years to 7.5% in 2008 and to 7.0% in 2009 (Figure 3.22.6). This reflects an expected slowdown in growth in garment exports as a result of increased competition from Viet Nam since that country joined WTO in January 2007, and the scheduled end-2008 termination of safeguards imposed by the US on garment exports from the People's Republic of China. Reduced demand for clothing exports will dent overall manufacturing output, although the effect should be mitigated somewhat by continued robust growth in services, especially those related to tourism and finance.

Agricultural output is expected to pick up by 4–5%, as the sector takes advantage of an expansion in irrigation facilities to raise paddy output and to diversify crops. Although offshore oil and gas deposits have been discovered in recent years, the potential size of exploitable deposits remains uncertain and economic activity related to the find is unlikely to have much impact on GDP in the forecast period, other than through exploration drilling. More specifically, government revenues from commercial exploitation of hydrocarbons are not expected before 2011.

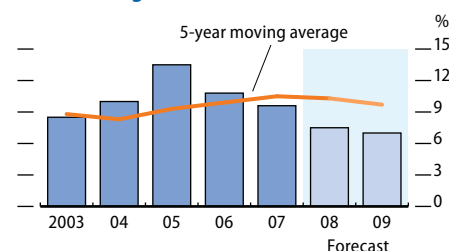
Persistently high food prices and anticipated further increases in oil prices, combined with buoyant domestic demand and a weakening US dollar, will likely keep average inflation uncomfortably high at about 5.5% in 2008 (Figure 3.22.7). The 2008 budget projects a widening of the overall central government deficit, to 4.2% of GDP, as modest gains

3.22.1 Selected economic indicators

	2008	2009
GDP growth	7.5	7.0
Inflation	5.5	5.0
Current account balance (% of GDP)	-10.6	-11.1

Source: Staff estimates.

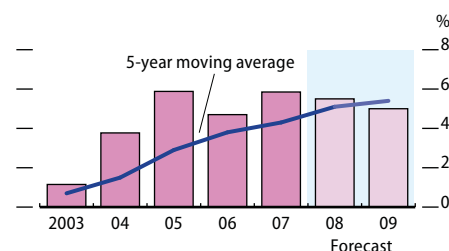
3.22.6 GDP growth



Source: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

3.22.7 Annual inflation



Sources: National Institute of Statistics, available: <http://www.nis.gov.kh>, downloaded 28 February 2008; staff estimates.

[Click here for figure data](#)

in revenues—from further improvements in tax administration—are expected to be outweighed by rises in both recurrent and development spending. The budgeted increases in tax revenues appear conservative though, and the outturn could be appreciably higher and the overall budget deficit correspondingly lower. As in recent years, domestic revenues and concessional external financing are expected to cover the budget deficit, so that no additional inflation pressure is expected from the fiscal stimulus.

The external current account deficit is projected to widen further to 10.6% of GDP this year (Figure 3.22.8), principally reflecting slower growth in exports of goods and the impact of persistent domestic demand on imports. Nevertheless, inflows of foreign direct investment and concessional loans and grants, including those expected from pledges made by development partners at the Cambodia Development Cooperation Forum last year, should result in a continued, though slower, accumulation of gross international reserves.

The main risk to this outlook is a deeper than anticipated downturn in global economic activity, which could depress Cambodian exports further, and weaken inward investment and tourism. Domestic risks as usual include bad weather, which would lower agricultural production. Also, any sudden reversal in rapidly rising land prices and real-estate speculation could prompt a generalized slowdown in bank lending, temper construction activity, and impede other investments.

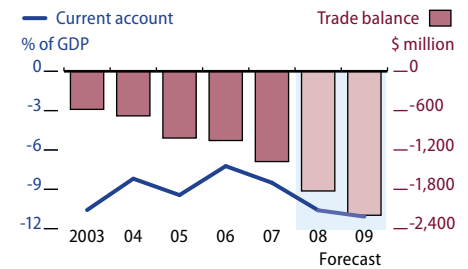
Development challenges

Although progress has been made in reducing overall poverty incidence, the country still faces many challenges both in reducing poverty more rapidly (estimated by the Government at 31% in 2007), especially in rural areas, and in narrowing income disparities between rural and urban areas. Despite strong expansion of the economy over the past decade, it remains narrowly based. The clothing industry, the main engine of exports (Figure 3.22.9), has an uncertain future. The scheduled removal at end-2008 of the US safeguards, coupled with Viet Nam's accession to WTO, will expose it to much stiffer competition.

Economic diversification requires an investment environment conducive to establishing and expanding new private businesses. Preliminary indications are that the costs of doing business have been reduced and the business climate has improved through trade facilitation measures (a new customs law was enacted in late 2007 and most of the key implementing regulations have been prepared). However, further progress is needed in streamlining business licensing and inspections and in improving overall governance.

With 90% of the population in rural areas, diversifying sources of growth and reducing poverty at a quicker rate require further efforts to develop agriculture, fisheries, and forestry. Improvements in irrigation and land titling (about 800,000 land titles have been issued) will help increase production by encouraging farmers to invest in their land. Remaining constraints to faster, sustainable rural growth include poor rural infrastructure, lack of access to finance, and weak institutional capacity in rural areas.

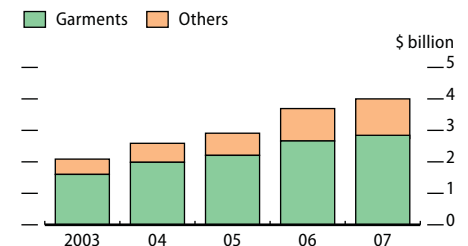
3.22.8 Current account indicators



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

3.22.9 Exports



Note: Figures for 2007 are estimates.

Sources: International Monetary Fund, *Country Report* Nos. 06/264 and 07/290, available: <http://www.imf.org>; staff estimates.

[Click here for figure data](#)

Indonesia

At its best pace since the Asian financial crisis, economic growth in 2007 was spurred by private consumption and investment. Domestic demand is forecast to drive moderate growth in 2008–2009. Rising prices for food and fuel have increased the risk that government subsidies on these basic needs will crowd out much-needed development expenditures. Inflation accelerated above 7% in early 2008. A longer-term challenge is to reduce the vulnerability of the many Indonesians who live near the poverty line.

Economic performance

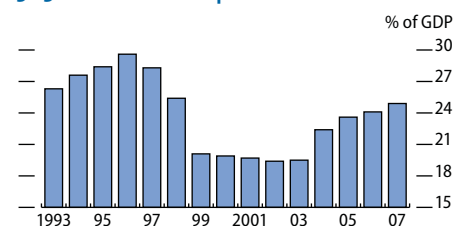
Economic growth accelerated to 6.3% in 2007, above its 5-year average of 5.5% and the best growth rate since 1996. The main drivers of growth were private consumption, supported by private investment, and an expansion of net exports. Growth in fixed capital formation increased to 9.2% in 2007, although most went to buildings (76% in real terms) and only 14% to machinery and equipment. The fixed capital investment-to-GDP ratio increased to 24.9% in 2007, up 5.4 percentage points over 4 years (Figure 3.23.1). The improvement in investment was underpinned by an increase in domestic credit, and by falling inflation and interest rates. The lower inflation and interest rates also helped push up consumer spending, with private consumption increasing by 5.0% in 2007 and making the biggest contribution to GDP growth (Figure 3.23.2). The contribution to GDP growth from net exports partly reflected a rise in exports owing to the boom in world commodity prices.

From the supply side, higher GDP growth was accounted for mainly by the services sector (Figure 3.23.3), with transportation and communications, and electricity, gas, and water supply recording double-digit growth. The rapid expansion of telecommunications services owes much to growing demand for mobile telephone and Internet services, which have been expanding by 40–50% a year. The expansion of utilities was due mainly to a 30% rise in gas usage as the state-owned electricity company switched to gas from more expensive fuels, and to a government drive to get consumers to shift from subsidized kerosene to nonsubsidized liquefied petroleum gas.

Manufacturing output growth of 4.7% reflected higher growth in machinery, food, rubber, and paper products, offset in part by declining output for textiles, refined petroleum products, and liquefied petroleum gas. The increase in food, rubber, and paper products was stimulated by higher world prices. Reduced output for textiles is a sign of declining competitiveness in this labor-intensive industry.

Agricultural output growth at 3.5% was driven by a 4.8% increase in rice production and higher world prices for plantation crops such as

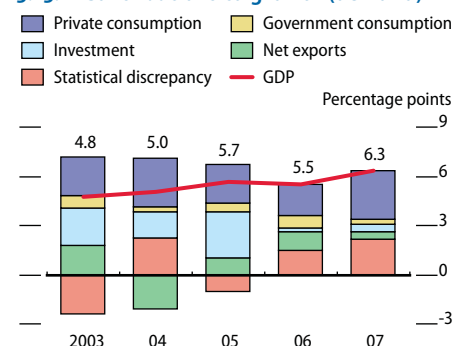
3.23.1 Gross fixed capital formation



Sources: Asian Development Outlook database; CEIC Data Company Ltd.; Statistics Indonesia, available: <http://www.bps.go.id>, downloaded 29 February 2008.

[Click here for figure data](#)

3.23.2 Contributions to growth (demand)



Sources: Asian Development Outlook database; Statistics Indonesia, available: <http://www.bps.go.id>, downloaded 29 February 2008.

[Click here for figure data](#)

palm oil and rubber. Mining and quarrying grew by just 2.0%, despite considerably higher prices for oil and gas (which account for 55% of this subsector's output). This weakness was largely due to a 1.2% decline in oil and gas extraction caused by years of underinvestment in the sector. Reflecting an easing in the global economy late last year, year-on-year GDP growth stepped down to 6.3% in the fourth quarter from 6.5% in the third.

Year-on-year inflation declined from a peak of 18.4% in late 2005 to 6.6% at end-2007 (Figure 3.23.4), as the impact of a 126% rise in fuel prices in October 2005 faded. Amid some volatility, inflation remained within Bank Indonesia's target range of 5–7% during the year, averaging 6.4%. While movements in food prices and seasonal factors contributed much to the volatility, a combination of factors ranging from higher global nonfood commodity prices, a depreciating rupiah, and a steady increase in domestic demand kept inflation from declining further.

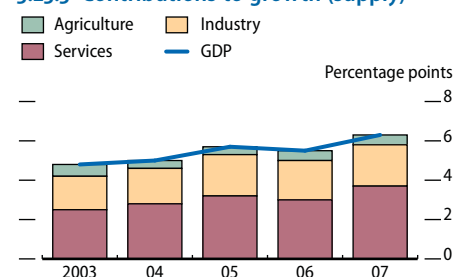
Broad money (M2) growth accelerated to 18.9% last year, largely because of a sharp rise in net foreign assets of the banking system owing to an increase in external reserves. Private sector credit growth also quickened (Figure 3.23.5), reflecting a reduction in interest rates. With the easing of inflation pressures, Bank Indonesia cut its policy rate from 12.75% in April 2006 to 8.0% in December 2007 (Figure 3.23.6). This led to a corresponding reduction in commercial bank rates and a recovery in bank credit, which increased by 25.5% year on year in December 2007. The stronger growth in lending helped lift bank profits. Banks' nonperforming loans fell to 1.9% (net) by December, from 3.6% at end-2006. The pickup in bank lending raised some concern about credit quality, as evidenced by growth in credit card nonperforming loans from 9% in 2006 to 12% in 2007.

The strengthened economic fundamentals and yield differentials attracted significant foreign portfolio inflows during the first half of 2007, before international investors turned more risk averse after the subprime credit problems in the United States (US). Having experienced a sharp downturn during July–August, the Jakarta Stock Exchange (JSX) nevertheless rebounded and more than regained lost ground in the rest of the year. By end-2007, the JSX composite index was 52% higher than a year earlier (Figure 3.23.7). The rupiah depreciated by 4.4% against the US dollar in 2007 (Figure 3.23.8), despite strong growth in international reserves. This growth was partly attributed to reserve management arrangements, whereby inflows of foreign exchange from oil revenues and royalties automatically accumulate as reserves of Bank Indonesia, while Pertamina (the state-owned oil company) buys dollars in the market to purchase oil imports.

The relatively moderate impact of the US subprime crisis on domestic financial markets, together with an improved policy environment, led to Standard & Poor's as well as Moody's rating agencies to raise the country's sovereign foreign currency debt rating to BB- and Ba3, respectively, in 2007.

The overall budget deficit has gradually widened in recent years from 0.5% of GDP in 2005 to 1.2% in 2007 (versus a revised budget target of 1.5% for that year). The actual outturn was assisted by increased revenues from petroleum royalties as the Government's share of oil revenues rose

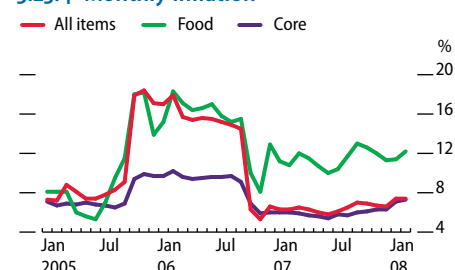
3.23.3 Contributions to growth (supply)



Sources: Asian Development Outlook database; Statistics Indonesia, available: <http://www.bps.go.id>, downloaded 29 February 2008.

[Click here for figure data](#)

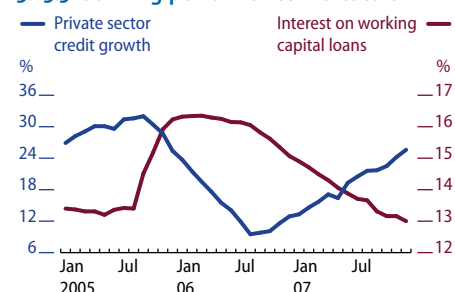
3.23.4 Monthly Inflation



Source: CEIC Data Company Ltd., downloaded 14 March 2008.

[Click here for figure data](#)

3.23.5 Banking performance indicators



Sources: Bank Indonesia, available: <http://www.bi.go.id>; International Monetary Fund, International Financial Statistics online database, downloaded 14 March 2008.

[Click here for figure data](#)

along with higher oil prices. On the expenditure side, higher spending on food, fuel, and electricity subsidies was more than offset by reduced outlays on all other expenditure categories. Although there was some improvement in budget execution in 2007, capital expenditures were again subject to considerable back-loading, reflecting difficulties in the management of public expenditures. Capital spending fell short of the budgeted amount by an estimated 10%.

The authorities funded the widening fiscal deficit by issuing government securities and increased borrowing from development partners. Still, the ratio of total central government debt to GDP declined by 3.4 percentage points to 35.7% in 2007 (Figure 3.23.9), reflecting the concessionary nature of the borrowing and higher economic growth.

Merchandise exports rose by about 14%, to \$118.0 billion last year. Non-oil and gas exports were up by 18.2%, driven mainly by agricultural produce, which was boosted by higher global commodity prices and by manufactured goods. Exports of oil and gas increased by only 8.4% in value terms, even though prices rose sharply, owing to production problems. Imports climbed by about 15% to \$84.9 billion as a result of strong demand for imported consumption and capital goods.

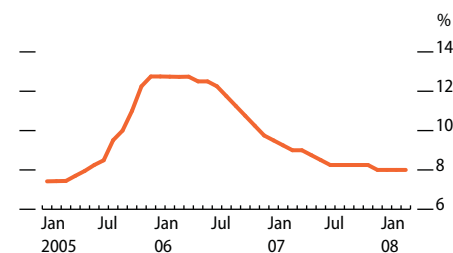
Despite faster import growth, the higher base of exports than imports meant that the trade surplus rose to \$33.1 billion (Figure 3.23.10). The transfers account recorded a marginally higher surplus, owing to growing remittances from migrant workers. These were partly offset by widening deficits in the services and income accounts stemming mainly from a rise in imports of freight and business services, and the repatriation of profits and dividends by foreign companies operating in Indonesia. The upshot is that the current account surplus moderated to 2.5% of GDP from 2.9% in 2006.

On the capital and financial account, higher inflows of foreign direct and portfolio investments and loan disbursements to the private sector were offset to some extent by a significant increase in overseas asset placements by domestic investors. As a result, the overall balance of payments surplus fell slightly to \$12.5 billion. International reserves increased by about \$14 billion to \$56.9 billion (Figure 3.23.11) (providing 5.7 months of import cover). Total external debt is estimated to have declined to about 31% of GDP at end-2007 from 35% at end-2006, and the debt service ratio was reduced to an estimated 19.2% from 24.8%.

The Government pursued its reform agenda in 2007 aimed at improving the investment climate and public service delivery. Parliament passed a landmark investment law, which stated the principle of equal treatment for all investors regardless of national origin, as well as a tax administration law that strengthened the rights of taxpayers and limited arbitrary decision making by tax officials. Other significant changes included reducing the time for refunds of value-added tax, streamlining business licensing procedures, and implementing good corporate governance and risk management standards for state-owned banks.

An economic policy package unveiled in July integrates and builds on separate policies covering investment, infrastructure, the financial sector, and small and medium enterprises. It involves 165 reforms to be achieved by July 2008. As of end-February 2008, 105 of these reforms had been completed. These gains have, however, taken place from a low

3.23.6 Bank Indonesia rate



Sources: International Monetary Fund, *International Financial Statistics* online database; Bank Indonesia, available: <http://www.bi.go.id>, downloaded 14 March 2008.

[Click here for figure data](#)

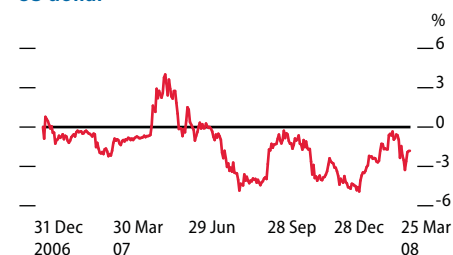
3.23.7 Jakarta composite index



Source: CEIC Data Company Ltd., downloaded 14 March 2008.

[Click here for figure data](#)

3.23.8 Change in rupiah against the US dollar



Note: A point below zero indicates a depreciation in the rupiah from the end-2006 rate.

Source: Bank Indonesia, available: <http://www.bi.go.id>, downloaded 25 March 2008.

[Click here for figure data](#)

base, and the investment climate continues to rank poorly. Transparency International's 2007 Corruption Perceptions Index ranked Indonesia 143 out of 180 economies, while the World Bank's *Doing Business 2008* put the country 123 out of 178 on ease of doing business. Firms still face a difficult legal and regulatory environment.

Strict labor regulations create a disincentive to employment expansion. The existing labor law is criticized by business groups for, among other things, mandating severance payments that are much higher than comparable economies, and limiting the ability of employers to outsource work. These have been identified as impediments to hiring new workers on a permanent basis, particularly in labor-intensive industries. Revisions to the labor law were proposed as part of an investment policy package in 2006 but were not implemented because of opposition from labor unions. The proposed changes would have addressed these issues and brought labor regulations into line with those of countries such as Malaysia and Thailand.

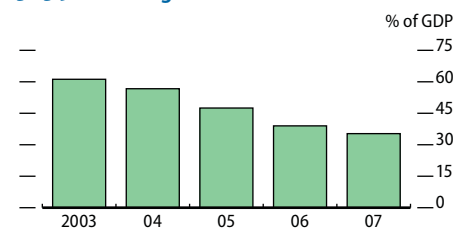
The Government launched a national community empowerment program in 2007 to improve local governance and service delivery at the subdistrict and village level by encouraging participatory planning and providing block grants for rural infrastructure, education, and health related projects. The program, which was rolled out to half the country's subdistricts in 2007, will be further expanded to cover the entire country by 2009.

The 2008 budget approved by Parliament last year proposed a substantial reallocation of spending to priority areas, including infrastructure and social sectors, with a scaling up of spending on poverty reduction through the community empowerment program. This reflects recognition of the need to ramp up development expenditures (comprising capital and social assistance spending). Before the 1997–98 Asian financial crisis, development expenditures were generally 7–8% of GDP. They dropped during the crisis and have been fairly stagnant at 2–3% of GDP since.

Higher development expenditures were made possible by the fiscal space of about \$10 billion a year generated by a reduction in the fuel subsidy in 2005, declining debt service payments, and increased revenues from more effective tax administration. However, a recent decision by the Government to absorb the increase in global prices for oil and food and substantially increase the subsidies that it provides for fuel, electricity, and staple food items is likely to undermine the gains made by the 2005 fuel subsidy reduction.

The authorities were revising the budget in March 2008 to take account of the global economic slowdown and higher commodity prices. They raised the oil price assumption in the budget from an original \$60 per barrel to \$95 per barrel. As a result, the subsidy envisaged for fuel and electricity increased from Rp45.8 trillion and Rp29.8 trillion, respectively, in the original budget to Rp130 trillion and Rp61 trillion in the revised budget. The authorities also increased subsidies for food to Rp19.8 trillion from Rp7.2 trillion as part of a package of measures to bring down the price of food. The energy subsidies together currently exceed the total budgetary allocation for capital and social expenditures by 18%. Moreover,

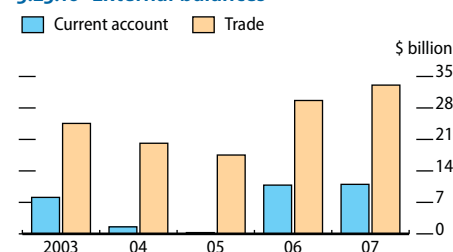
3.23.9 Central government debt



Source: Indonesia Debt Management Office, available: <http://www.dmo.or.id>, downloaded 17 March 2008.

[Click here for figure data](#)

3.23.10 External balances



Sources: Asian Development Outlook database; Bank Indonesia, available: <http://www.bi.go.id>, downloaded 14 March 2008.

[Click here for figure data](#)

3.23.11 External liquidity



Note: Import cover is in months of imports and official debt repayment.

Sources: Asian Development Outlook database; Bank Indonesia, available: <http://www.bi.go.id>, downloaded 14 March 2008.

[Click here for figure data](#)

evidence suggests that the fuel and electricity subsidies have been poorly targeted, with minimal benefit to the poor.

To offset these increases, the Government intends to raise revenues through the application of so-called safeguard measures aimed at advancing tax and dividend payments of state-owned enterprises, restricting access to subsidized kerosene, and applying an across-the-board 10% cut in expenditures. Hoping to maintain development spending at original budgeted levels, the Government envisages the fiscal deficit for the year to widen to 2.1% of GDP. As in 2007, this deficit will be financed by the issuance of government securities and by increased borrowing from development partners.

Economic prospects

The forecasts are predicated on the Government maintaining efforts to improve the investment climate and public financial management, especially in relation to budget execution. It also assumes that the authorities will endeavor to maintain social assistance spending, but expenditures on infrastructure will to some extent be compromised if, as seems likely, the Government continues to absorb price increases for oil and staple foods. It is further assumed that Bank Indonesia will ensure that the high rate of growth in domestic credit does not give rise to balance sheet problems at banks that could undermine financial system stability. Finally, the forecast presupposes normal weather conditions and no major natural disasters.

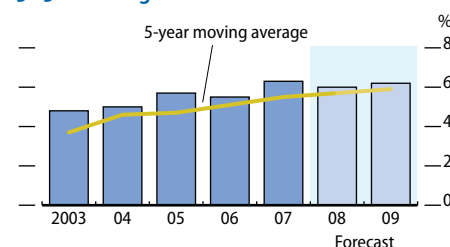
On these assumptions, GDP growth is projected to ease to 6.0% in 2008, before picking up to 6.2% in 2009 (Figure 3.23.12). Growth will be driven mainly by private consumption, helped by the lagged effect of lower interest rates. Private investment is also likely to expand in response to the lower interest rates and an improving investment climate. However, public sector investment may not rise at the planned rate because of the cost of subsidies on the budget.

GDP growth will be supported by higher rates of credit expansion to the private sector, provided that bank and corporate balance sheets do not deteriorate due to high rates of credit growth and uncertainties in financial markets. Higher domestic demand will, however, be partly offset by softer export growth owing to the slowdown in industrial economies, and by a pickup in imports due to growth in consumption and investment. In 2009, private sector demand is expected to remain strong and might be supported by a cut in interest rates, if inflation moderates. This will be reinforced by some increase in export growth if, as expected, industrial nations stage a modest recovery and world trade picks up. Public sector investment growth will, however, continue to be constrained by heavy outlays on subsidies.

The higher domestic demand in 2008 is expected to underpin robust growth in services, while agriculture will benefit from high world prices for plantation crops and favorable weather prospects. In 2009, manufacturing activity is expected to rise owing to a modest recovery in external demand.

Continued turmoil in global financial markets into 2008 saw the JSX fall by 15.8% from the beginning of 2008 to mid-March.

3.23.12 GDP growth



Sources: Asian Development Outlook database; Statistics Indonesia, available: <http://www.bps.go.id>, downloaded 29 February 2008; staff estimates.

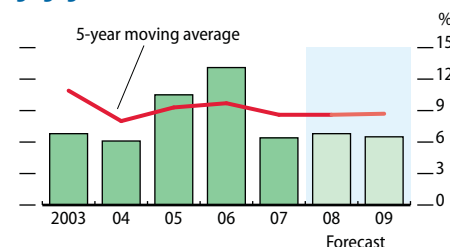
[Click here for figure data](#)

3.23.1 Selected economic indicators

	2008	2009
GDP growth	6.0	6.2
Inflation	6.8	6.5
Current account balance (% of GDP)	1.9	1.6

Source: Staff estimates.

3.23.13 Inflation



Sources: CEIC Data Company Ltd., downloaded 26 February 2007; staff estimates.

[Click here for figure data](#)

The rupiah/dollar exchange rate remained broadly stable, in part due to central bank intervention in the market to stabilize the rupiah and contain imported inflation.

Inflation accelerated in January and February 2008 to 7.4% year on year in both months, due mainly to increased prices of staple foods. In February, the Government announced measures to stabilize food prices, including increased outlays on food subsidies and the removal of import duties on soybeans and the value-added taxes on wheat flour and cooking oil. Food prices are seen moderating somewhat with the start of the harvest season. However, given the likely increase in domestic demand and high global food prices, inflation is set to average 6.8% in 2008 before moderating to 6.5% in 2009 on an easing of world food prices (Figure 3.23.13).

Preliminary data for January 2008 indicate that exports grew by a faster than expected 33.2% as a result of buoyant commodity prices, while imports grew by 43.9%, providing a larger than forecast trade surplus. During the remainder of the year, slower growth in exports combined with strong import growth will pull down the trade surplus. Although around 50% of Indonesia's non-oil and gas exports are destined for markets in Asia other than Japan, the slowdown in industrial countries will also indirectly hurt these exports since most are intermediate products that feed into final products that are then shipped to industrial markets.

In 2009, a modest increase in export volume growth due to a recovery in external demand will likely be offset somewhat by weaker export commodity prices, while import growth will remain buoyant owing to stronger domestic demand. Consequently, the trade surplus is forecast to moderate further. This will be accompanied by larger deficits in the services and income accounts, due to the repatriation of profits and dividends, and private debt interest payments. As a result of these developments, the current account surplus will decline to 1.9% of GDP in 2008, and to 1.6% in 2009.

Notwithstanding lower current account surpluses, the overall balance of payments is projected to remain in surplus during the forecast period as a consequence of growth in foreign direct investment and, to a lesser extent, portfolio inflows. International reserves are projected to increase to \$68 billion at end-2008, and to \$77 billion in 2009.

The main domestic risk to the forecast involves subsidies. Higher than expected prices for food and oil would mean even larger government subsidies that could crowd out development expenditures. Moreover, if food prices continue to exert pressure on inflation, interest rates could well rise, damping domestic demand. There is also a risk that planned reforms could meet intensified public opposition. Tariff changes and some aspects of investment climate reform, such as those relating to the labor market, are generally opposed by the public and special interest groups. In this context, reform efforts could slow in the lead-up to parliamentary and presidential elections scheduled for 2009.

3.23.1 Development challenges

While the share of the population in extreme poverty (living on less than \$1 a day) has declined over recent years to 8.5%, nearly half the population still live on less than \$2 a day. This suggests that there is a large group of people clustered around the poverty line who are highly vulnerable to shocks, such as natural disasters or price rises of food staples.

One factor contributing to this vulnerability is the lack of adequately paid jobs, which underlines the importance of improving the environment for employment generation. The gradual pickup in economic growth in recent years has led to some increase in employment, though at 9.1% in August 2007 the unemployment rate remains high compared with many East and Southeast Asian countries. Moreover, underemployment is also high at 27.6% of the labor force.

While it could be argued that postcrisis Indonesia has not experienced economic growth rates necessary to significantly bring down unemployment and poverty, the growth that has been achieved has not been accompanied by a commensurate increase in employment. The labor force absorption into the formal sector has dropped from 81% prior to the financial crisis to around 11%, which suggests a loss of competitiveness in labor-intensive manufacturing sectors such as textiles and clothing, as well as a mismatch between skills required and the skills possessed by workers.

Reforming the education system and ensuring that the labor force has access to affordable and quality training should be a priority in this regard.

Lao People's Democratic Republic

Mining and hydropower kept the economy growing at a rapid rate last year and the outlook is for further growth at a more moderate pace in 2008–2009. Inflation decelerated to its lowest level in years, although it picked up in late 2007. The Government is improving trade and investment conditions in an effort to join the World Trade Organization by 2010. But more needs to be done to spur development of the private sector, as well as agriculture, to boost employment and reduce poverty.

Economic performance

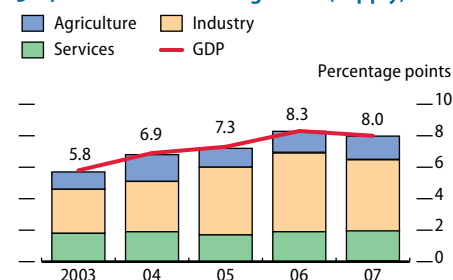
The economy grew by 8.0% in 2007 (Figure 3.24.1), above the 6.8% average of 2002–2006. For a seventh consecutive year, industry recorded double-digit growth (14.0% in 2007), as output from hydropower plants and mining continued to expand. Industry has grown to account for nearly one third of the economy, a result of strong external demand for the country's hydropower and minerals (mainly gold and copper). Services grew by 7.2% in 2007. Tourist arrivals rose by about 15% to an estimated 1.4 million, and tourism attracted significant investment in accommodation and other facilities. Agriculture and forestry, which supports more than four fifths of the population and is still the biggest sector, grew by 2.7%, hurt by drought in some provinces.

The expansion of hydropower and mining is underpinned by increasing inflows of foreign direct investment (FDI). Rubber plantations, small-scale manufacturing, and tourism also attracted such inflows. In 2007, gross FDI increased by nearly 20% to \$770 million.

Merchandise exports in nominal terms rose by an estimated 50.6% in 2007, reflecting buoyant exports of copper and gold, which account for about 60% of total exports. Other exports are clothing, electricity, and agricultural products. Imports fell by 1.7% as a result of reduced purchases of heavy machinery as a major hydropower project neared completion, and the closure of some clothing factories, which rely heavily on imported raw materials. A small trade surplus and rising tourism earnings helped narrow the current account deficit to 15.0% of GDP. After inflows of FDI and grants, the overall balance of payments recorded a surplus. External reserves increased by \$203 million to \$530 million by December 2007 (Figure 3.24.2), equal to almost 6 months of nonresource imports.

Despite robust economic growth, inflation slowed to a multiyear low, averaging 4.5% in 2007. Prices started to pick up in the fourth quarter, though (Figure 3.24.3). The decline in inflation partly reflects government subsidies for paddy production and greater efforts at land reform, which have stimulated supply of rice. Broad money supply (M2) growth

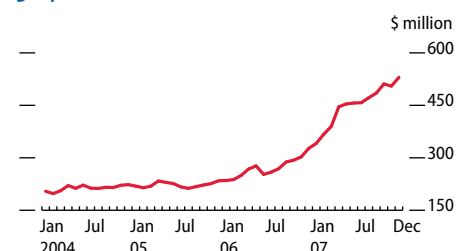
3.24.1 Contributions to growth (supply)



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

3.24.2 Gross international reserves



Source: International Monetary Fund, *International Financial Statistics* online database, downloaded 25 March 2008.

[Click here for figure data](#)

accelerated from about 25% in January 2007 to 44% in August, reflecting the buildup in international reserves and a directive by the central bank for retailers to quote prices in the local currency, the kip, rather than in United States (US) dollars or Thai baht. The kip appreciated by 1.0% against the dollar in 2007, but depreciated by 4.0% against the baht (Thailand is a major trading partner).

Government revenues, a perennial weakness in fiscal management, have picked up in recent years, partly because hydropower and mining provide expanding sources of taxes and other income. Total revenues, excluding grants, rose to 14.0% of GDP in FY2007 (ended 30 September 2007), marking an increase of some 3 percentage points since 2003 (Figure 3.24.4). Implementation of a revised tax and customs law helped in this regard, as did the recentralization 2 years ago of tax collection functions from the provinces. Government spending in 2007 increased slightly as efforts were made to concentrate on priority areas and to trim costs. The fiscal deficit narrowed to 3.1% of GDP in FY2007, about half the level of the 2 previous years.

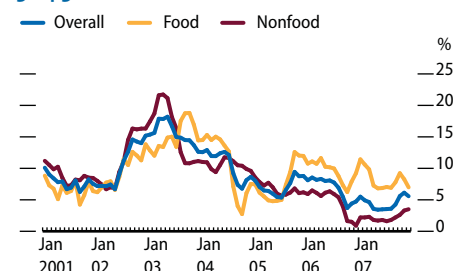
The International Monetary Fund projected that external public debt would fall to 63% in 2007, still high but declining, from 69% in 2006 and 89% in 2003. Most of the debt is to multilateral development banks and the Russian Federation, and is on concessional terms. Debt service payments consume about a tenth of total government revenues. One focus of fiscal policy is to maintain the effort to mobilize revenues so that spending on social and economic programs can be increased while the borrowing requirement can be reduced. Fiscal policy generally is consistent with macroeconomic stability, but there are slippages reflected in government borrowing from banks, accumulating arrears, and taking on quasi-fiscal liabilities through state-owned enterprises.

In an effort to join the World Trade Organization (WTO) by 2010, the Government is formulating policies to improve the environment for trade and investment. Reforms introduced for WTO accession, and to meet the country's commitments under the ASEAN Free Trade Area and Greater Mekong Subregion initiatives, have improved customs clearance procedures with the establishment of computerized systems and the piloting of one-stop customs clearance at selected border posts, an important step in view of the fact that several major trading partners are neighbors.

Private sector participation in the economy is gradually expanding, with the number of registered firms growing by about 12% in aggregate over the past 3 years. The Enterprise Law and Investment Law, both approved in recent years and aimed at enhancing the business climate, are being implemented. A business registry office was established in 2007 to issue business licenses, and it reduced the time and costs associated with business registration. Also last year, the National Assembly approved the implementation decree for a development strategy for small and medium enterprises.

Still, private sector development remains constrained by poor infrastructure (especially reliability and cost of electricity); cumbersome regulations; deficiencies in the legal and tax frameworks; lack of skilled labor; and problems in access to land for business. On this last point, it takes on average 4 months to register a property. A provincial land

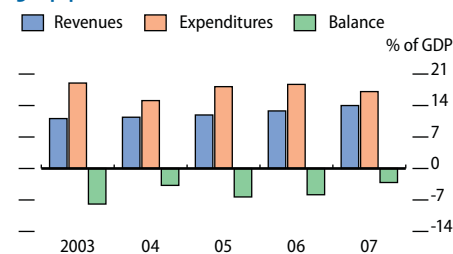
3.24.3 Inflation



Sources: National Statistics Center, Lao PDR; Bank of Lao PDR, available: <http://www.bol.gov.la>, downloaded 18 March 2008.

[Click here for figure data](#)

3.24.4 Fiscal indicators



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

management authority has been established under the Prime Minister's Office to enforce the implementation of the land laws, but this has had limited impact so far.

Reforms of state-owned commercial banks are making slow progress. Three of these banks dominate the banking sector, and had nonperforming loans estimated at 70% of their total loan portfolio in 2006. The three banks made provisions in early 2007 for such loans in accordance with international accounting standards. An audit report last year found the banks to be operating profitably, with no government transfers foreseen. Further action is required to expedite the recapitalization of the banks and to strengthen bank supervision. A privately owned bank agreed to take an international bank as a strategic partner and shareholder in 2007.

Economic prospects

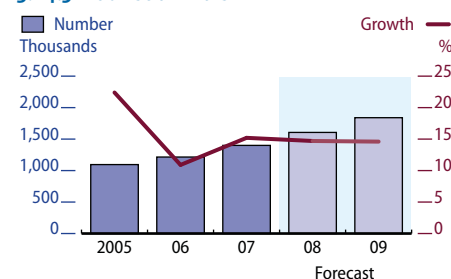
Projections are based on the assumptions that the Government will maintain efforts to meet targets of the Sixth Socioeconomic Development Plan 2006–2010, which aims to achieve annual average GDP growth of 7.5–8.0% over the 5 years. The plan prioritizes development of agriculture, infrastructure, education, and health care, and calls for accelerating reforms in key areas including governance, private sector development, and natural resources management.

Robust economic growth expected in neighboring trading partners such as the People's Republic of China (PRC) and Thailand should support demand for the country's main exports. The 1,080-megawatt Nam Theun 2 hydropower project is scheduled to be completed in 2009, and construction is under way on several other power projects due to start production between 2011 and 2015. A forecast weakening in global prices for metals is expected to dent export income, but new mining projects, notably the Phu Kham copper and gold mine, are scheduled to start production this year and will contribute to exports. Imports are forecast to rise significantly this year as demand increases for construction materials to build new hydropower and mining projects, and imports of consumer goods increase as a result of reductions in tariffs under ASEAN Free Trade Area commitments.

The clothing industry has been in decline since the phasing out of quotas in the European Union market in 2004. It is also hurt by rising transportation costs for imported raw materials. Several factories were closed in 2007 and the outlook for the industry is grim. Tourism, though, is expected to maintain solid growth (Figure 3.24.5). The performance of agriculture, as usual, depends largely on the weather.

On this basis, GDP growth is projected to edge down to just below 8% in 2008–2009 (Figure 3.24.6). The current account deficit is forecast to remain at over \$500 million, although that would represent a declining percentage of the rising GDP. Inflows of grants and FDI should cover the external financing requirement. Inflation is expected to accelerate to 5–6% in the forecast period (Figure 3.24.7) because of rising prices for imported goods, including fuel, and the rapid growth in money supply. A value-added tax approved in 2006 is expected to be put into effect next year. This will expand the tax base and further help build government

3.24.5 Tourist arrivals



Source: Lao National Tourism Administration, *Annual Report 2006*.

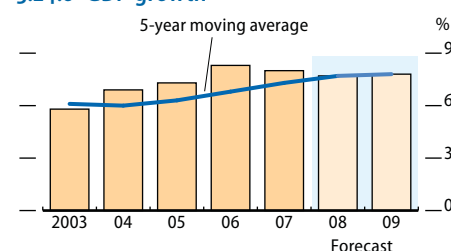
[Click here for figure data](#)

3.24.1 Selected economic indicators

	2008	2009
GDP growth	7.7	7.8
Inflation	5.0	6.0
Current account balance (% of GDP)	-12.2	-11.4

Source: Staff estimates.

3.24.6 GDP growth



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

revenues. However, tax administration still requires substantial strengthening.

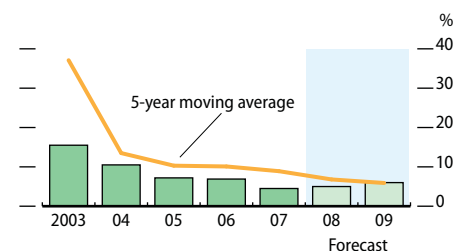
A sharp fall in global metal prices is a risk for the forecast period. In the medium term, there is a risk of slippage in the reform agenda, particularly fiscal reforms, which could jeopardize macroeconomic stability. The increase in revenues from natural resources could undermine the will to undertake reforms for mobilizing nonresource income. The Government's policy to take equity stakes in some resource projects raises a potential financial risk in the longer term.

Development challenges

Diversifying sources of growth and generating employment remain major challenges. Since hydropower and mining have only a limited capacity to create employment, expansion of agriculture remains the key to raising incomes and employment. In this regard, an issue that needs more focused attention is access to land and land titling. A 2007 poverty assessment noted that a major cause of poverty in the country is diminishing access to cultivated land.

The private sector has the potential to generate significant employment, but more needs to be done to improve the business environment for small and medium enterprises. The clothing industry, a significant source of jobs in the formal sector employing about 28,000 people, is in decline. The civil service employs about 100,000 people but its salary range of \$50–90 a month is below that required to afford many basic necessities.

3.24.7 Inflation



Sources: National Statistics Center, Lao PDR; Bank of Lao PDR, available: <http://www.bol.gov.la>, downloaded 18 March 2008; staff estimates.

[Click here for figure data](#)

Malaysia

Brisk domestic demand, particularly private consumption, lifted economic growth to 6.3% in 2007. Fixed capital investment expanded at its fastest rate since 2000. Export growth slowed sharply, though, as electrical and electronic products suffered from weakening global demand. Both consumption and investment are likely to decelerate in 2008 and the export outlook has deteriorated, slowing GDP growth by about 1 percentage point. Government subsidies have helped to keep inflation low but, with price pressures rising, are putting greater strain on the budget.

Economic performance

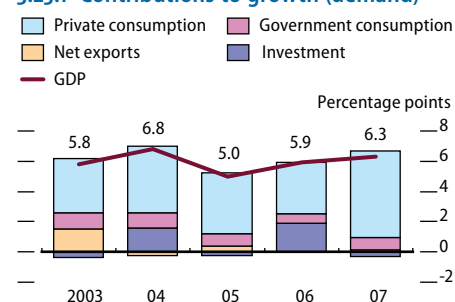
Powered by domestic demand, the economy expanded by 6.3% in 2007, above the 5.8% average recorded in 2002–2006. Growth in private consumption, which has been the main driver of GDP in the last few years, accelerated to 11.7% from 7.1% in 2006. It contributed 5.7 percentage points of total GDP growth (Figure 3.25.1).

Household spending was buoyed by a strong labor market, a hefty (7.5–42%) increase in public sector salaries from July 2007, low interest rates, and the wealth effect felt by individuals from stock market gains. Rural incomes benefited from high global prices for agricultural commodities. Public consumption also grew, by 6.4%.

Gross fixed capital formation increased robustly by 10.2% last year, the highest rate since 2000, supported by both stronger public and private investment. The former was bolstered by development projects implemented under the Ninth Malaysian Plan 2006–2010, and the latter by the solid economic growth, low interest rates, and improvements to the investment climate. Among policy changes in 2007 that helped private investment, the Government cut the corporate tax rate by 2 percentage points over 2 years to 26%; approved a 10-year tax exemption for venture capital; and eased foreign exchange restrictions somewhat. In addition, investment incentives were introduced for domestic and foreign investors in the Iskandar Development Region, one of three economic development regions being developed under the Ninth Plan (Box 3.25.1).

Foreign direct investment (FDI) net inflows rose by 54.4% to \$9.4 billion in 2007, with manufacturing, particularly the electrical and electronics subsector, attracting more than half the total. Gross fixed capital formation added 2.3 percentage points to GDP growth (although this was more than offset by a decline in inventories). On the external front, real exports and imports each grew by about 4%, the weakest performance for several years, largely reflecting soft global demand for electrical products, and net exports did not make a significant contribution to GDP growth.

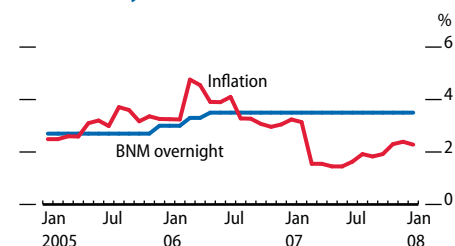
3.25.1 Contributions to growth (demand)



Source: Bank Negara Malaysia, available: www.bnm.gov.my, downloaded 17 March 2008.

[Click here for figure data](#)

3.25.2 Policy rates and inflation



Source: CEIC Data Company Ltd., downloaded 17 March 2008.

[Click here for figure data](#)

On the supply side, the services sector expanded strongly by 10.0% and contributed 4.7 percentage points to GDP growth. Its growth was led by finance, insurance, real estate, and business services. Wholesale and retail trade, as well as accommodation and restaurants, also registered healthy growth owing to strong household spending and inward tourism programs to commemorate the 50th anniversary of independence. Tourist arrivals rose by 19.5% to 21 million in 2007, with significant increases in visitor numbers from People's Republic of China, India, and Indonesia.

Growth in industry rose modestly by 3.3%, the lowest rate in 5 years. Manufacturing, which accounts for two thirds of industrial output, grew by 3.1%, damped by the softer external demand for electrical products (40% of total manufacturing). Indeed, production of semiconductors and other electrical parts contracted slightly in the first half of 2007, while production of household appliances, office machinery, and audiovisual appliances fell sharply from the same period a year earlier. Mining and construction performed well, reflecting increased crude oil and natural gas production, and projects initiated under the Ninth Plan. Agriculture expanded slightly, by 2.2%. Production of crude palm oil (almost a third of total agricultural output) fell by 0.4% because of bad weather and floods.

Despite the robust domestic demand, inflation eased to average 2.0% in 2007 from 3.6% in 2006. This was largely attributed to subsiding effects of a 18–24% hike in administered retail fuel prices in 2006, and was helped by an appreciation of the ringgit. Inflation bottomed out in the second quarter (1.5%) and rose to 2.4% in December, reflecting high global commodity prices and a 3.0% rise in prices of food and beverages (nearly a third of the consumer price index basket). Bank Negara Malaysia, the central bank, has maintained its overnight policy interest rate at 3.5% since April 2006 (Figure 3.25.2). Money supply (M2) growth decelerated to 9.5% from 17.1% in 2006, owing to outflows of foreign portfolio funds (bank lending increased) (Figure 3.25.3).

The ringgit continued to appreciate against the US dollar, although it weakened for a while, along with other currencies, when US subprime credit problems intensified (Figure 3.25.4). For all of 2007, it appreciated by 5.8% against the US dollar (and by 13.8% since Malaysia ended the peg against the US dollar in mid-2005). The real effective exchange rate appreciated by 2.7% in 2007.

The federal Government continued to run a budget deficit of about 3% of GDP in 2007. Increased spending reflected the salary hike for civil servants and accelerated disbursement for the Ninth Plan's development projects. Revenues benefited from higher corporate tax receipts and increased income from Petronas, the national oil and gas company. Its dividends, income tax, export duties, and royalties accounted for 38% of total revenues. However, Malaysia also subsidizes retail fuels at great cost—equivalent to an estimated 7% of total operating expenditures in 2007.

Growth in merchandise exports decelerated to an estimated 9.6% in 2007 in nominal US dollar terms in 2007. Electrical products, accounting for 44% of total exports, increased by just 1.2% due to weak global demand. In contrast, palm oil and palm oil product exports, the second largest export item, jumped by 51.3% on high global prices. Exports of liquefied natural gas increased by 19.9% thanks to buoyant demand from Japan; Republic of Korea; and Taipei, China. Merchandise imports also

3.25.1 Regional development

The Government is investing heavily in three regions in peninsular Malaysia with the aim of spurring growth and reducing regional income disparities. Under the Ninth Plan, \$16.4 billion is allocated for the regions and an additional \$2.7 billion is to be sourced from the private sector. Significant public funding is planned until 2025 and tax concessions are offered to investors.

The Iskander Development Region in the south was launched in November 2006. Taking advantage of proximity to Singapore, the idea is to establish a logistics and services center for trade, develop electrical product manufacturing, and build tourist facilities. The region has introduced incentives including tax breaks and liberalized rules on use of foreign labor and capital. It received investment commitments totaling \$2.3 billion in the first 10 months of 2007.

The North Corridor Economic Region was launched in July 2007. Its focus is on development of commercial-scale farming and food processing. It also aims to take advantage of proximity to Thailand and Indonesia to become a processing, logistics, and trade center.

The East Coast Economic Region, the least developed of the three, was launched in October 2007. It involves development of a deep-sea fishing port, aquaculture, palm-oil processing (tapping the region's palm oil plantations), and petrochemicals.

One challenge is to execute these large projects simultaneously. Another is to secure the cooperation of the private sector, government-linked companies, local communities, and the state governments. In the areas that intend to develop commercial farming, deep-sea fishing, and aquaculture, the cooperation of local communities which follow traditional farming and fishing will be crucial if the required skills are to be taught.

decelerated, to an estimated 11.9% in 2007, largely reflecting soft demand for inputs for the electrical products industry. The trade balance was still in substantial surplus. Increased earnings from tourism helped swing the services account into surplus, from a long-standing deficit, and the current account surplus grew to \$29.7 billion, or 15.9% of GDP. International reserves rose to \$101.3 billion by end-2007, equivalent to 8.5 months of retained imports and 6 times short-term external debt.

A generally robust labor market saw employment rise by an estimated 2.1% in 2007, with services generating most jobs. The unemployment rate declined to 3.1%. Malaysia imports labor—it had more than 1.9 million registered foreign workers as of May 2007, or 16.8% of total employment, mainly unskilled workers in manufacturing and agriculture. Another estimated 3 million unregistered foreign workers are in the country.

Economic prospects

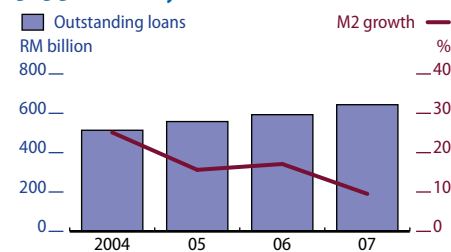
Domestic demand is again likely to be the mainstay of economic growth in the forecast period, given the expected weaker export markets in industrial countries and slowdown in most of Asia. Private consumption will remain the main driver, although it is likely to decelerate somewhat relative to 2007. The consumer sentiment index dipped a little from high levels in late 2007. Heightened inflation pressure, uncertainty about the world economic outlook, and a retreating impact of last year's big salary increase for civil servants will likely weigh on consumer spending.

The expansion of fixed investment in 2007, supported by public investment related to the Ninth Plan and the pickup in private investment, is expected to moderate in 2008 because of the weaker global prospects. Real exports of energy and commodities might hold up relatively well, but electrical products and other manufactured exports face weaker markets. On the balance of these factors, GDP growth is projected to slow to 5.4% in 2008 before speeding up to 5.9% in 2009 (Figure 3.25.5)—if global export markets improve as expected.

From the production side, the services sector is forecast to slow as household incomes and business activity decelerate. Tourist arrivals are unlikely to increase at such a high pace after the close of 50th anniversary events in August 2008. Manufacturing growth will be hurt by the weaker outlook for electrical products. Production of oil and natural gas is forecast to rise because the capacity of some oil fields and gas facilities has been increased. As a net exporter of oil and gas, Malaysia has some protection against the impacts of rising world energy prices. Construction will be underpinned by Ninth Plan infrastructure projects. Agriculture is expected to do better (depending on the weather) as high prices for commodities and food stimulate production.

The government budget for 2008 projects higher development expenditures under the Ninth Plan and a fiscal deficit still of around 3% of GDP. Subsidies for diesel and gasoline, as well as food staples, cost about \$3.5 billion last year, or about 10% of total operating expenditures, and are rising. Even after administered fuel prices were raised in 2006, the cost of fuel subsidies rose by 20% in 2007 as global oil prices climbed. To reduce fiscal strains that might arise because of the tax concessions granted last year and the rising cost of subsidies on fuel and some food,

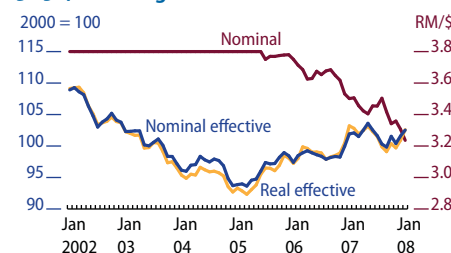
3.25.3 Monetary indicators



Source: CEIC Data Company Ltd., downloaded 17 March 2008.

[Click here for figure data](#)

3.25.4 Exchange rates



Sources: Bank for International Settlements, available: <http://www.bis.org>; CEIC Data Company Ltd.; both downloaded 17 March 2008.

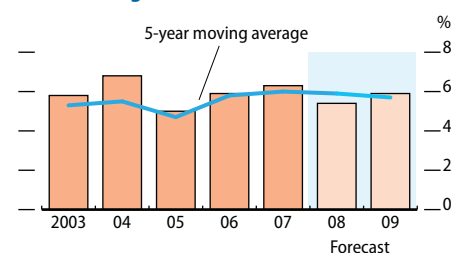
[Click here for figure data](#)

3.25.1 Selected economic indicators

	2008	2009
GDP growth	5.4	5.9
Inflation	2.7	2.5
Current account balance (% of GDP)	11.6	11.7

Source: Staff estimates.

3.25.5 GDP growth



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

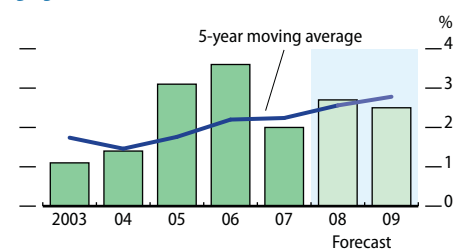
the Government could raise fuel prices or introduce the proposed goods and services tax, or both. However, elections held in March this year returned the Government to office with a reduced majority and loss of control of some states, complicating both passage of economic legislation and implementation of projects in the development regions.

Inflation pressure is likely to remain elevated in 2008 and will be further affected if retail fuel prices are raised or the goods and services tax is introduced. With inflation quickening to 2.4% in late 2007 (and further to 2.7% in February 2008), the Government established a National Price Council early this year to stockpile cooking oil, rice, and other staples in an effort to keep prices of these goods stable. In 2008, inflation is forecast to average 2.7% (Figure 3.25.6).

Given the weak outlook for manufactured exports and high prices for some imports, the trade surplus is expected to narrow this year. The services balance is seen reverting to a deficit because of a deceleration in tourism earnings. Together, these outcomes will lower the current account surplus to about 11.6% of GDP (Figure 3.25.7).

Domestic risks to the outlook include delays in implementation of projects under the Ninth Plan. As of October 2007, only about 30% of the total allocation for development projects over the 5-year period of the plan had been disbursed from the federal budget, against a scheduled 37%. Capacity constraints in agencies involved were part of the cause. Delay in implementation affects not only public investment but also private investment in projects.

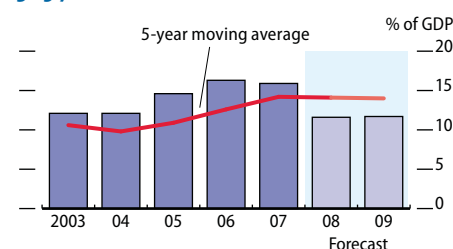
3.25.6 Inflation



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

3.25.7 Current account balance



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

Myanmar

Modest rates of growth in recent years have been based on high prices for natural gas exports, heavy public expenditures, and an improving agricultural performance. However, macroeconomic stability is vulnerable to fiscal deficits that are financed through money creation, in turn prompting double-digit inflation. The Government has taken tentative steps toward a more market-oriented system in agriculture and finance, and should build on these reforms.

Economic performance

Official estimates put GDP growth at above 10% in recent years (and 12.7% in FY2006, ended 31 March 2007), but variables correlated with GDP suggest that actual growth was significantly less than this, and below potential. Changes in production inputs such as energy, fertilizer, and capital goods are also consistent with modest economic growth. More broadly, official statistics are constrained by weaknesses in resources and institutions, making objective assessment of economic performance difficult.

Agriculture contributes about 43% of GDP and its performance has improved in some areas. Industry accounts for roughly 20% of GDP and has benefited from high prices for natural gas, the leading export. Construction is supported by government investment spending, including outlays on the new capital city, Naypyidaw.

The Government took some modest steps to reform the economy in 2007, particularly in agriculture and finance, and through market-oriented pricing reforms in state-owned enterprises (SOEs). (See Box 3.26.1.) In agriculture, some SOEs have been privatized or reoriented toward research and extension activities, and the role of the private sector has been enhanced in production, import, and distribution of important inputs, including fertilizer, seeds, and equipment. Restrictions on exports of rice have been lifted for rice grown on newly developed fallow lands. Such liberalization has encouraged production. In particular, output of pulses and beans, where the state has a minimal role in production and marketing, has grown rapidly. Production of pulses has increased threefold in the past 10 years and exports exceed 1 million tonnes.

In banking, several administrative measures put in place during a banking crisis in 2003 have been relaxed: the ceiling on deposit-to-capital ratios was increased from 7% to 10% in FY2006 and six private banks received approval to open new branches. Although foreign banks are still not allowed to operate branches or subsidiaries, 13 were licensed to run representative offices last year, and draft legislation that is planned to establish special economic zones is likely to permit foreign banks to operate in those areas.

3.26.1 Development challenges

Macroeconomic management will remain problematic, particularly in view of the high rate of inflation caused by monetized fiscal deficits. Still, the Government has started a modest transition toward a more market-oriented economic system, and needs to build on these reform moves. Likewise, it should develop institutional capacity to manage such initiatives. The comfortable level of international reserves has opened an opportunity to push through with reforms.

In this regard, possible steps in the important agriculture sector include lowering export restrictions, eliminating production targets, and using more market-oriented pricing. Similarly in finance, further liberalization of banking and the development of nonbank institutions in fields such as insurance and capital markets should be pursued, in addition to strengthening the monitoring, supervision, and prudential oversight of banks.

More broadly, the private sector could make a much more substantial contribution to the economy if the investment environment was significantly improved. Finally, unifying the exchange rate would go some way to eliminating distortions and to improving incentives in the economy.

Nonetheless, formal financial intermediation remains low and the financial sector is underdeveloped. In the absence of an effective government debt market, monetary policy remains subservient to high fiscal deficits. Tax revenues have been rising (Figure 3.26.1), in part because of reforms since 2004 to improve tax administration and to increase tariff receipts from the use of a more depreciated exchange rate than the official one for valuing imports. However, revenue gains have been offset by high government expenditures, driven by large increases in civil servants' salaries in 2006 and investment outlays, including those related to the new capital city. Consequently, the consolidated fiscal deficit, which covers SOEs, has remained at about 4% of GDP, and is financed mainly through money creation by the central bank.

Broad money thus grew by almost 27% in FY2006, on top of 25% in FY2005 and 33% in FY2004, pushing inflation well into double digits. The price of rice rose by nearly 40% in the 12 months to August 2007. The administered price of gasoline was raised by nearly 70% in August 2007, the price of diesel was doubled, and the price of natural gas was raised fivefold. These sharp rises led to a doubling of public transport fees as well as price increases of several other basic commodities. Widespread protests followed.

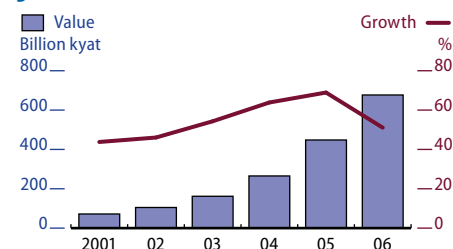
Rising export revenues from natural gas continued to bolster the external position (Figure 3.26.2). The capital account also benefited in FY2006 from increased foreign direct investment in gas and oil. Gross official international reserves rose by 88% to \$1.8 billion in the 12 months to June 2007, equivalent to 8 months of imports. Despite high inflation and monetary growth, the strong balance of payments resulted in the parallel market exchange rate for the kyat stabilizing at about K1,300/\$1 in the second half of 2007, implying some real appreciation. The official exchange rate remained at K5.5/\$1.

Economic prospects

GDP growth is expected to remain modest, supported by public expenditures and buoyant energy export prices; inflation is seen staying high. Although the Government's 5-year plan for 2006–2010 envisages average GDP growth of 10%, an outturn of half that target is likely over the medium term. The economy is vulnerable to a global economic downturn to the extent that activity slows in major trading partners, including the People's Republic of China, India, and Thailand. Conversely, if these countries maintain strong growth then the outlook is enhanced.

Historically high prices for gas exports are likely to be sustained in 2008, supporting strong export revenues and the current account. The volume of gas exports is expected to increase as more infrastructure is completed. However, the investment climate remains weak, given infrastructure and policy constraints, international trade and investment sanctions, and expectations of high inflation. Monetized fiscal deficits are likely to continue in the wake of outlays on the capital city and on highway projects. The fiscal deficits put macroeconomic stability at risk and complicate any further liberalization initiatives, given that controls, such as those in place, often generate revenues for the Government.

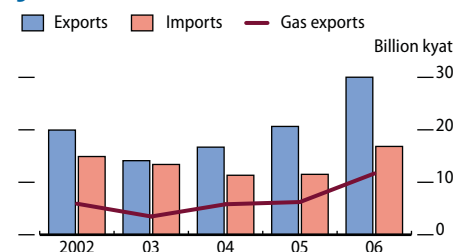
3.26.1 Tax revenues



Source: Myanmar Central Statistical Organization, available: www.csostat.gov.mm, downloaded 11 March 2007.

[Click here for figure data](#)

3.26.2 Trade indicators



Source: Myanmar Central Statistical Organization, available: www.csostat.gov.mm, downloaded 11 March 2007.

[Click here for figure data](#)

Philippines

GDP growth reached its highest rate in three decades, reflecting continued robust consumption growth as well as expansions in net exports and investment, though manufacturing remains a weak spot that inhibits job creation. External demand will slow this year to bring growth back toward trend, and inflation will rise to moderate levels. Further progress in repairing the fiscal position is needed, for greater spending on infrastructure and social programs both to improve the investment climate and to address issues of poverty.

Economic performance

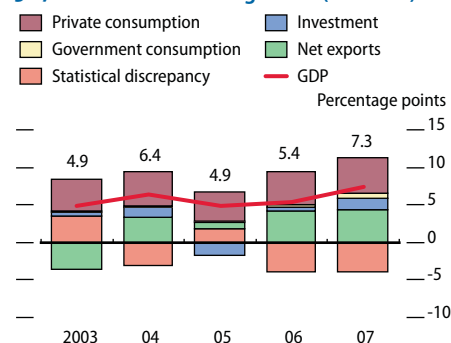
In perhaps its best performance for 30 years, the economy grew by 7.3% in 2007, well above its 5.2% average rate over the previous 5 years. Moreover, inflation fell to low levels, the fiscal position improved, the peso strengthened, and the current account recorded a large surplus.

All demand-side sectors made substantial contributions to GDP growth (Figure 3.27.1). Private consumption, supported by \$14.5 billion in remittances from Filipinos working abroad, rose by 6.3%, led by increased spending on food and beverages and on transportation and communications. Automobile sales, for example, increased by 18.5% last year in terms of units sold, compared with an increase of just 2.5% in 2006. Government consumption rose by 10.0%, spurred by spending ahead of national elections in May and facilitated by the improved fiscal position.

Total investment turned up after a weak performance in recent years, to grow by 9.3% in 2007. This was largely the result of increased government capital outlays and a surge of private sector real estate development, induced by tight supply of office space and by largely remittance-financed residential building. Gross fixed capital formation as a ratio to GDP rose for the first time since 1997 (Figure 3.27.2), although it remains low. Investment in plant and equipment recorded a slight upturn of 2.7% (from a decline in 2006). Net exports drove GDP growth in the first 9 months of 2007, but the contribution waned later in the year as exports weakened. Exports of electronics, which account for about 62% of total merchandise exports, were damped by a slowdown in global demand in the second half. The peso's appreciation also hurt some exports, such as clothing.

From the production side of the economy, the services sector, which accounts for about half of GDP, grew by a robust 8.7% in 2007 and was the main contributor to GDP growth (Figure 3.27.3). Mobile phone services, retail trading, finance, hotels and restaurants, and business process outsourcing all picked up strongly. Industry expanded by 6.6%, although this relied on a burst of growth in mining and construction,

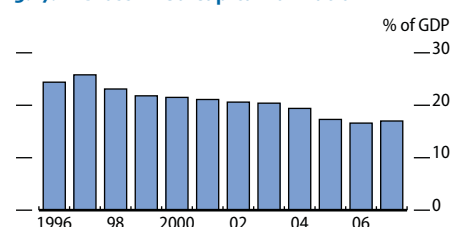
3.27.1 Contributions to growth (demand)



Sources: Asian Development Outlook database; National Statistical Coordination Board, available: <http://www.nscb.gov.ph>, downloaded 4 February 2008.

[Click here for figure data](#)

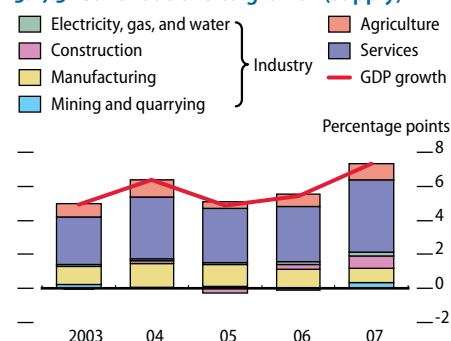
3.27.2 Gross fixed capital formation



Sources: Asian Development Outlook database; National Statistical Coordination Board, available: <http://www.nscb.gov.ph>, downloaded 4 February 2008.

[Click here for figure data](#)

3.27.3 Contributions to growth (supply)



Sources: Asian Development Outlook database; National Statistical Coordination Board, available: <http://www.nscb.gov.ph>, downloaded 4 February 2008.

[Click here for figure data](#)

while the important manufacturing subsector grew by a modest 3.3%. Strong global demand for nickel, copper, and coal lifted production of these minerals, supported by expanded gold mining and crude oil production (production levels for minerals and oil are still relatively low). Construction surged by 19.5%, reflecting increased public sector spending on infrastructure and the private sector real estate development boom. One reason for the weakness in manufacturing was a 5.6% fall in production of electrical machinery (including semiconductors), mainly due to soft external demand in the second half. Agriculture, benefiting from generally better weather than in the previous 2 years, expanded by a healthy 5.1%.

The robust economy was reflected in the labor market. The average unemployment rate declined to 7.3% in 2007 from 8.0% in 2006 and the underemployment rate to 20.1% from 22.6%. Construction and services provided many of the new jobs. (There are also more than 8 million Filipinos working abroad, equivalent to 23% of the total labor force within the country.)

Despite the improvement in activity generally, inflation in 2007 slowed to average 2.8%, the lowest in 21 years. A 19% appreciation of the peso against the United States (US) dollar during the year helped; the real effective exchange rate climbed by 14.7% (Figure 3.27.4). Since October 2007, inflation has been edging up because of rising prices of food and fuel (Figure 3.27.5). But with inflation largely contained, the Bangko Sentral ng Pilipinas cut its overnight policy interest rates four times between July and December 2007, lowering its lending rate by 250 basis points to 7.25%. It cut rates again in January 2008, trimming the lending rate to 7.00%. These cuts were targeted at stimulating investment and reducing upward pressure on the peso.

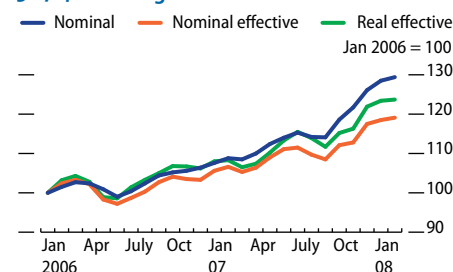
The authorities also took steps to rein in high money supply growth caused by inflows of remittances and portfolio investment. Starting in May, the central bank allowed banks and government-controlled corporations to deposit funds in its relatively high-yielding special deposit accounts. These measures drained liquidity and pulled down M3 money supply growth from 26.1% in April to 9.0% in December (Figure 3.27.6).

Financial markets performed well in 2007: the Philippine Stock Exchange index rose by 21.4% (Figure 3.27.7) and capital raised through the stock exchange jumped by 57%. Spreads between foreign currency-denominated Philippine bonds and comparable US Treasury bonds narrowed. Bank lending grew steadily, except that to manufacturing.

Maintaining the trend set in recent years, the fiscal deficit narrowed in 2007, although this was achieved with the help of sales of government assets. The national government fiscal deficit fell to the equivalent of 0.2% of GDP, down significantly over 5 years from 5.3% (Figure 3.27.8). Tax collections increased, but did not reach target. Total revenues rose by 15.8%, including privatization receipts of nearly \$2 billion (Figure 3.27.9). Expenditures rose by 9.5%. Importantly, interest payments on the large national debt declined by 14.0%, thanks to the peso's appreciation (41% of the debt is external) and lower interest rates, helping make room for increased public capital outlays.

The improved fiscal position, stronger economic growth, and currency appreciation enabled the national Government to reduce its outstanding

3.27.4 Exchange rate indexes

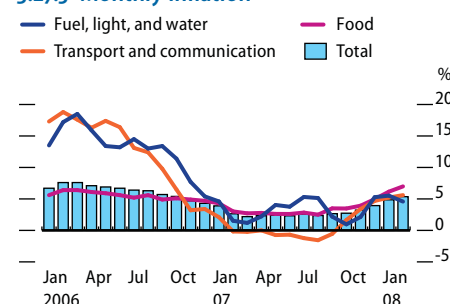


Note: The nominal rate is against the US dollar while effective exchange rates are against a basket of foreign currencies.

Source: Bangko Sentral ng Pilipinas, available: <http://www.bsp.gov.ph>, downloaded 17 March 2008.

[Click here for figure data](#)

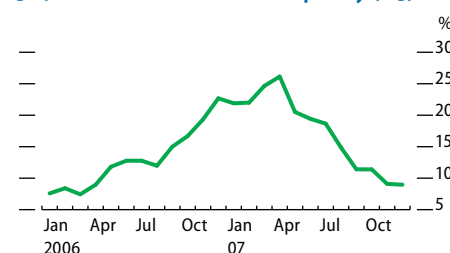
3.27.5 Monthly inflation



Sources: National Statistics Office, available: <http://www.census.gov.ph>; CEIC Data Company Ltd.; both downloaded 7 March 2008.

[Click here for figure data](#)

3.27.6 Growth of domestic liquidity (M3)



Source: Depository Corporations Survey, Bangko Sentral ng Pilipinas, available: www.bsp.gov.ph, downloaded 5 February 2008.

[Click here for figure data](#)

3.27.7 Philippine Stock Exchange composite index



Source: Datastream, downloaded 17 March 2008.

[Click here for figure data](#)

debt to \$79.8 billion (55.8% of GDP) at end-2007 from a recent peak of 78.2% in 2004 (Figure 3.27.10). Public sector debt, including guarantees on state-owned enterprise debt, is heading to below 70% in 2008, from as high as 118% in 2003. Yet despite progress achieved, the debt level remains elevated and interest payments still consume more than a quarter of national government revenues. The Government is changing the borrowing mix in favor of domestic borrowings, which now total 58% of national government debt.

Merchandise exports in nominal US dollars grew by 6.0% in 2007, decelerating sharply from 2006 in part because of weakness in electronics (up by 4.5%) and garments (down by 13.1%). Merchandise imports grew by 8.1%, widening the trade gap to \$8.2 billion. After taking into account a small surplus in services and buoyant remittances, a current account surplus of \$6.4 billion was generated in 2007 (4.4% of GDP). The capital and financial account recorded net inflows of \$3.9 billion (Figure 3.27.11), largely reflecting development loans and, to a lesser degree, net portfolio investment.

Net foreign direct investment by nonresidents edged up by just 0.2% to \$2.9 billion, after accounting for \$1.5 billion in debt repayments by foreign-owned companies to foreign creditors or parents. (In an encouraging sign, gross foreign direct equity inflows rose by 28.2% to \$2.2 billion.)

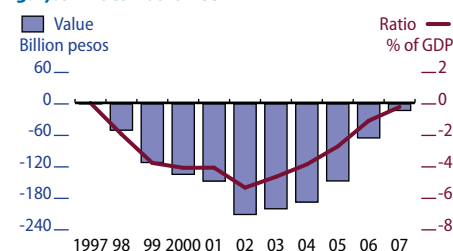
The overall balance-of-payments surplus more than doubled from 2006 to \$8.6 billion, putting upward pressure on the currency. Gross international reserves soared by 47% to \$33.7 billion as of end-2007 (or 4.9 times the country's short-term external debt). This significant accumulation of reserves was attributed to US dollar buying by the central bank to smooth the appreciation of the peso, income from central bank investments abroad, and a rise in the value of the gold held in the reserves.

Economic prospects

The projections assume that fiscal reform efforts will be maintained and that monetary policy remains accommodative. On this basis, domestic demand is expected to hold up fairly well for the rest of the year. Consumption growth is forecast to drive GDP expansion again this year, although the pace will ease as higher prices for food and fuel reduce discretionary spending in other areas and growth of remittances could well ease from the rapid rate of recent years as the global economic environment softens. Remittances rose by 13.2% last year in US dollar terms (they soared from \$6.0 billion in 2001 to \$14.5 billion in 2007). This growth rate could fall by about half in the forecast period.

Investment is expected to expand in 2008. The improved fiscal position is allowing the Government to raise investment in much-needed infrastructure. It has drawn up a \$44 billion infrastructure program for the 5 years to 2010, mainly for transportation, power, and water projects. In the private sector, the reductions in interest rates and an enhanced willingness of domestic banks to lend due to strengthened balance sheets will support investment. Residential real estate, a prime target for remittance inflows, is likely to attract much of it. Growth of

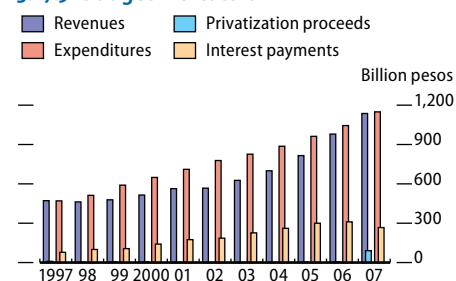
3.27.8 Fiscal balance



Sources: CEIC Data Company Ltd.; Bureau of the Treasury, available: <http://www.treasury.gov.ph>; both downloaded 14 February 2008.

[Click here for figure data](#)

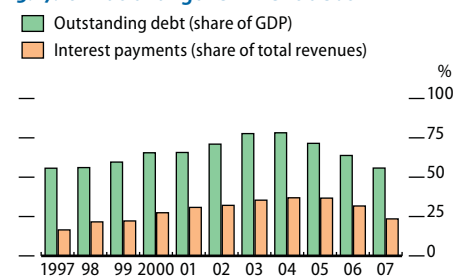
3.27.9 Budget indicators



Sources: CEIC Data Company Ltd.; Bureau of the Treasury, available: <http://www.treasury.gov.ph>; both downloaded 14 February 2008.

[Click here for figure data](#)

3.27.10 National government debt



Sources: CEIC Data Company Ltd.; Bureau of the Treasury, available: <http://www.treasury.gov.ph>; both downloaded 17 March 2008.

[Click here for figure data](#)

3.27.1 Selected economic indicators

	2008	2009
GDP growth	6.0	6.2
Inflation	4.0	3.6
Current account balance (% of GDP)	4.3	4.5

Source: Staff estimates.

business process outsourcing services (Box 3.27.1) is also stimulating demand for office space.

In contrast, investment in manufacturing, needed to boost employment, is expected to remain weak, given the slowdown in the global economy and, more particularly, in demand for electronics goods. A prolonged problem is the domestic investment environment. International surveys show the country to be in a relatively poor position. For example, the World Bank's *Doing Business* survey ranks the Philippines 133 of 178 economies in terms of the ease of doing business. Other studies show the country scoring poorly on control of corruption, political stability, and rule of law. Foreign direct investment, an important source of funding and technology for manufacturing, is low compared with countries such as Malaysia and Thailand.

Net exports are expected to contract in 2008 and slow GDP growth somewhat, given the weaker outlook for exports and high prices for oil and food (the Philippines is one of the world's largest rice importers). Taking these factors into consideration, GDP growth is forecast to decelerate to 6.0% this year and then edge up to 6.2% in 2009 (Figure 3.27.12).

On the supply side, services sector growth is expected to slow by a little over 1 percentage point to 7.5% in 2008 as retailing and finance growth slip. Construction is forecast to continue to benefit from expansion in public investment and demand for offices and housing. Mining production is also projected to rise as a result of new investments in nickel and copper mines as a response to high global metal prices, but at a more moderate rate than in 2007. Agricultural production is likely to revert to its trend growth rate of about 4%, assuming reasonable weather, and manufacturing growth will likely ease to about 3%, given the weaker prospects for its exports.

Inflation is seen accelerating from last year's low rate to average 4.0% in 2008, lifted by rising prices for imported rice and oil. (This would keep it within the central bank's 3–5% target range.) In the first 2 months of 2008, inflation averaged slightly over 5%.

Merchandise exports will be constrained by weaker global demand, but rising prices for food and oil will contribute to a widening of the trade deficit this year. The current account surplus is projected to stay over 4% for the forecast period, underpinned by remittances. The national budget for 2008 raises the allocation for infrastructure by about 20% from the 2007 budget. The focus is on investing in transportation, agricultural infrastructure, and school buildings. Even if the infrastructure investments are fully implemented, however, the rate of public investment at 2.8% of GDP would still be relatively low. The target is a balanced budget this year, including planned privatization receipts.

Slippage in fiscal reform is the main domestic risk to the prospects. The share of tax revenues in GDP has edged up, from 12.4% in 2004 to 14.0% in 2007 (Figure 3.27.13), and this momentum needs to be maintained if the Government is to sustain infrastructure spending and keep its budget from sliding back into deficit, with the associated pitfalls of a rising country risk premium and higher interest rates. Fiscal gains so far have been supported by substantial privatization, which is not sustainable, and favorable interest-rate and currency trends, which

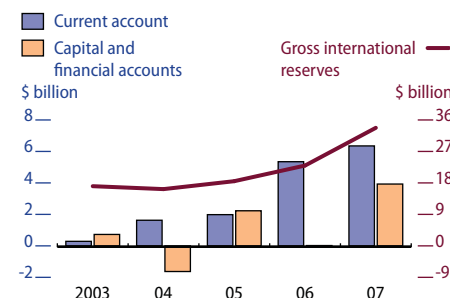
3.27.1 Business process outsourcing

The business process outsourcing industry in the Philippines is one of the world's biggest, with a 5% market share in 2006 of global offshore outsourcing. This new business has expanded rapidly because many local people have a knowledge of English and wages and office rents are relatively low.

Revenues grew by 48% a year between 2004 and 2006. The industry has contributed to GDP growth through expansion of the services sector and of demand for office space; it has become an important foreign exchange earner; and it provides jobs for college graduates. It aims to double its global market share to 10% by 2010, which it believes would create 1 million more jobs.

Such expansion will require the nurturing of higher value-added services such as software development and medical transcription, as well as a supply of labor with the appropriate skills. Lack of skills is a constraint, and greater cooperation between education institutions and business-process outsourcing operators would be beneficial. Lastly, the industry is heavily concentrated in the capital, Manila. Encouraging more service providers to set up in other cities, where wages and rents are lower, would help it to keep costs down and to spread its employment benefits.

3.27.11 Balance-of-payment components and reserves



Sources: Asian Development Outlook database; Bangko Sentral ng Pilipinas, available: <http://www.bsp.gov.ph>, downloaded 18 February 2008.

[Click here for figure data](#)

are vulnerable to swings in market sentiment. Further improvements in the ratio of tax revenues to GDP depend largely on strengthening the administrative capabilities of the main revenue-collecting agencies. Another risk is that higher than expected inflation could drive the central bank to raise interest rates, damping business and consumer demand and raising the public debt service burden. The uncertain incidence of typhoons and dry spells as usual poses risks to the weather-vulnerable agriculture sector.

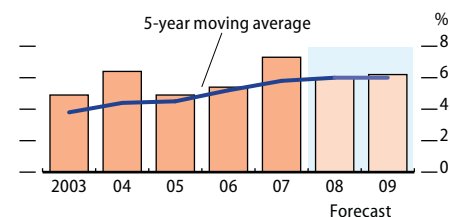
Development challenges

Last year's quickened pace of economic growth generated a net 924,000 jobs. This still falls well short of the medium-term development plan's target of about 1.5 million new jobs a year between 2004 and 2010. One reason is the stagnation of manufacturing. More robust manufacturing would not only generate more jobs, but the links with other sectors would spur employment there, too. Manufacturing also generally provides longer-term employment than other sectors. However, no substantial expansion in manufacturing is likely without a significant and sustained improvement in the investment climate. Business process outsourcing, which has grown rapidly to employ about 320,000 people, holds out hope for further employment generation, if it can find suitably trained staff.

Poverty has been a persistent problem even with the pickup in economic growth over recent years. The incidence of families living in poverty increased by 2.5 percentage points to 26.9% between 2003 and 2006 (Figure 3.27.14), which means that about 4.7 million families, or 27.6 million people, lived in poverty in 2006.

One factor in this deterioration is increasing prices for basic items. The annual per capita poverty threshold was raised from P12,309 in 2003 to P15,057 in 2006 to take price increases into account. In addition to external factors such as higher oil prices, prices of food and beverages increased by 19.3% in 2003–2006. This was partly due to typhoon damage to crops in 2005 and 2006. Insufficient increases in incomes and a high population growth rate were other factors that affected poverty incidence. Further improvement in the fiscal position would enable an increase in social spending to address this issue and to build infrastructure that would help to attract employment-creating industries.

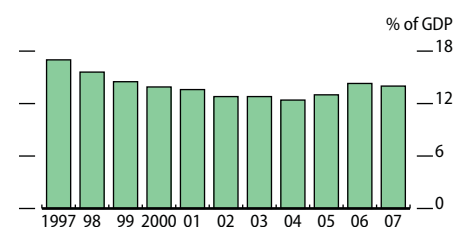
3.27.12 GDP growth



Sources: Asian Development Outlook database; National Statistical Coordination Board, available: <http://www.nscb.gov.ph>, downloaded 31 January 2008; staff estimates.

[Click here for figure data](#)

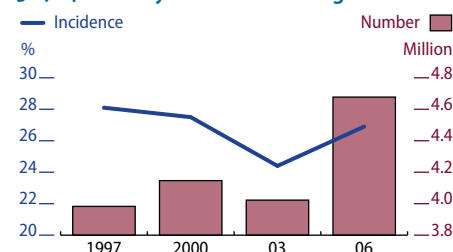
3.27.13 Tax revenues



Sources: CEIC Data Company Ltd.; Bureau of the Treasury, available: <http://www.treasury.gov.ph>; both downloaded 14 February 2008.

[Click here for figure data](#)

3.27.14 Poverty indicators among families



Source: National Statistical Coordination Board, available: <http://www.nscb.gov.ph>, downloaded 6 March 2008.

[Click here for figure data](#)

Singapore

Growth remained well above its trend rate for a fourth year in a row, driven largely by a buoyant property market and related construction activity. Inflation accelerated rapidly, reflecting both domestic cost pressures and escalating international prices. A cyclical slowdown is expected in 2008 because of weaker external demand, although domestic demand will be underpinned by the strong property market and a firm labor market. Policies to manage immigration and address an aging population are needed over the longer term.

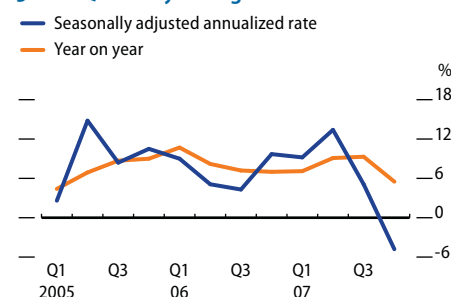
Economic performance

Against the backdrop of a robust Asian economy and a recovery in the domestic property market, GDP expanded by 7.7% in 2007, though momentum eased over the course of the year. GDP fell by 4.8% on a quarter-on-quarter seasonally adjusted annualized basis in the fourth quarter (Figure 3.28.1) owing to sluggish growth in electronics and a decline in pharmaceutical production.

For all of 2007, manufacturing growth slipped to 5.8% from 11.9% in the previous year, mainly due to the weak performance of pharmaceuticals and electronics. The former was affected by the closure of plants for maintenance and to change their product mix, with the result that output of the broader biomedical subsector fell by 0.6%. The latter expanded by a modest 4.0%. Despite strong growth in semiconductors, the production of data storage equipment, consumer electronics, and computer peripherals continued to shrink, reflecting a consolidation of the hard disk industry and relocation of some product manufacturing to lower-cost countries. Still, up by 23.5%, transportation engineering was particularly strong in 2007, boosted by global demand for shipbuilding, ship repairs, and oil-rig building.

After a decade of underperformance, construction emerged as an important growth driver. The property market rebounded as abundant liquidity, the expanding domestic economy, and a large inflow of foreigners boosted demand. An official price index of private residential property surged by 31.0% in the fourth quarter from a year earlier, approaching record levels set in 1996 (Figure 3.28.2). The property market boom spurred construction, which expanded by 20.7%, the fastest pace since 1996. Robust property and construction activity spilled over into financial and business services, as evidenced by strong growth in construction and housing loans. A buoyant stock market and greater volatility in the foreign-exchange market also contributed to the strength of financial services, which grew by 16.9%. Overall, the services sector expanded by 7.8% in 2007 and was the biggest contributor to GDP growth on the supply side.

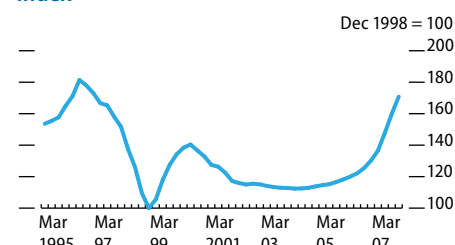
3.28.1 Quarterly GDP growth



Source: Singapore Department of Statistics, available: www.singstat.gov.sg, downloaded 17 March 2008.

[Click here for figure data](#)

3.28.2 Private residential property price index



Source: CEIC Data Company Ltd., downloaded 17 March 2008.

[Click here for figure data](#)

In contrast, the export performance was lackluster, despite the generally benign global trade environment. Merchandise exports increased by just 10.1% last year, decelerating from 18.2% in 2006. A sharp decline in electronics exports largely offset gains from rising exports of pharmaceuticals, disk media, and petrochemicals. Although electronics production grew, exports of domestically made electronic products fell by 9.2%, suggesting a fall in export prices and possible inventory buildup. Import growth slowed to 9.5%, in line with the slow export growth as well as moderating investment in machinery and equipment (Figure 3.28.3).

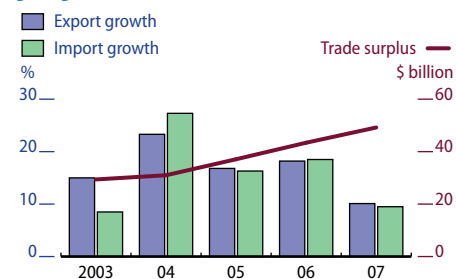
From the view of demand, fixed investment growth accelerated to 20.2% from 13.5% in 2006, largely reflecting a strong rise in construction investment. However, the growth of investment in machinery and equipment lost momentum, partly weighed down by the weak performance of electronics exports. Private consumption rose by 4.4% on the back of continuing strength in the labor market. Overall, domestic demand accounted for 6.7 percentage points of the GDP expansion in 2007, with a contribution of 4.6 percentage points from total investment and 2.1 percentage points from consumption (Figure 3.28.4).

Labor market conditions tightened. Total employment expanded by 9.4% between December 2006 and December 2007, and the unemployment rate fell to a decade low of 2.1%. As a reflection of the tight market, nominal wages rose rapidly, by 6.2%. These wage increases, plus steep hikes in rents and high prices for imported food and oil, fueled inflation pressure. Inflation accelerated from 0.5% in the first quarter to 4.1% in the fourth (Figure 3.28.5). For the year as whole, the consumer price index rose by 2.1%, double the rate of 2006. An increase in the goods and services tax in July also contributed to higher inflation in the second half of 2007.

In the context of sustained economic growth and rising inflation, the Monetary Authority of Singapore maintained its monetary policy of a modest and gradual appreciation of the trade-weighted nominal effective exchange rate, but slightly raised the speed of appreciation from October. Over the year, the Singapore dollar appreciated by 6.4% against the United States (US) dollar. Domestic monetary conditions eased in tandem with US interest rate cuts: the 3-month interbank rate fell by 106 basis points to 2.38% by year-end. The average prime lending rate remained at 5.33% throughout 2007. Domestic credit expanded by 20%, with 42% growth in construction loans and 15% growth in housing loans. In contrast, the weak performance of manufacturing led to a 5.9% contraction in lending there.

Robust economic growth and the buoyant property market also benefited the Government's operating revenues, which rose by 27.0% (excluding capital, investment, and interest income). Government expenditures edged up by 4.9%, resulting in a primary operating fiscal surplus of 3.3% of GDP. In the external accounts, the current account surplus rose to 2.4% of GDP, more than offsetting increased outflows in the financial account driven by local investors' portfolio investment in overseas markets. Consequently, gross international reserves marked a slight gain to US\$163.0 billion by end-2007.

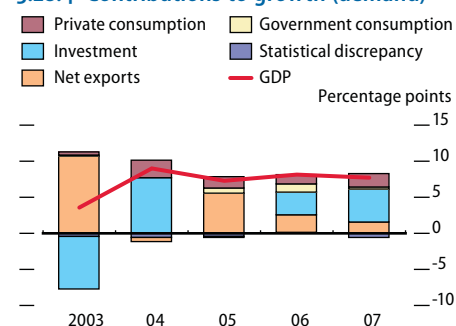
3.28.3 Trade indicators



Source: Singapore Department of Statistics, available: www.singstat.gov.sg, downloaded 17 March 2008.

[Click here for figure data](#)

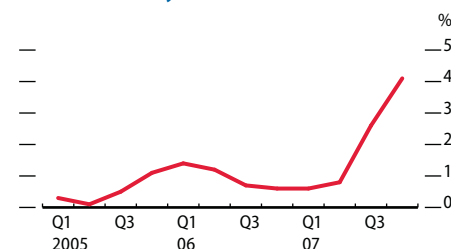
3.28.4 Contributions to growth (demand)



Source: Singapore Department of Statistics, available: www.singstat.gov.sg, downloaded 17 March 2008.

[Click here for figure data](#)

3.28.5 Quarterly inflation



Source: Singapore Department of Statistics, available: www.singstat.gov.sg, downloaded 17 March 2008.

[Click here for figure data](#)

Economic prospects

Singapore has enjoyed well above-trend economic growth for 4 consecutive years. In 2008, the slowdown in export markets, especially for electronics, and the tight supply of skilled labor will cause the expansion to slow.

Domestic demand that has been driven by the construction boom will help cushion the impact of the slowdown in external demand. Although manufacturing investment is likely to be damped by the weaker export outlook, construction investment will continue to expand at a robust pace in 2008 and 2009. Spurred by strong job creation, large inflows of foreign workers, and low interest rates, underlying demand for property will remain strong. Major projects under construction include two casino-resorts, a large expansion of the financial center, and infrastructure works. Moreover, tight supply of private residential property suggests the pipeline of residential projects will remain large, supporting construction investment well into 2009.

Concerned about intense pressure on construction resources and rapidly rising construction costs (estimated to increase by 20–30% in 2007), the Government has postponed about US\$2.2 billion of public sector projects in the pipeline until at least 2010. In October 2007 the authorities also withdrew a deferred payment scheme to cool the property market. Under this arrangement, a buyer could defer mortgage payments until a property was completed. The impact of these policy changes on construction demand is likely to be modest, though.

Consumer spending is likely to grow steadily, supported by the firm labor market and fiscal transfers to households. Export growth is forecast to moderate to 4.0% in 2008 because of the decelerating global economy, but import growth is likely to pick up, reflecting strong domestic investment demand and rising international commodity prices. Taking these factors into account, GDP growth is forecast to decelerate to 5.2% in 2008, and to move back up to 5.8% in 2009 if global growth revives as expected (Figure 3.28.6). The current account surplus as a ratio to GDP is forecast to stay about 24% in 2008–2009 (Figure 3.28.7).

Fiscal and monetary policies are expected to be generally neutral. The budget for FY2008 (started 1 April 2008) projects a small deficit of 0.3% of GDP, on account of a large increase in special transfers to help mainly low- and middle-income households cope with inflation. In the first half of 2008, inflation is forecast to spurt to about 6% (it was 6.6% year on year in January) because of high global food prices, rising private residential rents, and the tight labor market, before it decelerates to perhaps 4% in the second half as the impact of the increase in the goods and services tax moves out of the picture. That would put year-average inflation at 5.0%. The Monetary Authority is likely to maintain its moderately tight stance, in view of the weaker external outlook and downside risks to growth in 2008.

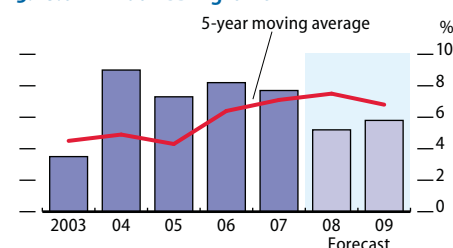
Sector-wise, manufacturing is expected to remain subdued in 2008, largely owing to weak electronics exports. Transport engineering, which is more sensitive to commodity cycles, will likely stay strong, and the volatile biomedical subsector is seen bouncing back from its weak performance in 2007. Construction is forecast to maintain double-digit growth. The softness in manufacturing and exports will have spillover effects on industries with close links to trade, such as transport and

3.28.1 Selected economic indicators

	2008	2009
GDP growth	5.2	5.8
Inflation	5.0	3.3
Current account balance (% of GDP)	23.2	24.0

Source: Staff estimates.

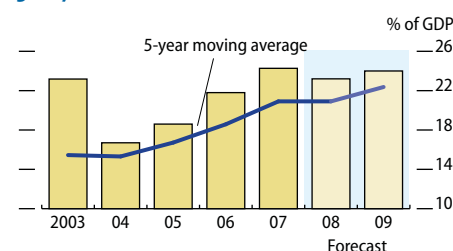
3.28.6 Annual GDP growth



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

3.28.7 Current account balance



Sources: Asian Development Outlook database; staff estimates.

[Click here for figure data](#)

storage services. In financial services, generally slower growth in Asia and global financial market turbulence may reduce fund-raising activity, thereby easing growth momentum. However, the foreign exchange market could remain busy and domestic loan growth will be bolstered by property market activity and low interest rates, supporting a still-healthy growth of 8–9% in financial services.

The outlook would be hurt by a more protracted and severe slowdown in the US economy than is currently foreseen. Domestically, rising inflation may prompt the monetary authorities to tighten monetary policy, exerting downward pressures on exports and on the domestic property market. Global economic and financial market turbulence may also erode confidence in the property market, especially at the high end, leading some buyers to hold back on purchases. That would act as a drag on construction and on property-related services.

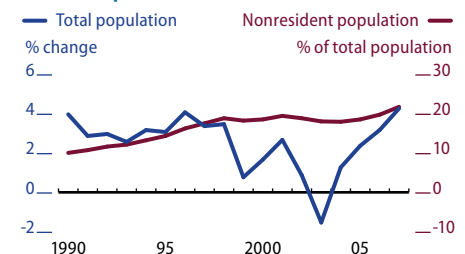
Development challenges

As a city-state of 4.5 million people depending heavily on trade in goods and services, Singapore is highly vulnerable to external shocks. A larger population would enable the country to build domestic demand to help balance fluctuations in external demand. Besides, export-oriented services targeted for expansion such as tourism, entertainment, health care, and education would benefit from a larger domestic market that would help increase scale and thus lower costs. The Government is planning for a substantial increase in population; it has revised its long-term population projection in its planning framework from 5.5 million to 6.5 million.

Given Singapore's low fertility rate, opening the door to immigration is the way to boost the population. Indeed, the number of immigrants has increased rapidly in recent years in response to the tight labor market and an easing of immigration policy (Figure 3.28.8). Yet high rates of immigration can bring social and political strains, especially during economic downturns or if the benefits of economic growth are not felt by the local population. Managing immigration so that it does not cause such strains, leading to demands for a more restrictive immigration policy and subsequent slowdown in population growth, will require careful planning and execution.

The influx of relatively young immigrants is slowing the speed of the aging of the population, but it has not reversed the aging trend. The proportion of residents aged 65 and above is likely to double to about 17% by 2020 from 8.5% in 2007. The Government has instituted some changes in pensions and housing policies to tackle this. Still, any comprehensive, long-term approach requires reforms in pensions, health, employment, and education.

3.28.8 Population indicators



Note: Total population comprises Singapore residents and nonresidents. Nonresident population comprises those who are not Singapore citizens or permanent residents.

Source: Singapore Department of Statistics, available: www.singstat.gov.sg, downloaded 17 March 2008.

[Click here for figure data](#)

Thailand

Exports drove moderate economic growth in 2007, with consumption and investment curbed by political uncertainties at home. An elected Government took office in January 2008, a development that is expected to assist in reviving domestic demand and so offset a likely weakening of exports this year. The Government has lifted capital controls and outlined policies to stimulate the economy and invest in large infrastructure projects. Growth is projected to edge higher in 2008–2009. Inflation, low last year, is now accelerating.

Economic performance

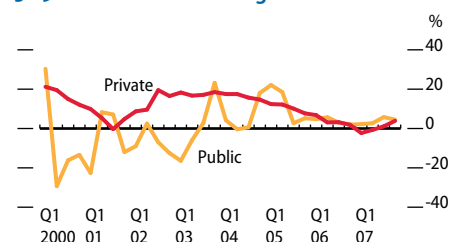
With consumption and investment weakened by lack of certainty on the political front, the economy grew by 4.8% in 2007, or nearly 1 percentage point below the average for the 5 years 2002–2006. Domestic demand contributed less than 2 percentage points to GDP growth while net exports contributed 3 percentage points. After 2 years of political instability, which included a military coup in September 2006 followed by an interim administration, an elected government took office in January 2008 in a six-party coalition.

Concerns about political issues and associated lack of clarity on economic policy eroded consumption and investment spending for much of 2006 and 2007. At half 2006's low rate, private consumption grew by just 1.4% in 2007, despite stronger farm incomes due to higher prices of agricultural products and increases in salaries for government and state-enterprise employees. Spending on items other than food grew by a meager 0.8%. The consumer confidence index fell until November.

Regarding investment, total gross fixed capital formation in 2007 grew by 1.4%, a sharp slowdown from a year earlier. Private fixed investment contracted in the first half, then started to improve in the second (Figure 3.29.1) to record 0.5% growth for the year as a whole. The pickup later in the year was the result of some improvement in investor confidence that the political uncertainties would be resolved. GDP growth lifted in the second half of 2007 (Figure 3.29.2) Public investment in FY2007 (ended 30 September 2007) was up by 4.0% from the previous fiscal year, even though there was no major investment under the large public infrastructure program drawn up in 2004, which called for capital outlays of as much as \$42 billion in 2005–2009.

From the supply side, industry was the fastest-growing sector and made the strongest contribution (2.5 percentage points of total GDP growth). Manufacturing output increased by 5.8%, driven by export-oriented industries including integrated circuits, hard disk drives, air conditioners, and vehicles. In contrast, some domestic market-oriented

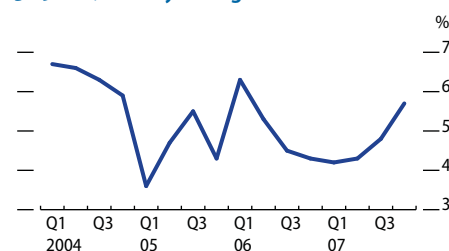
3.29.1 Fixed investment growth



Source: National Economic and Social Development Board, available: <http://www.nesdb.go.th>, downloaded 13 March 2008.

[Click here for figure data](#)

3.29.2 Quarterly GDP growth



Source: National Economic and Social Development Board.

[Click here for figure data](#)

industries reported lower production, namely cement and motorcycles. Construction grew by 2.7%, mainly reflecting an expansion of public sector projects. Growth in services was pulled back by a weakening in tourism arrivals. Agriculture had a reasonable year, with good output gains in cassava and palm oil, as well as in fisheries.

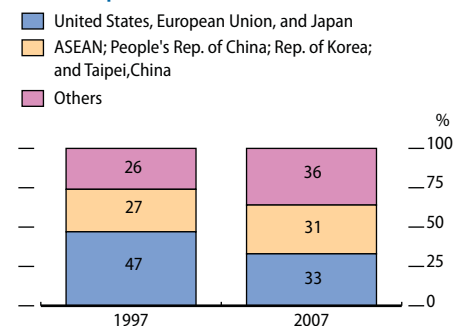
External trade made the major contribution to growth: merchandise exports climbed by 18.1% in nominal United States (US) dollar terms, while merchandise imports increased at just half that rate. All export categories performed well, notably electronics, vehicles, petroleum products, metal products, plastic products, and jewelry. Exports of agricultural products, including palm oil, rice, and natural rubber, also rose, boosted by high world commodity prices. The strong export performance was attributable in part to gains in fast-growing markets in eastern Europe, Middle East, People's Republic of China, and India (Figure 3.29.3). Thai producers have come under pressure from sluggish domestic demand and a slowdown in exports to the US to push harder in new markets, and seem to have been aided by Thailand's free-trade agreements. For example, exports of automobiles and parts to Australia surged after their bilateral agreement came into effect in 2005 (Figure 3.29.4).

The soft domestic demand kept import growth to moderate levels, until later in the year when it started to pick up (Figure 3.29.5) as private investment firmed. Demand for imported raw materials and intermediate goods rose in line with the strong export performance. A large trade surplus of almost \$12 billion contributed to a current account surplus of about \$15 billion, or 6.1% of GDP in 2007. Foreign exchange reserves increased by \$20 billion to \$85.1 billion at year-end, equivalent to 3.9 times short-term foreign debt and 6.2 months of imports. This also reflected accumulation of foreign exchange by the Bank of Thailand as it sold baht to limit the currency's appreciation. Still, the currency strengthened by a nominal 6.3% against US dollar in 2007, and its nominal effective exchange rate rose by 1.4% (Figure 3.29.6).

Weakness in domestic demand had another effect: it kept inflation low until the fourth quarter, when it quickened to 2.9%, propelled by higher prices for fuel and cooking gas (subsidies on cooking gas were ended in early December 2007). Food prices also picked up, in line with the global trend. For all 2007, inflation averaged 2.3%, about half the rate of the 2 previous years, paving the way for the central bank to reduce its policy interest rate by 175 basis points to 3.25% in January–July, in an effort to stimulate domestic demand. But with domestic demand (and inflation) gathering pace later in the year, the central bank left the policy rate steady after July. The interim administration, having accelerated spending to bolster domestic demand, recorded a budget deficit of 1.8% of GDP in FY2007. Total public debt fell to 38.0% of GDP at end-2007 from 40.5% a year earlier.

Employment rose by 1.6% to 36.2 million, and the unemployment rate averaged 1.4%, down from 1.5% in 2006, continuing the downward trend of the past 10 years.

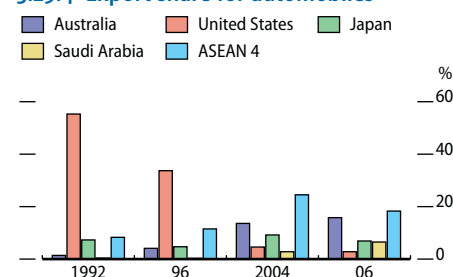
3.29.3 Export share



Source: Bank of Thailand.

[Click here for figure data](#)

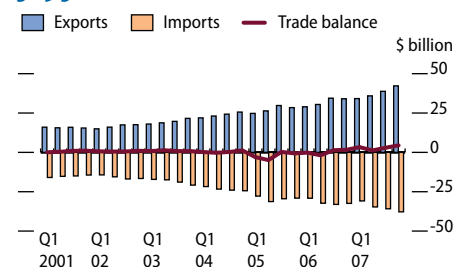
3.29.4 Export share for automobiles



Source: Ministry of Finance.

[Click here for figure data](#)

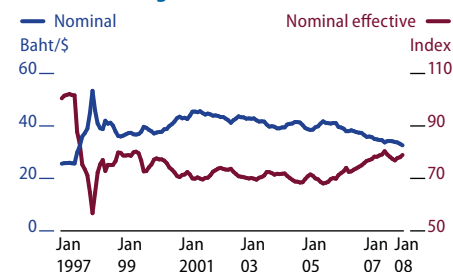
3.29.5 Trade indicators



Source: Bank of Thailand.

[Click here for figure data](#)

3.29.6 Exchange rates



Source: Bank of Thailand.

[Click here for figure data](#)

Economic prospects

The projections for 2008 and 2009 assume that the coalition Government will be stable and will implement the major policies outlined so far, which should underpin an improvement in consumer and business confidence. The Government has indicated that it will revive or revitalize some policies similar to those followed during 2001–2005, aimed largely at assisting poorer communities and small enterprises. One is the village fund program (put on hold during the interim administration), which provided a revolving fund of B1 million (now about \$31,250) for each village for lending to local people. It was successful in boosting consumption at the village level, although it is not clear that the money was always spent for productive purposes. The new Government plans to revive these village funds, and upgrade well-managed ones into village banks. Another program that was suspended and could be revived involves funding for communities for projects to generate sustainable revenues, develop community assets, and preserve the environment.

The One Village-One Product policy was continued during the interim administration but with only low priority. It assists small enterprises that add value to natural resource products such as silk and food. The People's Bank, which provides low-income people with access to banking, also looks set to get more attention. The Government will retain the universal health care program, which provides a useful safety net but is underfunded.

These policies would boost demand at the community level in the near term. Longer-term issues are to show that they are fiscally sustainable and can operate in a transparent way that enables public funds to be monitored.

As for public investment, the Government has reprioritized the large infrastructure investment program. Tenders for three new train routes in Bangkok will be called in 2008 as part of a \$22.2 billion plan to develop nine new mass transit rail lines for the city. The Government will draw B520 billion (US\$15.0 billion) from its budget in 2008–2013 to help fund the rail projects. Speeding up public investment in infrastructure is likely to provide a boost to related private sector industries, including construction and real estate, mainly after 2008.

Early indications show domestic demand continuing to improve in 2008. The index of consumer confidence rose in January 2008 (Figure 3.29.7) and the private consumption index increased by 8.5% that month from a year earlier. A sharp rise in imports of capital goods in January (excluding aircraft, ships, and trains) indicated a rise in private investment. In March, the Government introduced a policy package designed to stimulate consumption and investment, including tax breaks for individuals and for small and medium firms, and a reduction in taxes and fees for property transfers.

Given these policies and plans, faster growth is forecast for both consumption and investment, public and private. Stronger domestic demand is expected to offset a slowdown in exports, supporting a GDP growth forecast of 5.0% in 2008 and 5.2% in 2009 (Figure 3.29.8)

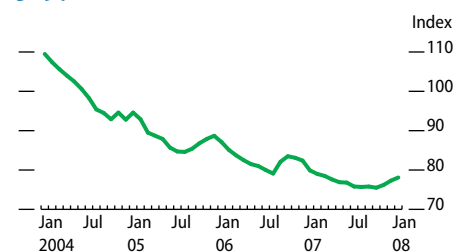
Private consumption will be buttressed by increases in minimum wages (January 2008) and in wages for the public sector, including state enterprises (October 2007) and the more recent tax breaks for individuals. The impact of last year's interest rate reductions will help.

3.29.1 Selected economic indicators

	2008	2009
GDP growth	5.0	5.2
Inflation	4.0	3.5
Current account balance (% of GDP)	3.0	1.0

Source: Staff estimates.

3.29.7 Consumer confidence index

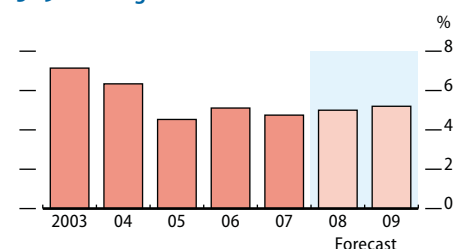


Note: A reading of less than 100 denotes deteriorating confidence.

Source: Center for Economic and Business Forecasting.

[Click here for figure data](#)

3.29.8 GDP growth



Sources: National Economic and Social Development Board; staff estimates.

[Click here for figure data](#)

Private investment is forecast to expand by at least 5% in 2008, from a low base last year. High levels of capacity utilization at end-2007 (Figure 3.29.9) will induce investment. Capacity utilization rates were high in chemicals (100%), petroleum products (94%), electronic products (92%), and beverages (87%). Moreover, foreign direct investment approvals last year rose by 63% in value terms, a sign that FDI inflows will be robust in the forecast period.

Merchandise export growth is projected to slow because of the downturn in industrial-country markets, but still to increase by about 11% in 2008 and 10% in 2009. Exports appear to be more resilient (Figure 3.29.10) now that the markets are more diversified. The diversification extends beyond expansion in new markets. For example, exports denominated in currencies other than US dollars have increased from about 8% in 1996 to 19% in 2007. This has helped reduce the impact of the baht's appreciation. Export products, too, are more widely based than in the past, marking Thailand's shift away from labor-intensive items over the past decade. The top exports last year were computers and parts, automobiles and parts, and electrical circuits.

Merchandise imports are forecast to accelerate, prompted by the revival of domestic demand, rising by 14% this year and 15% in 2009. The current account surplus is projected to shrink to about 3% of GDP in 2008 and to 1% in 2009 as the trade surplus falls (Figure 3.29.11).

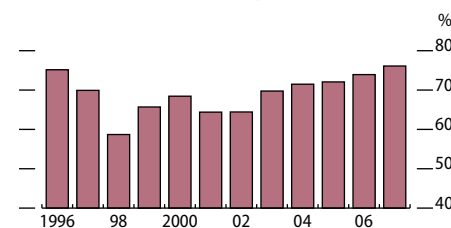
Inflation quickened to 5.4% in February 2008, the highest level in 20 months, indicating negative real interest rates (the policy interest rate is 3.25%) and an easing of monetary policy. Rising prices for oil and food are underpinning inflation. Price pressures are forecast to moderate during the year, leaving the average inflation rate at 4.0% for 2008, easing to 3.5% in 2009 (Figure 3.29.12). Inflation is limiting the possibility of further interest rates cuts to support economic growth.

The budget for FY2008 projects a wider deficit of 1.8% of GDP and disbursements of capital expenditures in the first 4 months of this fiscal year were stepped up sharply from the year-earlier rate. Given that the public debt is well below the government-imposed limit of 50% of GDP, the authorities are likely to consider additional public spending this year and next to stimulate growth. Tax concessions announced this year will erode public revenues, though collections of indirect taxes will rise if consumption picks up as forecast.

The central bank in March 2008 lifted capital controls (imposed in December 2006) by removing the 30% non-interest-bearing reserve requirement on many types of capital inflows. That restriction had been aimed at curbing a surge in capital inflows (Figure 3.29.13) and slowing currency appreciation. Following a plunge in stock prices in the immediate aftermath of the imposition of capital controls, the authorities exempted stock market inflows, and continued to roll back the restrictions over the course of 2007. In response to exporters' concerns that the lifting of the controls would add upward pressure on the baht (because of higher capital inflows), the Government stated that it would refinance its own foreign currency debt and ease restrictions on foreign investment by Thais.

Development of the domestic capital markets is one of the new Government's policies. It has announced tax concessions for companies to

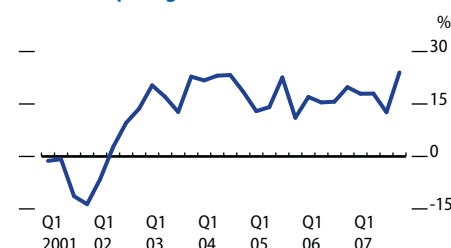
3.29.9 Industrial capacity utilization



Source: Bank of Thailand.

[Click here for figure data](#)

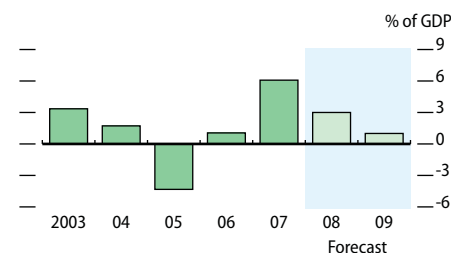
3.29.10 Export growth



Source: Bank of Thailand.

[Click here for figure data](#)

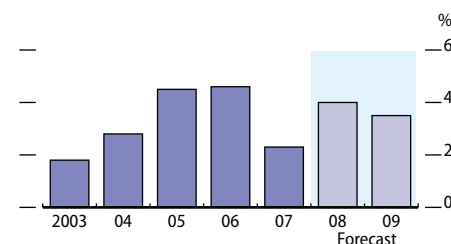
3.29.11 Current account balance



Sources: Bank of Thailand; staff estimates.

[Click here for figure data](#)

3.29.12 Inflation



Sources: Bank of Thailand; staff estimates.

[Click here for figure data](#)

list on the stock exchange, tax incentives for investment in life insurance and long-term equity funds, and stated that it will increase the role of domestic capital markets in financing the large infrastructure projects. However, privatization of state assets, which would benefit equity market development, does not appear to be a government priority.

Risks to the forecasts come from within and outside the country. Higher than expected global oil prices are a particular risk because the economy is more sensitive to oil prices than most others in Asia. A deeper global economic slowdown than the baseline forecast would damage the outlook for exports and for externally oriented services such as finance and tourism. Domestically, there are risks that the large public investment projects could face further delays, and that political stresses could reemerge.

Development challenges

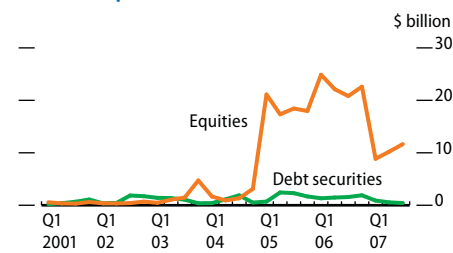
Given that foreign investor sentiment was dented by some of the policies and proposals of the interim administration, the new Government faces the challenge of rebuilding confidence. It has gone some way with the ending of capital controls. A proposed amendment to the Foreign Business Act that would tighten controls on foreign ownership of Thai companies remains a concern to international businesses and it might be shelved. Also to be resolved are proposed changes to retail laws that would hamper foreign retailers' expansion.

The baht appreciated by about 7% against the US dollar in the first 12 weeks of 2008 and has strengthened by 24% since end-2005. The Government's stance on currency appreciation has yet to become clear. Continued market intervention to support the US dollar against the baht is one option. Gross foreign reserves, including forward contracts, totaled \$106.7 billion at end-2007, with much of the rise of \$32 billion over the year reflecting market intervention by the central bank. However, this buying of foreign exchange has a cost: the central bank needs to counterbalance inflows with new bond issues to prevent excessive growth in the money supply that could fan inflation.

A longer-term challenge is the aging population. The population dependency ratio, defined as the ratio of the number of elderly to the number of working age people, is projected to rise from 23.5% in 2006 to nearly 69% by 2050. Such changes imply a reduction in income per capita and a heavy fiscal burden on the public old-age pension and health care programs. Currently, Thailand has a social insurance program that includes an old-age pension administered by the Social Security Office. The pension plan is a mandatory, defined-benefit system for employees in the formal sector of the economy. Workers and employers contribute 3% of wages each and the Government contributes an amount equal to 1% of wages.

However, it is projected that the pension system will not have adequate funding to pay the full promised retirement benefits by 2046, leaving the Government to fill a widening financial gap or to reduce the pension payouts and push many older people into poverty. Increasing the retirement age from 55 to 60 and raising contribution rates would help in the medium term. Adding mandatory privately managed pensions in order to supplement the public system could be a longer-term solution.

3.29.13 Capital inflows



Source: Bank of Thailand.

[Click here for figure data](#)

Viet Nam

A third consecutive year of 8%-plus growth was led by strong expansion of investment and consumption. The rapid growth has strained resources, as shown by a surge in imports, infrastructure bottlenecks, skilled-labor shortages, and inflation, which accelerated to over 19% year on year by March 2008. The authorities have tightened monetary policy and allowed some exchange rate flexibility to rein in price rises, and are initiating fiscal measures. These steps, plus weaker external demand, should pull back growth this year. In 2009, inflation is expected to moderate and GDP growth pick up. Challenges are to control inflation, maintain stability of the banking system, and ease the infrastructure constraints.

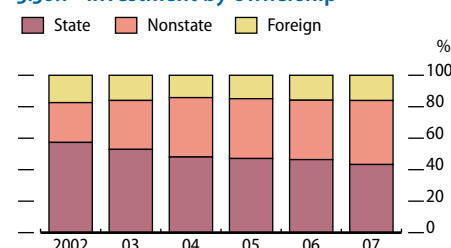
Economic performance

The economy maintained robust growth at 8.5% in 2007, above the 7.8% average of 2002–2006. Accession to the World Trade Organization (WTO) in January 2007 added impetus both to growth and to market-oriented reforms, resulting in strong domestic demand. Investment grew by 16% to reach 40.4% of GDP, one of the highest rates in Asia. Much of the expansion came from domestic private investors, whose share of overall investment rose to about 40% in 2007 (Figure 3.30.1) as the country continued its transition to a market-based economy. Foreign direct investment (FDI) approvals rose to about \$20.3 billion, with disbursements of \$4.0 billion (two thirds higher than in 2006). Consumption, boosted by wage increases and remittance inflows, also continued to grow strongly. Nominal retail sales of goods and services climbed by 23.3% (Figure 3.30.2). Strong domestic demand spurred a surge in imports, causing net exports to subtract from GDP growth.

On the supply side, industry grew by 10.6% and was again the main contributor to GDP growth. Private industry expanded by 20.9%, outpacing the state sector. Within industry, manufacturing (by far its largest subsector) grew by 12.8%. Fueled by the strong domestic demand, the output of utilities also increased, by about 12%. In contrast, mining output fell by 2.0% (Figure 3.30.3) as the biggest oil field in the country becomes depleted. Services grew by 8.7%, led by strong performances in the trade and finance, and hotel and restaurant, subsectors (the latter helped by buoyant tourism).

Agricultural output was hurt by drought, avian flu, and livestock diseases, offset in part by strong growth in fisheries. The sector as a whole grew by 3.4%, a little below the recent trend. Significantly higher production of natural rubber and cashew nuts was the result of increased plantings and gains in productivity. Agriculture's share of the economy continues its long-term decline (it was just under one fifth in 2007) as

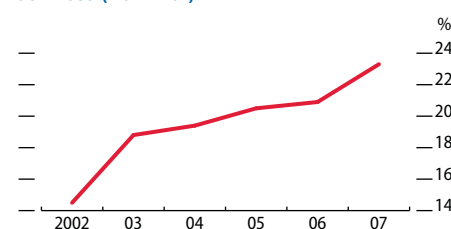
3.30.1 Investment by ownership



Source: General Statistics Office of Viet Nam, available: <http://www.gso.gov.vn>, downloaded 25 February 2008.

[Click here for figure data](#)

3.30.2 Growth of retail sales of goods and services (nominal)



Sources: General Statistics Office of Viet Nam, available: <http://www.gso.gov.vn>; CEIC Data Company Ltd.; both downloaded 25 February 2008.

[Click here for figure data](#)

industry and services expand rapidly, but it still accounts for a little over half of total employment.

Buoyant investment, coupled with higher international commodity prices, prompted a steep 35.5% increase in nominal merchandise imports (\$60.8 billion) in 2007 (Figure 3.30.4). Capital goods (17% of the total), soared by 56.5%, reflecting the import of aircraft and equipment for large projects such as the Dung Quat oil refinery. Manufacturing, particularly clothing, depends heavily on imported inputs. Consequently, growth in manufactured exports triggered matching growth in imports of raw materials and intermediate goods. Imports of consumer goods, too, rose.

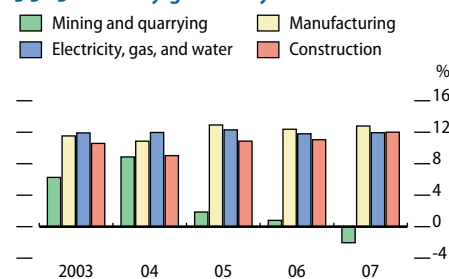
Growth in merchandise exports decelerated slightly from 2006, to a still-solid 21.5% (\$48.4 billion) in 2007. Clothing and textiles exports, benefiting from the end of quotas following WTO accession, rose by 33.4%. Wooden furniture, one of Viet Nam's fastest-growing exports, grew by 22.3%. Buoyant global commodity prices boosted the value of exports of coffee and pepper by about 50% each. Exports of higher value-added products are making a mark as FDI fuels the construction of export-oriented factories. Reflecting this, exports of electronics and computers increased to \$2.2 billion in 2007, up from about \$500 million in 2002.

With imports outpacing exports, the trade deficit widened to a record \$12.4 billion in 2007 (Figure 3.30.5) and the current account deficit pushed out to an estimated 8.0% of GDP. While this was largely the result of a surge in capital goods imports and other inputs for export production, the widening gaps raised concerns that increasing reliance on short-term financing, including trade credits, poses risks in the context of global financial market uncertainties. Strong inflows of FDI, remittances, aid, and portfolio investment contributed to a surplus in the overall balance of payments, and to a rise in gross official reserves to \$20.8 billion, equivalent to 14 weeks of imports.

The impact on money supply of the surging capital inflows was only partly offset by sterilization operations by the State Bank of Viet Nam, the central bank. As a result, money supply (M2) growth accelerated to 46% in 2007. Credit soared by 54% (Figure 3.30.6), significantly above the central bank's 25% target. High levels of liquidity, underpinned by strong domestic demand, pushed inflation up to 12.6% by December. Food prices (42.8% of the consumer price index) rose sharply during the year. Major reasons were outbreaks of poultry and pig diseases that reduced meat supplies and price hikes for imported food. Costs of building materials and rents gathered pace because of booming demand for real estate. Furthermore, the Government raised prices for electricity, coal, and gasoline.

Acting to drain excess liquidity, the State Bank increased issuance of bills and raised the reserve-requirement ratio for banks from 5% to 10% in June. Foreign exchange policy was also adjusted. For 3 years the dong had been managed with the result that it depreciated against the United States (US) dollar by about 1% a year. In 2007, the Government allowed more flexibility in the exchange rate by widening the dong's daily trading band against the US dollar from 0.25% to 0.5% in January and further to 0.75% in December. Given the weakening US dollar and strong capital inflows, the dong appreciated by 0.4% against the US dollar from October 2007 to February 2008 (Figure 3.30.7).

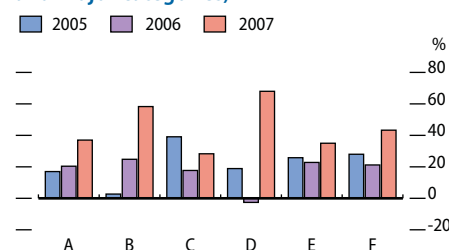
3.30.3 Industry growth by subsector



Source: CEIC Data Company Ltd., downloaded 25 February 2008.

[Click here for figure data](#)

3.30.4 Merchandise import growth (total and major categories)

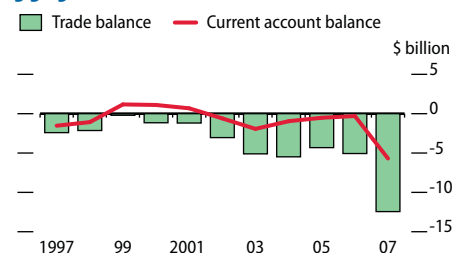


A = total imports; B = machinery and spare parts; C = petroleum; D = steel products; E = garments; F = electronic products.

Source: CEIC Data Company Ltd., downloaded 25 February 2008.

[Click here for figure data](#)

3.30.5 External indicators



Source: CEIC Data Company Ltd., downloaded 25 February 2008.

[Click here for figure data](#)

In another decision aimed at easing inflation pressure, import tariffs on 18 groups of commodities were cut in August.

Employment created by the expansion of industry and services, mainly in the private sector, brought the unemployment rate down from 4.8% in 2006 to 4.6% in 2007. Shortages of skilled labor, causing steep salary increases and high staff turnover rates, have become a constraint to business in Viet Nam, joining the list of bottlenecks that includes inadequate roads, ports, and power generating capacity.

Buoyant economic growth has propelled government revenues—they rose by 16.4% in 2007. Corporate income tax and value-added tax contributed 77% of the total. Revenues from oil grew strongly because of higher prices received for the nation's crude oil exports. (Viet Nam is a net oil exporter, shipping out crude and importing petroleum products.) Expenditures increased by 17.9%, with significant increases in spending on infrastructure and education. Fiscal policy was expansionary in 2007. The fiscal deficit widened to 4.9% of GDP from 4.1% in 2006. (Including onlending, mainly to state-owned enterprises, the deficit was estimated at 6% of GDP.) Public and publicly guaranteed debt rose slightly to 43.4% of GDP.

After a year when the stock market boomed (the VN Index of share prices soared by 144% in 2006), the market surged higher in the first 2 months of 2007. That prompted concerns about a price bubble and excessive lending for share purchases. The central bank imposed limits on lending to buy stocks. That move, combined with concerns about high market valuations, started a decline in share prices that accelerated in early 2008 when monetary policy was tightened. The VN Index was down by 55% in late March 2008 from its peak reached in March 2007 (Figure 3.30.8). More state-controlled companies issued shares and listed on the stock market during 2007.

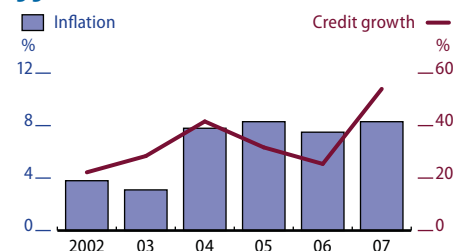
Economic prospects

The forecasts assume that the Government will follow policies that gradually rein in rapid inflation and maintain overall macroeconomic stability. Such policies were evident early in 2008 as the authorities aimed to pull back credit growth to 30% or less. The State Bank of Viet Nam in January raised bank reserve requirements from 10% to 11% and lifted official interest rates for the first time in more than 2 years (its base rate by 50 basis points to 8.75% and its refinancing rate by 100 basis points to 7.5%). However, these official interest rates are well below the inflation rate and have limited impact on market rates.

In a direct move to drain liquidity, the State Bank required banks to buy the equivalent of \$1.3 billion of 1-year Treasury bills. Banks were also directed to be more cautious in lending for shares and real estate. These tightening measures pushed up overnight interbank market rates to over 30% at times during February, and deposit rates jumped as banks competed for funds. Subsequently, the State Bank imposed a 12% cap on dong deposit rates.

In March 2008, the central bank again widened the daily trading band for the dong against the US dollar, to 1%, and indicated that the

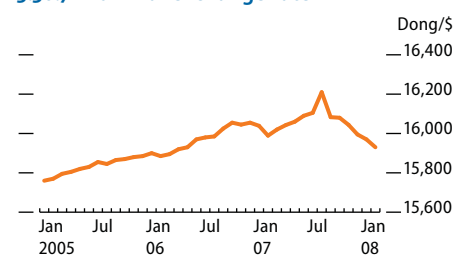
3.30.6 Prices and credit



Sources: International Monetary Fund, *Country Report* No. 07/387, available: www.imf.org; General Statistics Office of Viet Nam, available: www.gso.gov.vn, downloaded 25 February 2008.

[Click here for figure data](#)

3.30.7 Nominal exchange rate



Source: CEIC Data Company Ltd., downloaded 25 March 2008.

[Click here for figure data](#)

3.30.1 Selected economic indicators

	2008	2009
GDP growth	7.0	8.1
Inflation	18.3	10.2
Current account balance (% of GDP)	-10.3	-9.4

Source: Staff estimates.

band would widen to 2% at some time in the future. The currency appreciated by 0.3% against the US dollar in the first 2 months of 2008.

Also in March, the Government initiated fiscal tightening measures including cuts in non-critical expenditures and closer scrutiny of public investment projects as part of its effort to contain inflation. It also indicated that it would lower its 8.5–9.0% GDP growth target for 2008.

The investment momentum built up in recent years as a result of structural reforms and WTO accession is expected to be maintained this year. FDI approvals grew strongly by 56% in January–February 2008 from the year-earlier period. However, the monetary tightening has, among other things, made it difficult to convert US dollars into dong, which will likely delay disbursement of some FDI. Consequently, investment growth is forecast to slow in 2008 and Viet Nam's high investment rate is expected to decline to 34% of GDP in 2008. Consumption growth, too, is seen slowing, because higher prices for basic staples will likely damp other spending. Net exports are likely to remain contractionary.

On balance, economic growth is expected to moderate to 7.0% in 2008 (Figure 3.30.9), before it picks up to about 8.1% in 2009 if the authorities ease the monetary tightening by then and if a recovery in external demand emerges.

Prolonged cold weather in the north of the country early in 2008 damaged crops and pushed up food prices. At the same time, the Government raised the price of diesel fuel by 36%. Adding to demand pressures, salaries of public employees were increased from January 2008. Driven by higher prices for food and housing, inflation surged to 19.4% year on year in March (Figure 3.30.10), the highest in more than a decade. The policy tightening is expected to gradually help contain inflation in the second half of 2008, but it might still be in the region of 16% by December. Year-average inflation is forecast at 18.3%, slowing to 10.2% in 2009 (Figure 3.30.11)

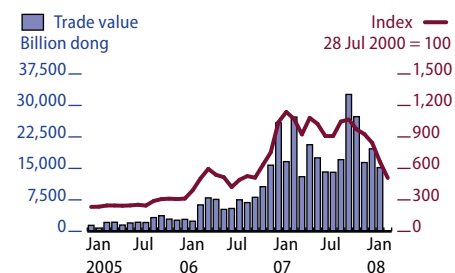
The slowdown in global trade is expected to trim nominal export growth to about 18% this year. Import growth is seen decelerating from 2007's unusually high rate, but will likely exceed export growth. (Official estimates for the first quarter of 2008 showed the trade gap more than quadrupled from the year-earlier period to \$7.4 billion as imports shot up by 63% and exports rose by 23%.) The current account deficit is forecast to widen to about 10% of GDP in 2008. Inflows of FDI, aid, and remittances should keep the overall balance of payments in surplus.

Development challenges

Years of rapid growth have strained available resources and caused imbalances and overheating in parts of the economy. This is shown by the surge in imports, infrastructure constraints, shortages of skilled labor, and very high inflation. The immediate challenge is to bring down inflation before expectations build to such a degree that high inflation becomes persistent. This would impair investment and economic growth over the medium term. Living standards, particularly for the poor, are already suffering.

Measures aimed at curbing inflation will slow growth in the short term. The tightening of monetary policy has also put considerable strain

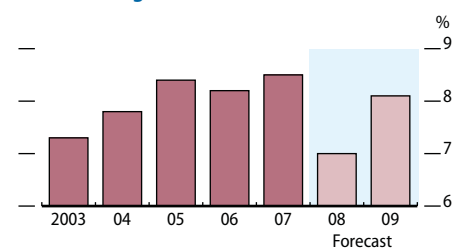
3.30.8 Ho Chi Minh stock exchange indicators



Source: CEIC Data Company Ltd., downloaded 24 March 2008.

[Click here for figure data](#)

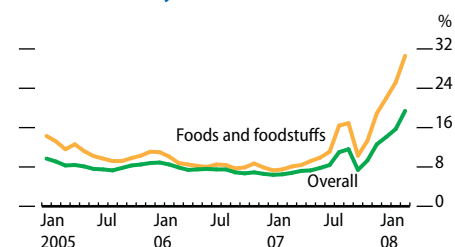
3.30.9 GDP growth



Sources: CEIC Data Company Ltd., downloaded 25 February 2008; staff estimates.

[Click here for figure data](#)

3.30.10 Monthly inflation



Source: CEIC Data Company Ltd., downloaded 25 March 2008.

[Click here for figure data](#)

on the financial sector, which is at an early stage of development and has many weaknesses. Furthermore, the fiscal tightening, if it reduces investment in infrastructure and education, could damage medium-term growth prospects.

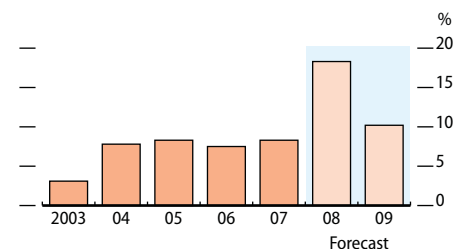
A policy mix of monetary and fiscal tightening, as well as greater exchange rate flexibility, could bring down inflation without putting an excessive burden on the financial sector and causing a sharp slowdown in growth. Careful selection of public expenditure priorities (especially public investment) is needed if medium-term prospects are to be enhanced.

Managing the strong inflows of foreign capital will remain a challenge for both macroeconomic management and for the banking system, especially as some banks expanded rapidly during the high-growth years, straining their management capacity. In addition, increased lending (with high-priced stocks and real estate as collateral) has implications for banks' asset quality, particularly during a period of monetary tightening. Moreover, the liquidity squeeze has raised funding costs for banks, and may erode their net interest margins. Standard & Poor's has stated that a prolonged squeeze would worsen structural weaknesses in banking.

The medium-term challenge will be to ratchet growth up again, while keeping inflation under control. To this end, the economy needs to increase the supply of skilled workers, improve efficiency of public investment, and continue market-oriented reforms, all the while investing further in infrastructure. The Government's capacity for macroeconomic policy management is an area that requires attention, including development of the monetary policy framework. Greater policy coordination among agencies is essential. The policy agenda for reform of the banking system should include strengthening prudential regulation and supervision, encouraging consolidation, and accelerating the entry of foreign operators.

Even with these challenges, the medium- and long-term economic prospects are good.

3.30.11 Annual inflation



Sources: Asian Development Outlook database; 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

Downturns in key industries, tightened monetary and fiscal policies, and weakened business confidence following a military coup in December 2006 caused the economy to contract in 2007. Foreign reserves stabilized, but the balance of payments remained weak. Prospects depend on the interim Government's ability to meet a timetable for elections in 2009, to ensure fiscal sustainability, and to promote private sector development. Modest growth is expected in 2008 and 2009.

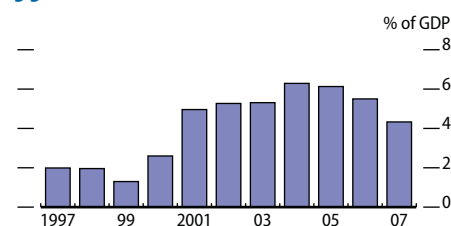
Economic performance

All major sectors of the economy weakened in 2007, after a military coup in December 2006 that led to the installation of an interim administration. Export income and business confidence fell and macroeconomic policies were tightened, resulting in an estimated 3.9% contraction in the economy. Active marketing and discounting kept the decline in tourist arrivals to 1%, but steep discounts offered on air fares and accommodation cut tourism earnings by an estimated 14%. A 20% fall in remittances (Figure 3.31.1), which have grown to be the second largest source of foreign exchange earnings, contributed to the malaise.

A weaker services sector accounted for much of the contraction in GDP (Figure 3.31.2). Activity slipped in wholesale and retail trading, hotels and restaurants, transport and communications, finance, and community services. Industrial production contracted as well, because the country's only gold mine closed in late 2006, bad weather reduced the output of sugar mills, and the clothing industry continued to decline after the loss of preferential access to some export markets. Construction activity dropped by almost 15% as major projects were completed and a loss of investor confidence and the macroeconomic tightening slowed new project development. A decline in sugarcane production led to an overall weakening in agriculture. The only area to achieve noticeable growth was the export-focused mineral water business.

The interim administration, faced with revenue shortfalls in a contracting economy and a high public debt burden, slashed outlays. It cut the civil service wage bill over the year by 9.7%, public spending on goods and services (including maintenance) by 28.2%, transfer payments by 15.9%, and capital expenditures by 44.8% (Figure 3.31.3). Total expenditures fell by 14.2% in 2007 and were 22% below the budget estimate. Even though revenues fell 15.5% short of target, the spending cuts swung the budget into surplus by an estimated 0.4% of GDP. As for public debt, the authorities consider it has reached an unsustainable level. Total public debt at end-2007 was F\$2.8 billion, or 50.3% of GDP, up from 40.8% in 2000 and well above an official target of 45%. Domestic

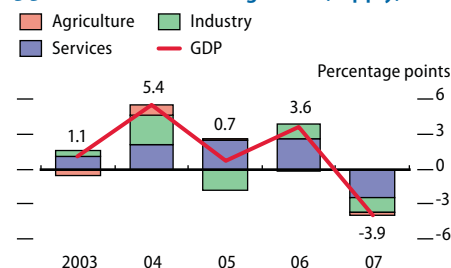
3.31.1 Private remittances



Source: Reserve Bank of Fiji.

[Click here for figure data](#)

3.31.2 Contributions to growth (supply)



Note: Official projection for 2007.

Sources: Fiji Islands Bureau of Statistics, *Key Statistics*, June 2007; Ministry of Finance, National Planning and Sugar Industry, *Economic and Fiscal Update: Supplement to the 2008 Budget Address*, November 2007.

[Click here for figure data](#)

debt accounted for 86.2% of the total and external debt for 13.8%. External debt servicing was an estimated 3% of exports last year. In addition to this debt, the Government bears sizable contingent liabilities, largely with respect to guarantees for state-owned enterprises.

The Reserve Bank of Fiji, acting to protect shrinking foreign exchange reserves in late 2006, tightened exchange controls. It also increased interest rates on its lending to commercial banks, imposed ceilings on lending to the private sector, and in March 2007 tightened capital controls. Monetary policy was eased later in the year: the Reserve Bank reduced the commercial bank reserve-deposit ratio (in May) and slightly relaxed exchange controls (from October). However, the credit ceiling remained in place, with exceptions for export businesses and some others. Growth in broad money supply (M2) slowed to 10.4% in 2007, from 19.8% in 2006. Credit to the private sector rose by just 2.3% over the 10 months to October 2007, the slowest rate in 5 years (Figure 3.31.4). The easing of monetary policy, combined with declining demand for funds, prompted a sharp drop in short-term interest rates over the year (Figure 3.31.5), while longer-term rates softened slightly.

Available balance-of-payments estimates suggest that import growth in nominal United States (US) dollar terms decelerated from 12.8% in 2006 to 1.8% in 2007 as the economy contracted, while exports fell by 0.8%, with fish, lumber, and mineral water the only exports of any importance to increase significantly. Balances on the income and current transfer accounts improved in 2007, and the current account deficit narrowed to an estimated 19.6% of GDP from 21.1% in 2006. The overall balance of payments registered a surplus of 0.7% of GDP.

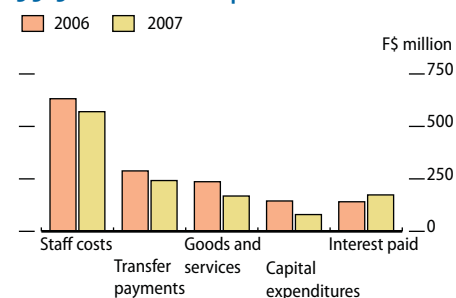
Foreign exchange reserves were rebuilt by about US\$89 million to US\$618 million (4.3 months of import cover) owing to a combination of the fiscal contraction, monetary tightening early in the year, and the weakening in private sector demand associated with the economic downturn. These effects more than offset declining exports and tourism receipts. Nominal and real effective exchange rates of the Fiji dollar appreciated by 0.2% and 2.4%, respectively, in the first 9 months of 2007, but the terms of trade continued to worsen. The central bank adhered to its policy of maintaining the exchange rate peg against a basket of currencies.

Inflation accelerated to 4.8% in 2007, nearly double the 2006 rate. Increased excise duties in early 2007 had a one-time upward impact on prices. Rising world oil prices pushed up transport and electricity costs, though a greater contribution from hydropower after good rainfall, and the continuation of oil supply contracts at pre-2007 prices, mitigated the full impact.

Economic prospects

The outlook depends heavily on the interim administration pushing ahead with proposed economic reforms and adhering to a timetable for national elections in 2009. Proposals put forward in the 2008 budget include a streamlining of investment approvals, promotion of private-public partnerships to lift infrastructure investment, deregulation to raise competition, provision of targeted incentives to businesses, and

3.31.3 Government expenditure items

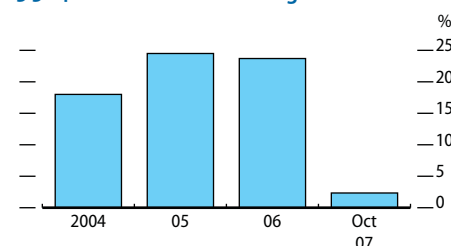


Note: Official projection for 2007.

Source: Ministry of Finance, National Planning and Sugar Industry, *Economic and Fiscal Update: Supplement to the 2008 Budget Address*, November 2007.

[Click here for figure data](#)

3.31.4 Private sector credit growth



Source: Reserve Bank of Fiji, *Monetary Policy Statement*, December 2007.

[Click here for figure data](#)

3.31.1 Selected economic indicators

	2008	2009
GDP growth	1.6	1.6
Inflation	4.6	3.7
Current account balance (% of GDP)	-21.0	-

Source: Staff estimates.

a reduction in the size of the public sector. The reforms would lay the foundation for a restoration of investor confidence, and the elections would likely lead to a normalization of relations with development partners and a removal of the adverse travel advisories issued after the coup. If this can be achieved, the balance of payments would be strengthened and room would be created for growth-promoting public expenditures, while fiscal sustainability would be enhanced through the public sector reform.

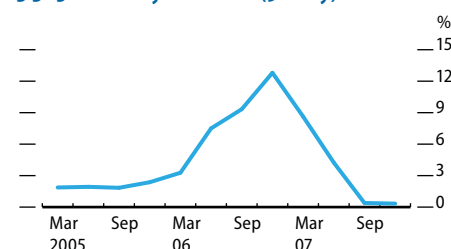
Official projections for 2008 include a pickup in sugar production and in tourism, as well as some improvement in fisheries, forestry, construction, and some parts of manufacturing. However, the sugar industry faces major hurdles. Production of both sugarcane and raw sugar fell in 2007 to one of the lowest levels in 30 years (Figure 3.31.6). Declining productivity over many years has put the cost of producing raw sugar domestically above the current world market price. The industry relies on concessional prices from the European Union (EU), which are being renegotiated, and their continuation is important to the industry's expansion. A range of initiatives, including adoption of improved farming practices, mill refurbishment, and expansion into cogeneration and ethanol production, are officially projected to return sugar output close to historical peaks by 2011. However, it is uncertain that the EU will agree to the concessions sought, or that the large productivity gains targeted are achievable. EU funding for the sugar restructuring program has been suspended, and this may contribute to delays in reform.

A cyclone in January 2008 damaged agriculture, including sugar, and hurt tourism earnings. For all of 2008, tourist arrivals and spending are officially projected to improve by 6.0% and to stimulate tourism-related services. This still might not be enough to increase occupancy rates though, given that new hotels have been built in recent years. As for gold, a new operator plans to reopen the mine, but production is not expected to return to previous levels. Remittances will continue to be a significant source of foreign exchange, but a decline in the number of security personnel in the Middle East from the Fiji Islands could further reduce these inflows.

A highly expansionary fiscal policy helped the economy recover from a coup in 2000. This time, the higher level of public debt and deterioration in the balance of payments preclude a fiscal-led recovery, although minor budgetary stimulation is planned. Taking these factors into account, a moderate economic recovery is forecast, with GDP rising by 1.6% both this year and next (Figure 3.31.7).

The 2008 budget projects an overall fiscal deficit of 2.0% of GDP. Revenues are expected to rise by 8.1%, helped by tax increases on hotels and gambling and a restructuring of customs tariffs. Current expenditures are set to rise by 8.4%, with spending on goods and services increasing by a substantial 23.8% and capital spending more than doubling, though this latter increase may prove hard to achieve because of capacity constraints. Last year's civil service pay cut will be partially reversed. As a result, the civil service wage bill will increase by 3.4% and absorb 48.7% of operating expenditures. A fiscal deficit of 1.5% is projected for 2009, which will keep public debt above the official target of 45% of GDP.

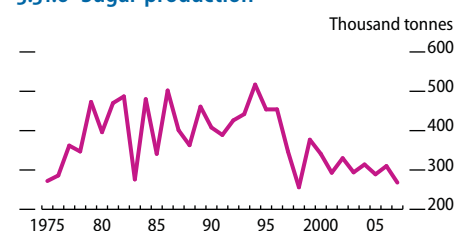
3.31.5 Treasury bill rates (91-day)



Source: Reserve Bank of Fiji, *Quarterly Review*, December 2007.

[Click here for figure data](#)

3.31.6 Sugar production

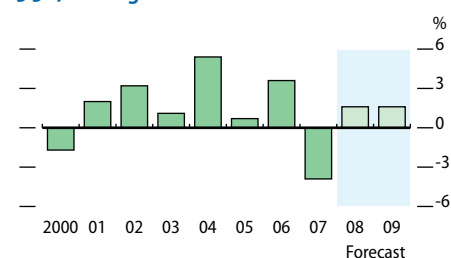


Note: Official projection for 2007.

Sources: Fiji Islands Bureau of Statistics, *Key Statistics*, June 2007; Ministry of Finance, National Planning and Sugar Industry, *Economic and Fiscal Update: Supplement to the 2008 Budget Address*, November 2007.

[Click here for figure data](#)

3.31.7 GDP growth



Note: Official projection for 2007.

Sources: Fiji Islands Bureau of Statistics, *Key Statistics*, June 2007; Ministry of Finance, National Planning and Sugar Industry, *Economic and Fiscal Update: Supplement to the 2008 Budget Address*, November 2007.

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Inflation is seen staying moderately high in 2008 at 4.6%—primarily because of the flow-through of rising oil prices and disruption to food supplies from the cyclone in January—and then easing in 2009 as these effects dissipate (Figure 3.31.8). With the fuel import bill constituting about one third of total import costs, the balance of payments is vulnerable to further rises in oil prices, with the result that exchange controls may be maintained. The current account deficit is projected to remain at about 20% of GDP (Figure 3.31.9).

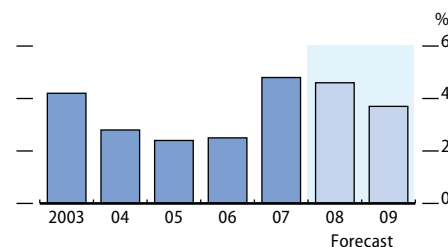
Development challenges

A deterioration in economic and development performance has been evident for some time. Per capita GDP has grown by an average of only 1.0% annually since 1995, traditional export industries have contracted without any compensating expansion in new industries, and there has been a high rate of emigration of business people and skilled labor. The 2006 coup added to the difficulties by eroding confidence in the state, and further weakened the investment outlook.

Reforms proposed in the 2008 budget signal a way forward with a program that stimulates export-oriented private sector development. The program needs to allow for greater public spending and investment, which should be offset over time by reduced spending on public sector wages. It requires broad-based support to maximize its chances of success.

The impact of four coups since May 1987 is apparent from population trends. Population growth slowed after the first coup, largely because of emigration, and preliminary results of the 2007 census point to a plateau (Figure 3.31.10). Emigration has contributed to rising remittances, but also to social dislocation and to an erosion of the skills base and the business community, undermining long-term growth prospects.

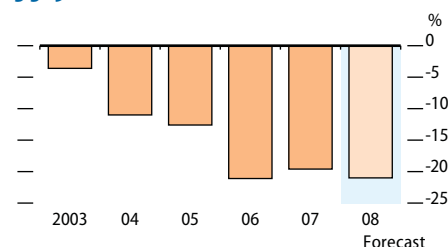
3.31.8 Inflation



Sources: Fiji Islands Bureau of Statistics, available: <http://www.spc.int/prism/>, downloaded 14 March 2008; staff estimates.

[Click here for figure data](#)

3.31.9 Current account balance

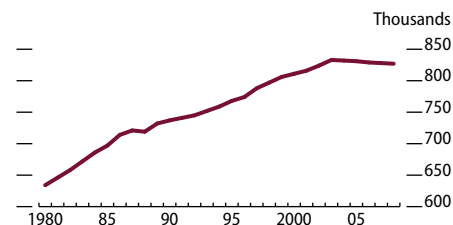


Note: Official projection for 2007 and forecast for 2008.

Sources: Reserve Bank of Fiji, *Quarterly Review*, September 2007; Ministry of Finance, *Economic and Fiscal Update*, Budget 2008 Address.

[Click here for figure data](#)

3.31.10 Population



Note: Estimates for 2004 to 2006 are extrapolated from 2003 official estimates and the 2007 preliminary census results.

Sources: Fiji Islands Bureau of Statistics, available: <http://www.spc.int/prism/>, downloaded 14 March 2008; Reserve Bank of Fiji, *Quarterly Review*, various issues; staff estimates.

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Papua New Guinea

Riding the wave of high world prices for export commodities, growth accelerated in 2007 and government revenues surged. GDP growth is forecast to stay above 6% this year, generated by buoyant public spending and incomes as well as new mineral projects. Inflation is likely to rise sharply. The windfall revenues should provide an opportunity to pay off debt, build infrastructure, and encourage development of the private sector.

Economic performance

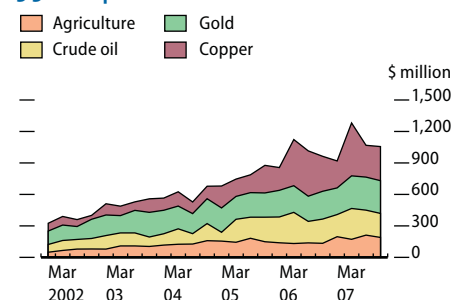
Economic growth accelerated to an estimated 6.2% in 2007, about double the average rate of recent years. The improvement was largely attributable to the flow-through of high prices for export commodities, which allowed for a rise in both government and household spending, and stimulated investment. The United States (US) dollar value of mining and oil exports had jumped by 31.6% in 2005 and 38.8% in 2006, and this continued to stimulate domestic demand in 2007, when the growth of such exports slowed to about 4% as global price rises moderated (Figure 3.32.1). Further, a near 40% increase in the US dollar value of agricultural exports in 2007 boosted rural incomes and spending. (Most Papua New Guineans are farmers who produce for their own use with many also undertaking some cash-crop production.)

Business confidence generally improved, which helped raise private investment. The economy has also realized some benefits from structural reforms, and from extra government revenues earned from the most profitable phase of the nation's largest gold mine, Ok Tedi. A stable domestic political environment last year also played a role: the prime minister was elected to another parliamentary term in a coalition government that holds a large majority.

Export prices in kina for agricultural, forestry, and fishing products rose by about 40%, with copra, copra oil, and palm oil each soaring by more than 50%. Moreover, production of palm oil, the largest agricultural export, continued to expand. However, 2007 was a poor year for coffee, the second-largest agricultural commodity, with production falling to low levels in part owing to rain during the flowering season. In forestry, logging rates rose by about 15% in response to a reduction in log taxes and higher world prices.

The commodity price boom lifted overall spending capacity and business confidence, prompting banks to increase lending to the private sector. Banks were also encouraged along this path by a reduction in borrowing by the Government. Lending to the private sector rose by 31.9% in 2007 (Figure 3.32.2), with the rise concentrated in manufacturing,

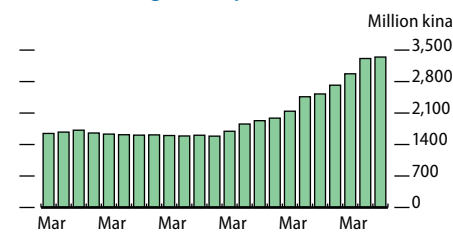
3.32.1 Exports



Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*, various issues.

[Click here for figure data](#)

3.32.2 Lending to the private sector



Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*, various issues.

[Click here for figure data](#)

wholesale and retail trading, and for personal purposes. Broad money supply (M3) rose by 27.3% over the year and the central bank maintained a neutral monetary policy stance.

High rates of growth in government revenues from mining and oil supported a 19.4% rise in real government spending last year. Even with such a large increase in expenditures, there was an overall budget surplus equivalent to an estimated 1.7% of GDP, although this narrowed from the 2006 surplus. Budgeted expenditures include a large commitment to planned activities termed “additional investment/priority expenditure” (Figure 3.32.3). These funds were largely unspent in 2007 because the intended use was typically only at a conceptual stage and the plans and capacity required for implementation were not in place. Treating these funds as savings, which is the international standard, would raise the estimated budget surplus to 11.4% of GDP (Figure 3.32.4).

Inflation was held to an average 2.5% in 2007, despite the stronger economic growth. Prices of fuel and electricity rose sharply, but those for food and household equipment eased. A slight depreciation in the kina on a trade-weighted basis contributed to a 5.5% rise in the underlying inflation rate, which excludes seasonal effects and price-controlled items. Employment in the relatively small formal private sector rose by 7.4% in the first 9 months of 2007, with the main job generators being retailing, construction, agriculture, forestry, and fishing.

A 30.9% surge in imports in US dollar terms in 2007 reduced the trade surplus, but the current account was still in surplus, equivalent to an estimated 4.3% of GDP for the year. Gross international reserves rose to a historical high of 17.6 months of nonmining and oil imports, or 11.3 months of total imports (Figure 3.32.5).

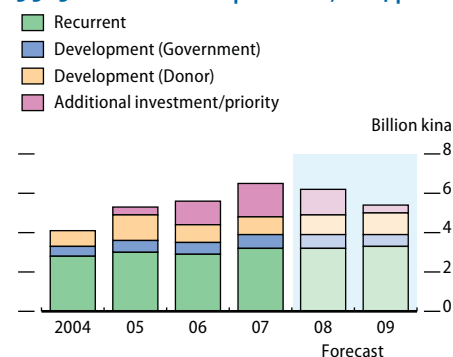
Economic prospects

Strong economic momentum will be maintained in 2008, supported by a projected increase in government spending, the continuing boost to incomes from buoyant export prices, and the improved level of business confidence. Furthermore, new mining projects are scheduled to start production, notably the Sinivit and Simberi gold mines and the Ramu nickel-cobalt project. Subsequently, GDP growth is projected to rise to 6.6% in 2008, before easing to 4.6% in 2009 (Figure 3.32.6). The surge in export prices has so far elicited little supply response in production of minerals, hydrocarbons and agricultural commodities (Figure 3.32.7).

Almost all the expansion in export income and in government revenues stems from higher prices, or from the realization of production plans in place before the recent rise in export prices. This suggests that a tapering off in world prices for oil and possibly other commodities over the medium term will slow economic growth after this year. Similarly, trade and current account surpluses are expected to decline over the medium term.

Inflation is forecast to rise to 5.2% in 2008 (Figure 3.32.8) as the effect of higher fuel prices and rising public expenditures feed through the economy and as inflation rises in Australia and other major sources of imports. There is a risk that any rapid spending of the “additional” expenditures that have been saved would put additional upward pressure

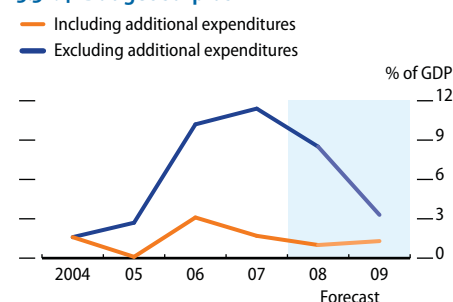
3.32.3 Government expenditure, 2004 prices



Source: Department of Treasury, 2008 Budget, Volume 1.

[Click here for figure data](#)

3.32.4 Budget surplus



Source: Department of Treasury, 2008 Budget, Volume 1.

[Click here for figure data](#)

3.32.1 Selected economic indicators

	2008	2009
GDP growth	6.6	4.6
Inflation	5.2	4.0
Current account balance (% of GDP)	4.1	1.9

Source: Staff estimates.

on local prices, as well as downward pressure on the kina through high import demand. However, substantial reserve holdings, which are projected by the central bank to rise to 21.2 months of nonmineral imports by 2010, provide a capacity to manage the risk.

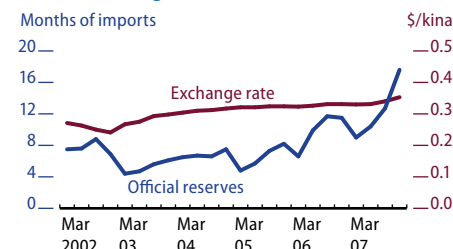
The commodity price boom and subsequent boost to public revenues have allowed for a rapid reduction in public debt. This debt fell to an estimated 35% of GDP by end-2007, from more than double that level in 2002, and is expected to decline further to about 27% by 2010. The ratio of external debt to GDP declined to 18.0% in 2007 and is projected to fall to 11.4% by 2010. The net public debt position (gross debt less savings) is even more favorable because of the large savings of unspent “additional” expenditures. Despite the moderate level of debt, weakness in governance and the vulnerability of the economy to commodity price swings mean that the risk of debt distress is significant.

The boom has the potential to push up the currency, which would hurt nonresource activities and hence their growth prospects. So far, the Bank of Papua New Guinea has largely controlled this effect by allowing foreign reserves to rise instead of the exchange rate. The boost to government revenues also brings the danger of an erosion of fiscal discipline that can undermine governance and institutions over time. Signs of such a problem have become evident. District-level governments were allocated the equivalent of about \$300 million last year in “additional” expenditures for basic services delivery. This is equivalent to 20% of a normal year’s total public expenditures. In contrast to provincial-level governments that have key responsibilities for delivery of basic services, districts have had little responsibility for service delivery. Their capacity for planning and implementing such large increases in funding is weak and their levels of transparency and accountability are low. The large allocation to districts is at odds with lessons from provincial government reforms of the mid-1990s, that decentralization needs to be preceded by a major capacity development effort that takes into account the prominent role of political representatives in rural areas.

Furthermore, the “additional” expenditures are held in trust funds. Such accounts have been difficult to monitor and safeguard in the past, and their extensive use has the potential to undermine accountability. It would be to the economy’s advantage to use the revenue windfall from resources to rapidly pay off public debt, thereby reducing interest costs on the budget and easing the inflation effect of a further acceleration in government expenditures.

The newly elected administration has adopted an investment strategy that signals a shift in some expenditures away from core areas of government. In early 2008, it bought the mid-size Tolukuma gold mine through a new state-owned investment company, Petromin PNG Holdings. Given that mining usually maximizes its economic contribution when it is privately owned, and that private ownership puts mining at arm’s length to regulators, it is not clear if this is the optimum use of such public funds.

3.32.5 Exchange rate and reserves

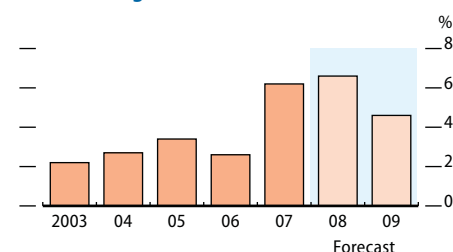


Note: imports refer to nonmineral products.

Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*, various issues.

[Click here for figure data](#)

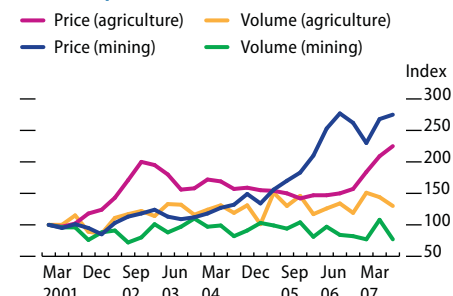
3.32.6 GDP growth



Source: Department of Treasury, 2008 Budget, Volume 1.

[Click here for figure data](#)

3.32.7 Export indexes



Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*, various issues.

[Click here for figure data](#)

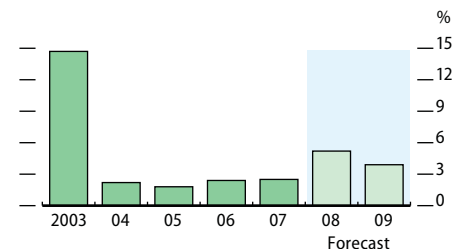
Development challenges

Economic growth is likely to subside when global commodity prices steady and possibly turn down. An earlier resources boom in the 1990s is officially recognized as a lost opportunity, with the rate of development generally slowing over that decade despite large inflows of mining and oil revenues. A key issue is to use the current favorable market conditions to secure sustainable development through upgraded infrastructure and basic services.

This period of strong growth in public revenues also provides an opportunity to adopt much needed structural reforms to open sectors controlled by state-owned enterprises, such as ports and electricity, to competition and to fund a rehabilitation of infrastructure and basic facilities, such as schools and health clinics. The Government has funds to meet adjustment costs (such as those that would arise from privatizing state entities or outsourcing public activities). Potential gains from such reforms have been highlighted by the entry of a new firm into the mobile-telephone market, which has resulted in a noticeable improvement in phone services in rural areas.

Placing greater reliance on private sector development, however, would require further improvements in the business environment. The still-deficient investment climate is evident in the lack of growth in export volumes, and an apparent overall decline in the ratio of private investment to GDP. This weakness is also shown in survey-based indicators of the quality of the investment environment (Box 3.32.1).

3.32.8 Inflation



Sources: Bank of Papua New Guinea, available: <http://www.bankpng.gov.pg>, downloaded 13 February 2008; staff estimates.

[Click here for figure data](#)

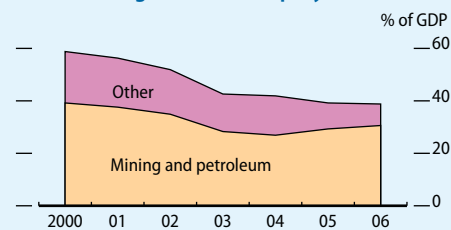
3.32.1 The climate for private investment

The World Bank's *Doing Business* indicators ranked Papua New Guinea 84 out of 178 economies in 2007, placing it in the middle range of this international measure of business regulations and property protection rights. The country's rank is as high as 31 in terms of the ease of employing and laying-off labor, but as low as 162 in terms of the ability for companies to enforce contracts. The World Bank's most recent governance indicators place Papua New Guinea in the weakest 25% in relation to regulatory quality, rule of law, and control of corruption. Further on this latter issue, Transparency International's measure of corruption put the country at 162 out of 179 in 2007, a notable deterioration from the ranking of 102 out of 145 in 2004.

Papua New Guinea's total investment ratio, which averaged 25% in the 1980s, fell in the 1990s to about half that level. Investment subsequently rebuilt as major projects expanded and was estimated at close to 1980s

levels from 2000 to 2002. But partial data suggest that the investment ratio has subsequently weakened. As a ratio to GDP, the stock of foreign investment (debt and equity) has declined. This decline has outweighed an encouraging rise in locally funded investment illustrated by the rise in domestic borrowing.

Private foreign debt and equity



Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*, June 2007.

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Democratic Republic of Timor-Leste

An improvement in law and order enabled the economy to recover in 2007 from a slump the previous year. Economic prospects rest on the maintenance of internal stability and continued expansion of public expenditures. On the expectation that these conditions will be met in 2008, the economy is forecast to grow moderately. Surging petroleum revenues are building the nation's financial wealth and provide the opportunity to fund public economic and social programs, as well as to strengthen the institutions needed for development.

Economic performance

Economic activity rebounded in 2007 following violent civil unrest in 2006, which caused a sharp contraction in the economy. The international security and police forces built up in 2006 under the auspices of the United Nations (UN) remained through 2007 and underpinned law and order. Presidential and parliamentary elections were held and a new government was installed in August. The improved civil conditions, demand stimulus from the international forces, and expanding public spending programs helped lift GDP by an estimated 7.8% in 2007 (excluding offshore oil and natural gas and the UN contribution to government operations).

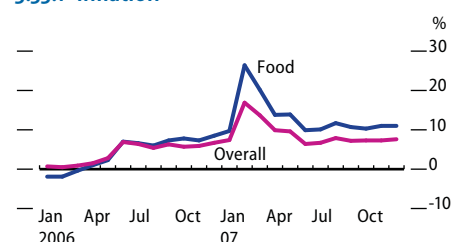
Agriculture, which accounts for about 80% of employment, contracted in 2007 due to shortages of seed, locust infestations, and bad weather. The preliminary estimate put the decline in production at 2.2%, although some indicators pointed to a larger fall. This led to projections of a cereal deficit for the 6 months to April 2008 of 86,000 tonnes, and a requirement of 15,000 tonnes of cereal in emergency assistance. Up to 30% of the population received some support last year from the World Food Programme, which estimated that production of cereals, tubers, and maize was 20–30% below the average level of the past few years.

Shortfalls in domestic food production and low inventories, plus rising rice prices in Southeast Asia, contributed to a surge in inflation in February 2007, when food prices in Timor-Leste rose by 26.4% (Figure 3.33.1). That surge subsided, but year-on-year inflation remained high at 7.6% at end-2007, and averaged 8.9% over the year.

Merchandise imports soared by 85.1% over the first 6 months of 2007 from the year-earlier period, with the jump largely a result of the rising international presence and public investment. A sharp increase in oil exports, as well as coffee shipments, produced a trade surplus, though.

Substantial revenues to the Government from petroleum production are deposited in the nation's Petroleum Fund and invested abroad, with only the estimated sustainable income drawn down each year by

3.33.1 Inflation



Source: Timor-Leste National Directorate of Statistics, *Quarterly Reports*, various issues.

[Click here for figure data](#)

the Government to fund expenditures. This income financed a near doubling of such expenditures (excluding donor projects) in FY2007 (ended 30 June 2007) and a further rise was budgeted for July–December 2007 (Figure 3.33.2). The budget surplus was almost three times GDP in FY2007, and remained high over the second half of 2007.

The economic rebound was evident in the banking sector. Loans rose by 8.8%, with most of the increase in lending to individuals and, to a lesser extent, to the construction, trading, and finance subsectors. Broad money rose by 44.0% in 2007 as the large international presence added to deposits with the banking system. Nonperforming loans remained a problem. Bad loans increased because of weak credit assessment policies and difficulties in contract enforcement and loan recovery. They rose rapidly in 2006 as the economy contracted, and remained at around 30% in 2007 (Figure 3.33.3). The three commercial banks are branches of foreign banks, so this moderates the risk of financial sector instability.

Economic prospects

GDP (excluding hydrocarbons and UN operations) is projected to expand by 6.5% in 2008 (Figure 3.33.4), provided that there are no civil disturbances. A large projected increase in public expenditures is expected to drive growth. Budgeted expenditures for 2008 are just 3% higher than the allocation for FY2007 (from 2008 the Government's fiscal year is the calendar year). However, large amounts of committed yet unspent funds will feed into the economy over the medium term. For example, budgeted expenditure was \$329 million in FY2007, but only \$170 million was actually spent during the year. As of mid-December 2007, about \$154 million of unspent funds were available. Consequently, actual expenditures are likely to grow over 2008–2009 (Figure 3.33.5) because the Government is expected to improve its rate of disbursement. Economic growth is projected to slow over 2009 as the expansion in actual government expenditure moderates.

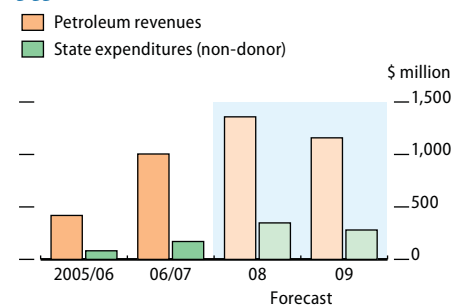
The new Government is focusing on administrative reform, internal security, expansion of public works, and a more generous transfer program targeting the disadvantaged. The budget surplus in 2008 is once more likely to be substantial.

Inflation is expected to slow to 7.0% in 2008 and 6.6% in the next year, assuming that prices of imported food rise at a more moderate level from later this year and that there are no major disruptions to local production (food accounts for 58% of the consumer price index).

However, this positive outlook for key economic aggregates masks a deep problem with food availability. Preliminary analysis of a 2007 household survey found that food consumption was low for 3.2 months of the year, with 73% of households experiencing at least 1 month of low food consumption last year. These results were only a small improvement on the figures for 2001, of 3.6 months and 86%, respectively. The 2007 survey also found that 54% of households self-assessed their food consumption as less than adequate, again only a small improvement on the 59% seen in 2001.

The shortage of food arises from low agricultural output and very limited alternative means of earning income in rural areas. Agriculture was highly protected before 1999, and then abruptly exposed to

3.33.2 Fiscal indicators

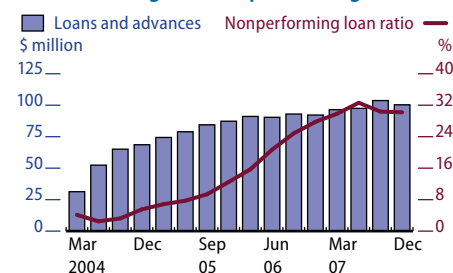


Note: Fiscal year changed to a calendar year basis in 2008.

Source: Government of Timor-Leste, General Budget of State 2006–07 and 2008.

[Click here for figure data](#)

3.33.3 Lending and nonperforming loans



Source: Banking and Payments Authority.

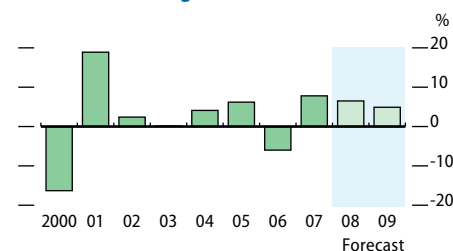
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3.33.1 Selected economic indicators

	2008	2009
GDP growth	6.5	4.9
Inflation	7.0	6.6
Current account balance (% of GDP)	-	-

Source: Staff estimates.

3.33.4 Real GDP growth



Note: Non-oil, non-UN GDP.

Sources: Government of Timor-Leste, General Budget of State 2006–07 and 2008; staff estimates.

[Click here for figure data](#)

international competition. Extended drought has added to difficulties. The sector is unable to support the large majority of the population reliant on it and many people face regular food shortages. A recovery in production in the forecast period hinges on government support to farmers for infrastructure and extension services, on better weather, and on a reduction in losses caused by locusts.

Internal instability remains a risk to the forecasts. The UN Security Council has said that unless differences among national leaders are resolved, political uncertainty will persist, together with the prospect of renewed violence. In February 2008, the president was seriously wounded in an attack by a leader (himself killed in the attack) of a group of ex-military personnel. Almost 10% of the population still lived in temporary camps or with host families at end-2007, having been displaced from their homes by the civil unrest of the year before. They face many difficulties in rebuilding damaged homes, livelihoods, and community relations. The international presence is important to medium-term prospects, given its contribution to internal security and the spillover effects of its expenditure. (The UN Mission has an annual budget around half that of the Government.) Timor-Leste's president has requested an extension in the UN Mission to 2012, from its current mandate that has been extended to February 2009.

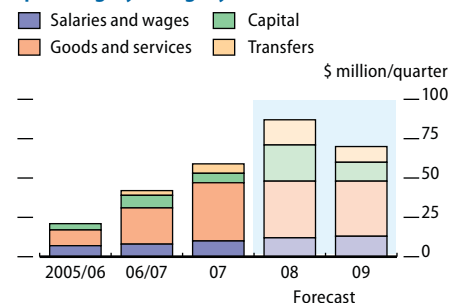
Development challenges

Low rural incomes, high population growth rates, and pressures for rapid urbanization are major challenges. Even the strong inflows of petroleum revenues risk creating economic distortions if they are mishandled. High demand for skilled people suited to public administration and to construction has pushed up wages in these areas, with a flow-on impact to general wage levels. This relatively high wage structure, combined with the poor state of physical infrastructure, internal instability, and a still-emerging legal framework, adds to business costs and reduces potential returns from investment. This in turn deters expansion of the formal private sector, except for businesses that supply the public sector or the international community.

Reflecting the small size of the formal private sector, paid employment accounts for less than 15% of total hours worked, and about 70% of paid employment is within the public sector, public works, or nongovernment organizations, according to preliminary results of the 2007 household survey. The 2004 census found that the unemployed and those discouraged from seeking work accounted for half the people aged 15–24 years living in Dili, the capital. The subsistence and informal sectors of the economy also face significant problems.

Working in the country's favor, national income has risen substantially and financial wealth is accumulating (Figure 3.33.6), which should finance public programs for many years and provide an environment to strengthen state institutions, including systems to manage public expenditures. The quality of public expenditures is critical for the conversion of the growing financial wealth into higher living standards, through a healthier and better educated population, supported by improved physical infrastructure.

3.33.5 Average quarterly government spending by category

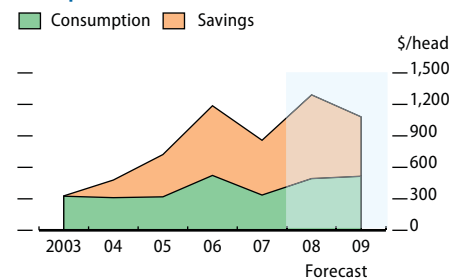


Note: Fiscal year changed to a calendar year basis in 2008.

Sources: Government of Timor-Leste, *General Budget of State 2006–07 and 2008*; Directorate of Treasury, Ministry of Planning and Finance, *Democratic Republic of Timor-Leste Annual Financial Report and Accounts 2005–06*, December 2006 and *Annual Financial Report and Accounts Fiscal Year 2006–07*, December 2007.

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3.33.6 Savings and consumption, 2000 prices



Sources: Government of Timor-Leste, *General Budget of State 2006–07 and 2008*; staff estimates.

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Small Pacific countries

Rising tourism-based activities supported growth in the Cook Islands, Palau, Samoa, and Vanuatu in 2007, while logging fueled growth in Solomon Islands. But economies contracted in the Federated States of Micronesia, Nauru, and Tonga owing to cuts in government spending; growth was low elsewhere in the subregion. The outlook is for growth in the better performing economies to ease in 2008. Inflation is generally projected at moderate levels. Renewed efforts are required across the Pacific to lift growth by strengthening the environment for private sector development. The need is greatest in the weaker economies, which would also benefit from a determined effort to raise standards of governance.

Cook Islands

Growth of 3% in 2007 was attributable mainly to a 5.1% upturn in tourist arrivals (Figure 3.34.1). Agriculture continued to recover from 2005 cyclone damage, but pearl and fish exports fell. The consequent widening in the merchandise trade deficit was largely offset by an increased surplus in services resulting from the expansion in tourism. The improvement in tourism was also reflected in growth in lending by commercial banks to the trading and hotel subsectors.

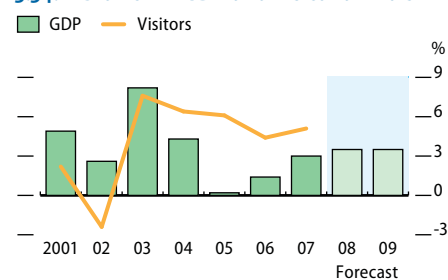
Use of the New Zealand dollar as the domestic currency means that inflation generally tracks the New Zealand rate, which decelerated in 2007. Also, the Cook Islands removed most import duties from July 2006, which helped offset the effect of higher global oil prices. Subsequently, inflation eased to 2.4% (Figure 3.34.2).

The Government's operating surplus declined in FY2007 (ended 30 June 2007) as the budget moved to near balance. Cyclone rehabilitation works lifted capital spending and most other expenditures edged higher. Public debt—all of it external—remained moderate at 19.1% of GDP and, accounting for reserves built up to meet loan repayments and cash holdings, net debt remained low at about 3% of GDP. A supplementary budget passed in November 2007 suspended a cost-of-living adjustment that would have increased the civil service wage bill by 12%, but it still projected an overall budget deficit for FY2008 (Figure 3.34.3), the first deficit since the mid-1990s.

The deficit is largely due to a projected decline in domestic revenues from 31.3% of GDP to 29.5% following the removal of most import duties. The fiscal outcome will depend on how the cost-of-living adjustments to civil service salaries are handled and the extent of a subsidy provided to Air New Zealand to help meet any losses on the direct air service between Rarotonga and Los Angeles that started in March 2007.

GDP growth in 2008 is expected to accelerate to 3.5% and to be

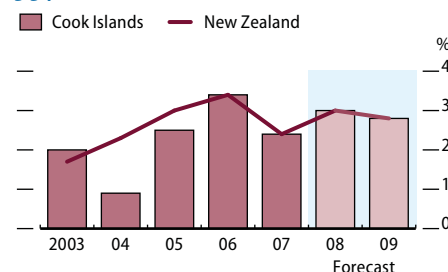
3.34.1 Growth in GDP and visitor arrivals



Sources: Cook Islands Statistics Office, *Annual Statistical Bulletin 2007*, available: <http://www.stats.gov.ck/>, downloaded 25 February 2008; staff estimates.

[Click here for figure data](#)

3.34.2 Inflation



Sources: Cook Islands Statistics Office, available: <http://www.stats.gov.ck/>, downloaded 21 February 2008; Government of Cook Islands, *Half Year Economic and Fiscal Update for Financial Year 2007/2008*, December 2007; New Zealand Treasury, *Half-Year Economic and Fiscal Update 2007*, December 2007; Reserve Bank of New Zealand, available: <http://www.treasury.govt.nz/>, downloaded 25 February 2008; staff estimates.

[Click here for figure data](#)

maintained at this rate in 2009, while inflation is forecast rising slightly in line with the trend in New Zealand. The growth projection assumes that tourist arrivals continue to rise at the 2007 rate and that pearl exports grow by 10%, in reflection of stronger marketing efforts.

The solid fiscal position gives the Government the capacity to borrow in order to finance a backlog of infrastructure works. Deteriorating infrastructure, particularly water and sanitation, is straining to service increasing numbers of tourists. Substantial capital spending is provided for under a National Sustainable Development Plan and 20-year Infrastructure Master Plan adopted in 2007. These infrastructure works are central to protecting the natural environment and to ensuring that tourism-led growth is sustainable. The investments proposed under the infrastructure plan could see net general government debt rise to about 20% of GDP by 2026, and result in debt service payments rising to 2% of GDP. The Government should have the capacity to handle such an increase in debt, provided that the loan funds are used to support the economy.

A decline in the population of the outer islands remains a policy concern. The number of people on 11 smaller islands fell by more than 40% between the mid-1990s and a census in 2006, with many leaving for better jobs and services overseas. The population on the second-largest island, Aitutaki, also declined, although the development of a vibrant tourism industry there limited the fall to 13%. An overall recovery in the population since a financial crisis in the mid-1990s (Figure 3.34.4) is entirely the result of growth on Rarotonga. The outer islands are becoming more costly to sustain as working age people emigrate, leaving the elderly and their grandchildren (see also Box 3.34.1). The demographic changes also carry important repercussions for the future of the traditional Cook Islands culture.

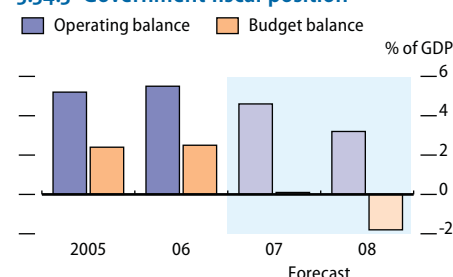
Kiribati

This economy is dominated by the public sector, with the general government subsector accounting for 47% of GDP in 2006 (up from 30% in 2000), and the public service and 25 public enterprises providing over two thirds of paid employment. In 2007, economic growth slowed to an estimated 0.5% (Figure 3.34.5). The slight expansion was supported by a 1% increase in government recurrent expenditures. Workers returning from employment overseas provided some demand-side stimulus. Remittances of ships' crews working overseas, tuna-fishing access fees, and earnings of the Revenue Equalization Reserve Fund (RERF)—an offshore investment fund established with royalties from a now-closed phosphate mine—contributed about 45% of gross national product (Figure 3.34.6).

Merchandise exports, mainly copra and seaweed, fell in 2007, and their earnings were dwarfed by merchandise imports, including fuel. Deficits in trade and services were substantially offset by external earnings from the RERF, fishing license fees, remittances, and donor assistance. The use of the Australian dollar as domestic currency helped maintain inflation at a modest rate of 3–4%.

The overall budget deficit in 2007 was kept moderate by increased RERF earnings from investments on the Australian stock exchange (Figures 3.34.7 and 3.34.8). Non-RERF revenue collections fell short of

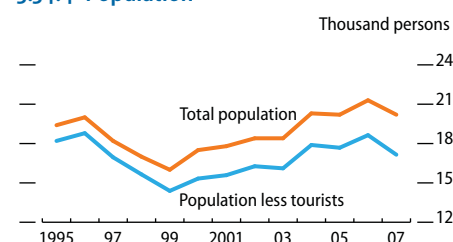
3.34.3 Government fiscal position



Source: Government of Cook Islands, *Appropriation Bills*, various years.

[Click here for figure data](#)

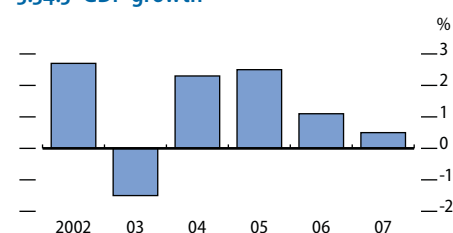
3.34.4 Population



Sources: Cook Islands Statistics Office, *Statistical Bulletin* 2003 and 2006 and *Quarterly Statistical Bulletin*, June 2007; staff estimates.

[Click here for figure data](#)

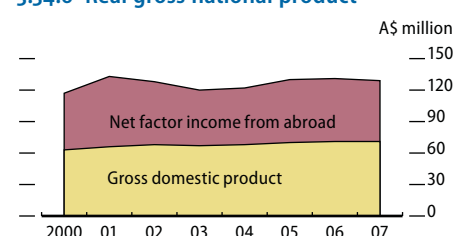
3.34.5 GDP growth



Sources: Kiribati National Statistics Office; staff estimates.

[Click here for figure data](#)

3.34.6 Real gross national product



Sources: Kiribati National Statistics Office; staff estimates.

[Click here for figure data](#)

3.24.1 Migration and remittances in the Pacific

Many of the Pacific island countries have long-standing links with Australia, New Zealand, or the United States (US), with significant implications for the small economies. In the north, residents of the Federated States of Micronesia, Republic of the Marshall Islands, and Palau can freely enter the US, while in the south Cook Islanders hold New Zealand citizenship, which also provides direct access to Australia. Fiji Islands, Samoa, and Tonga have developed deep links with Australia, New Zealand, and the US through extensive emigration. Kiribati and Tuvalu are also exporters of labor—their seafarers work on international ships.

The ability to emigrate has led to very low population growth rates in some Pacific countries. Only a few, however, receive large remittances. In Tonga, remittances have reached as high as 40% of GDP and remittances in Samoa also are relatively high. In these two countries, enduring community links are important in maintaining such flows. Remittances are also important in the Fiji Islands, and to a lesser extent in Kiribati and Tuvalu, but not elsewhere (at least not in official statistics).

These links to industrial economies and their labor markets have important flow-on effects. Some small Pacific economies face fiscal pressures from their need to compete with much higher salary levels in foreign labor markets, and this affects their ability to provide funding for essential public services. Some economies are now short of labor. In Palau, foreign workers now take up about half of all jobs as the growth of tourism has spurred employment, while the importance of foreign workers is increasing in the Cook Islands as tourism-based growth absorbs the supply of local labor.

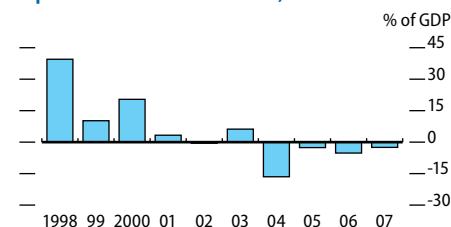
The prospect of migration or obtaining overseas employment also encourages local education systems to respond to the needs of overseas markets rather than their own. Families “invest” in selected children in the hope that they can secure opportunities abroad and provide a flow of remittances for the family. The safety net provided by remittances can dull incentives for those at home. But it can also help some take the risk of moving away from traditional forms of livelihood into formal sector activities such as small-scale retail or tourism-based activities.

original budget estimates because of declines in fishing license fees and import duties, while current expenditures came in slightly below budget estimates, largely because of lower than expected debt service payments. The civil service wage bill fell slightly, but subsidies to public enterprises rose. Little was budgeted for infrastructure maintenance.

Last year the Government sharply increased its drawdowns from the RERF to A\$45.0 million, in order to help fund expenditures and repay loans from the Bank of Kiribati. While the RERF balance remained above an informal benchmark of the real per capita level in 1996, the increase in drawdowns since 2003 could undermine the fund’s capacity to fulfill its role as a permanent source of budget support. Weaker global equity market returns will necessitate much lower drawdowns, likely requiring a more prudent approach to government expenditures in 2008 and 2009.

Kiribati, a low-lying atoll nation, faces numerous development challenges, including adaptation to the impact of climate change. Areas of risk over which the authorities have some policy control include rapid population growth, a narrow economic base, unplanned and poorly managed urban growth, and weak public sector performance. The Government has begun addressing these issues through a National Sustainable Development Plan that emphasizes the pursuit of economic growth through development of tourism and fisheries by the private sector. Special emphasis is placed on the relatively large but remote and lightly developed Kiritimati island. Achieving private sector-led growth will require considerable political will, in particular to address inadequacies in the public sector, notably loss-incurring public enterprises. Economic growth in the short and medium term is likely to remain low, as fiscal constraints are expected to tighten.

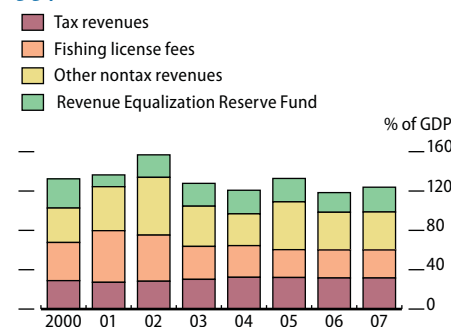
3.34.7 Fiscal balance (including Revenue Equalization Reserve Fund)



Sources: Staff calculations based on the Kiribati National Statistics Office, *Government Finance Statistics*, November 2001 and *Republic of Kiribati Budget*, various years.

[Click here for figure data](#)

3.34.8 Government income



Source: Staff calculations based on the Kiribati National Statistics Office, *Government Finance Statistics*, November 2001 and *Republic of Kiribati Budget*, various years.

[Click here for figure data](#)

Republic of the Marshall Islands

GDP growth edged up to 2.0% in FY2007 (ended 30 September 2007) (Figure 3.34.9). The economy is dominated by the public sector, which accounts for 45% of GDP and employment, and the 2007 expansion was driven primarily by an increase in government capital expenditures from United States (US) \$14.5 million in FY2006 to US\$21 million in FY2007. Emigration has accelerated over the past decade or so, but private transfer receipts fell from 0.5% of GDP in 1997 to 0.3% in 2006.

The budget is heavily dependent on funds from the US under the amended Compact of Free Association FY2004–FY2023, with domestic revenues funding only 45.6% of current expenditures in FY2007. An overall budget deficit of 0.7% of GDP in FY2007, compared with a surplus in FY2006, reflected the increase in capital expenditures. Weaknesses in fiscal management remained apparent, with domestic revenues falling slightly and little reduction in a public service wage bill that accounted for 42.6% of current spending and involves pay rates that are higher than the private sector. The weak revenue performance was aggravated by a high noncompliance rate of 30–40% in tax payments, which causes annual revenue losses of US\$8 million–10 million.

Although the amended Compact agreement specifies annual declines in Compact grants, there has been little advance planning for these adjustments in the country. A tendency to use Compact funds to support public sector activities and jobs, rather than to facilitate private sector development, has constrained economic growth, and thus the prospect of significantly reducing reliance on external support.

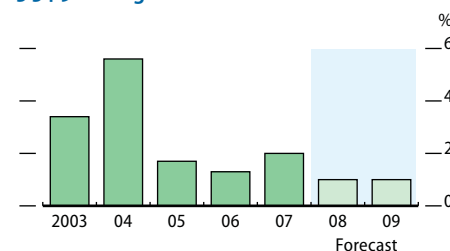
The International Monetary Fund considers the economy to be at high risk of debt distress, with a ratio of net present value debt to GDP of 75% in 2007, and debt service as a share of exports at 32.3% in 2006 (Figure 3.34.10). Scheduled debt service obligations are underbudgeted and repayments sometimes delayed. Furthermore, additional loans, albeit on concessional terms, fall due for repayment over the next 5 years. One option to reduce the fiscal pressures would be to reform and downsize the public sector.

Some noteworthy efforts to pursue private sector development in 2007 included the introduction of legislation to allow for competition in telecommunications with the Government's National Telecommunications Authority. Internet costs are among the highest in the Pacific, at US\$190 for 50 hours. In other developments, construction started on a fish-processing plant, which should revive tuna loining this year; and the country was removed from the List of Uncooperative Tax Havens by the Organisation for Economic Co-operation and Development in mid-2007.

This economy usually runs a deep trade deficit (Figure 3.34.11), which is covered by inflows on the income and transfers accounts, especially Compact grants and payments associated with the US military base at Kwajalein atoll. The US dollar is the domestic currency, so inflation is influenced by trends in the US. In FY2007, inflation was 3.4% (Figure 3.34.12) and is expected to remain at around this level in FY2008.

Stumbling blocks to private sector investment include problems with access to finance and land, ineffective laws and regulations, poor infrastructure, and policy shifts. An election in late 2007 resulted in a change of government and some uncertainties in the policy environment. A decline in Compact grants scheduled for FY2008 and FY2009 will

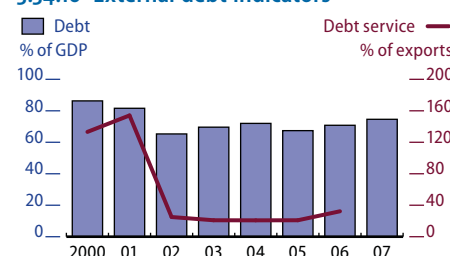
3.34.9 GDP growth



Sources: Economic Policy Planning and Policy Office, available: <http://www.spc.int/prism>, downloaded 14 March 2008; staff estimates.

[Click here for figure data](#)

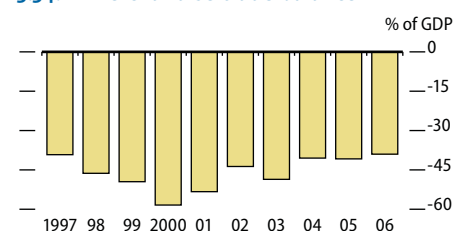
3.34.10 External debt indicators



Sources: Economic Policy Planning and Policy Office, available: <http://www.spc.int/prism>, downloaded 4 February 2008; US Department of Interior, RMI FY2006 Economic Review, August 2007.

[Click here for figure data](#)

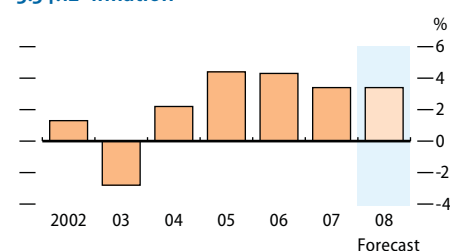
3.34.11 Merchandise trade balance



Sources: Government of the Republic of Marshall Islands, FY 2006 Economic Statistics Tables, June 2007; Economic Policy Planning and Policy Office, available: <http://www.spc.int/prism>, downloaded 22 February 2008.

[Click here for figure data](#)

3.34.12 Inflation



Sources: Economic Policy Planning and Policy Office, *Majuro Consumer Price Index*, December 2006 and December 2007; staff estimates.

[Click here for figure data](#)

have a damping effect on economic growth, offset in part by the new tuna-loining plant. Annual GDP growth of around 1% is projected.

Federated States of Micronesia

The economy contracted for a fourth year in a row, with GDP falling by 2.5% in 2007. The decline was most marked in the states of Chuuk and Kosrae, where past financial management deficiencies are now requiring severe fiscal contraction. The economic deterioration also reflects the impact on public current expenditures of cuts in US funding under the amended Compact of Free Association, of underspending of grants, and of difficulties on the part of national and state governments in meeting specific requirements to access infrastructure development and capacity-building funds provided by the Compact.

A contracting public sector also hurts private sector activity, given that government and public enterprises account for 38% of GDP and 51% of paid employment. The weak economy of recent years is reflected in a decline in living standards and in emigration. Between 2003 and 2007, GDP per capita fell from US\$2,015 to US\$1,840 (Figure 3.34.13), and emigration has averaged 1.8% of the population a year since 2001.

Inflation slowed to 2.8% in 2007 (Figure 3.34.14), after exceeding 4% for 2 years when taxes on alcohol and tobacco had been raised. The use of the US dollar as domestic currency kept domestic interest rate trends aligned with those in that country.

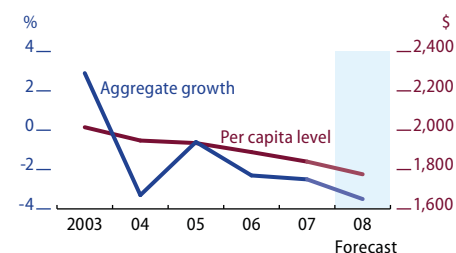
US Compact funding provides about 65% of revenues for the national Government and 75% of revenues for the states, and is the major component of the balance of payments. The decline in Compact funding is matched by a commensurate increase in US support to the FSM Trust Fund, which is to act as a post-Compact fiscal support mechanism. The country is now struggling to raise the revenues required to support public sector operations, which involve paying wages that are well above those in the private sector. Past efforts to reduce the size of the public sector have had limited success, and progress in adjusting to lower Compact funding has been minimal.

This deteriorating fiscal situation is masked by increases in bilateral grants from the People's Republic of China and, to a lesser degree, Japan. Despite the extent of the public service sector, the Government lacks the capacity to adequately monitor and report on Compact expenditures and performance, which holds back access to some funds, particularly those for infrastructure. Moreover, its ability to implement infrastructure works is limited, even if funds become available.

The consolidated budget deficit narrowed to 2.7% of GDP in FY2007 (ended 30 September 2007) (Figure 3.34.15), but the financial positions of Chuuk and Kosrae states remain precarious. Chuuk has planned an adjustment strategy but there has been little progress in its implementation. Kosrae has adopted a strategy to reduce state employment.

The external debt position remained sustainable in FY2007, with gross external debt equivalent to 25.1% of GDP and debt service equivalent to 6.0% of exports of goods and services. There are concerns, though, that state government contingent liabilities might be significantly

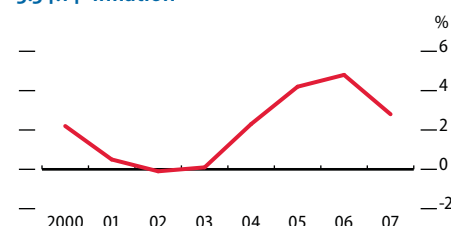
3.34.13 GDP indicators



Sources: Department of Economic Affairs, FSM Statistical Yearbook 2007; US Department of Interior, FSM FY2006 Economic Review, August 2007; staff estimates.

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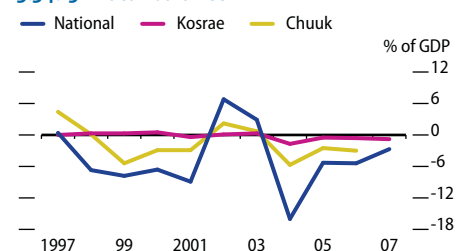
3.34.14 Inflation



Sources: Department of Economic Affairs, FSM Statistical Yearbook 2007; US Department of Interior, FSM FY2006 Economic Review, August 2007.

[Click here for figure data](#)

3.34.15 Fiscal balance



Note: 2007 figure for Chuuk state is not yet available.

Sources: Department of Economic Affairs, FSM Statistical Yearbook 2007; US Department of Interior, FSM FY2006 Economic Review, August 2007.

[Click here for figure data](#)

underreported and that expected additional debt could place further pressures on fiscal stability.

The economic decline is likely to continue in 2008 and 2009, with GDP contracting by 3.5% and 3.0%, respectively. The outlook could improve in the medium term if Compact infrastructure funds were released. Achieving sustainable growth will depend on the Government's ability to drive reforms that support new private sector development in the face of opposition to liberalization of investment policy. In particular, tourism and fisheries have development potential, provided that barriers to mobilizing land and to allowing foreign investment can be overcome.

Nauru

A sharp contraction in the public sector, which dominates this small economy, and reduced construction spending on phosphate facilities triggered a 27.3% drop in GDP in FY2007 (ended 30 June 2007) (Figure 3.34.16). Furthermore, phosphate mining, which had resumed the previous year after several years of no production, was suspended for several months because of storm damage to port infrastructure.

The contraction in the public sector involved reining in the budget deficit to 17.4% of GDP in FY2007. Deep deficits in the previous 2 years were largely funded by underpaying civil service salaries (and accumulating salary arrears). The narrower deficit in FY2007 was largely achieved by cutting pay rates. The budget for FY2008 estimates a small surplus, to be achieved through cuts in capital expenditures, with a slight surplus also budgeted for FY2009.

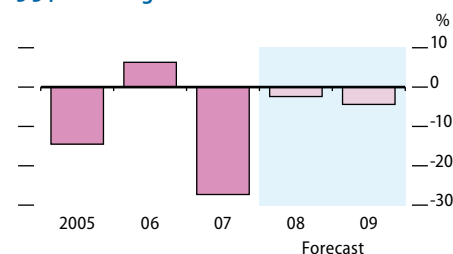
Inflation eased to an estimated 2.9% in FY2007. The use of the Australian dollar as the legal tender and the sourcing of about 60% of imports from that country sees inflation usually tracking the Australian trend. The merchandise trade deficit narrowed slightly to 82% of GDP in FY2007 (Figure 3.34.17) and a small current account deficit was recorded.

The economy will get some help in FY2008 by a full year of phosphate mining. Remaining primary phosphate reserves total about 1.9 million tonnes, enough to last 2–3 years. Reserves of secondary phosphate (found at a deeper level) have the potential to support mining for up to 30 years, according to a 2006 feasibility study. Against this, the closure in the second half of FY2008 of an Australian refugee processing center on the island will hurt. The center directly employs about 100 Nauruans and indirectly perhaps another 900. The Australian Government has committed to maintaining its aid program, which is worth about A\$1,000 per person per year. Nevertheless, GDP is projected to decline by 2.4% in FY2008 and by a further 4.4% in FY2009 as the full effect of the center's closure is felt. After that, a slight economic recovery is foreseen.

The foremost financial management issue is the need to develop a response to the high level of public international and domestic debt (equivalent to about 30 times GDP). Attempts to repay even a small share of the external debt could place severe pressure on the budget, potentially absorbing any fiscal surplus from the renewal of phosphate mining, and compressing public expenditures on essential services.

Government reform efforts are yielding some success, with state-owned enterprises and utilities undergoing initial reforms. Government

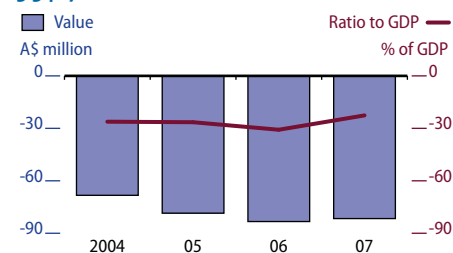
3.34.16 GDP growth



Sources: Asian Development Bank, *Nauru Country Economic Report*, August 2007; staff estimates.

[Click here for figure data](#)

3.34.17 Merchandise trade balance



Source: Asian Development Bank, *Nauru Economic Report*, 2007.

[Click here for figure data](#)

wages have been cut to more affordable levels and overstaffing in government departments has been reduced. In addition to phosphate mining, industries that offer growth potential include fisheries, small-scale agriculture, construction, finance (Nauru has been removed from the blacklist of the Financial Action Task Force on Money Laundering), and tourism. A turnaround in the performance of public utilities and the domestic airline would also help lift economic performance.

Republic of Palau

Driven by an increase in tourist arrivals (Figure 3.34.18) and expansion in construction, economic growth accelerated to 5.7% in 2007. Tourism received a fillip from the weakening US dollar, which is also Palau's currency. Arrivals from the Republic of Korea rose by 21% and from Europe by 13%, providing welcome diversification from the main tourist sources of Japan and Taipei, China. The hotels and restaurants, and transport and communications subsectors, both related to tourism, grew by about 15% and 7%, respectively. Investment in tourist accommodation remained strong, with the construction of two resorts and a hotel, and renovation of other hotels and restaurants.

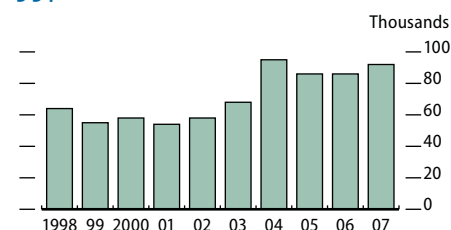
Inflation decelerated to 3.8% in 2007, primarily due to the decline in prices of clothing, footwear, and housing (Figure 3.34.19). On the fiscal side, domestic revenue collection rose by 2.5%, but growth in current expenditures quickened to 9.6%, and capital spending grew by 20.3%. As a result, the budget deficit in FY2007 (ended 30 September 2007) widened sharply to 7.0% of GDP from 1.0% in FY2006. External grants continued to dominate government revenues, providing 56% of the total.

With the ending in 2009 of the 1994 Compact of Free Association with the US, alternative financial sources will be needed to sustain public spending if negotiations for an extension of the Compact are unsuccessful. Tax reforms proposed by a Tax Review Task Force last year included increasing existing tax rates and introducing new taxes and fees. However, the FY2008 budget made provision for only two out of 19 proposed tax measures, while still providing for a 2.8% increase in public spending. It is likely that future infrastructure maintenance will be inadequately funded, given the completion of projects in 2007, including a major Compact-funded road. Palau's external debt was low, in the order of 10% of GDP, in FY2007.

The business environment improved in 2007 as a result of greater competition in telecommunications, which reduced costs, and regulatory reform, which somewhat strengthened the rights of foreign investors. In August 2007, new legislation extended land leaseholds by non-citizens from not more than 50 years without right of renewal to 99 years, consisting of 50-year leases with an option of renewal for another 49 years. Another new law removed a restriction that only Palauan citizens could register a ship and operate it within the country's territory. New legislation was also introduced to combat money laundering.

Further growth in tourism is expected in 2008 after favorable publicity in the international media about Palau's strong stance on environmental protection and from the filming in the country of a new series of the US "Survivor" television show. Benefits of growth in visitor

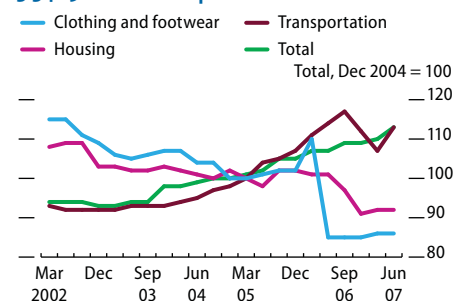
3.34.18 Total visitors



Sources: Palau Office of Planning and Statistics, available: <http://www.palau.gov.net/stats/>, downloaded 14 March 2008; Palau Visitors Authority, available: <http://www.visit-palau.com/>, downloaded 13 March 2008.

[Click here for figure data](#)

3.34.19 Consumer price index



Source: Palau Office of Planning and Statistics, available: <http://www.palau.gov.net/stats/>, downloaded 19 February 2008.

[Click here for figure data](#)

arrivals will again be spread over a range of services and in construction. The new land leasehold regulations, if implemented effectively, should complement recent improvements in economic infrastructure and encourage long-term investment, especially if foreign investment restrictions are eased.

Little fiscal adjustment is expected, at least until Compact renegotiations are further advanced. GDP growth is nonetheless forecast to slow to around 2% this year (Figure 3.34.20), because construction activity will decline from a peak reached last year, when the sector accounted for 17% of GDP, and because uncertainty about the outcome of Compact renegotiations could damp investor confidence. Inflation is expected to remain at 3–4%.

Samoa

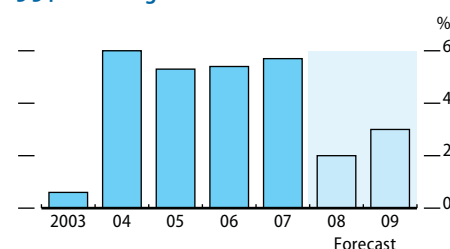
GDP expanded by 4.0% in FY2007 (ended 30 June 2007) and accelerated in the third quarter of 2007 when Samoa hosted the South Pacific Games (Figure 3.34.21). In the 9 months to September 2007, the economy grew by 5.7% from the year-earlier period. An increase in visitor arrivals and growth in tourism-based projects spurred double-digit expansion in the hotels and restaurants, transport and communications, construction, and manufacturing (excluding food and beverages processing) subsectors in that 9-month period. More favorable weather and migratory patterns of tuna allowed fishing to continue recovering from recession.

The FY2007 budget projected an overall deficit of 1.4% of GDP, but the actual outcome was a surplus of 1.2%. This reflected unexpectedly strong growth in revenues, particularly from taxes. Total expenditures came in slightly under the budget estimate because of delays in public investment projects, whereas current expenditures were higher than estimated and covered a second stage of a three-stage 42% civil service pay rise begun in the previous fiscal year. For FY2008, an overall budget deficit of 1.0% of GDP is projected. The ratio of external debt to GDP has been gradually declining from 54.3% in 2002 to 35.9%. In net present value terms, the debt is expected to decline from less than 30% of GDP at end-FY2006 to around 22% by FY2011.

Inflation picked up to average 6.1% in 2007 (Figure 3.34.22), largely driven by a 2.5% rise in the value-added goods and services tax and a 9.9% price hike for alcohol and tobacco products. Domestic prices for petroleum products were also raised. Monetary policy was tightened slightly in the last quarter of 2007 to reduce demand-side inflation pressure. The Samoan tala, which is pegged to a basket of six currencies of major trading partners, depreciated by 4–5% against the Australian and New Zealand dollars and the euro in 2007, but appreciated by almost 6% against the US dollar, leaving the real effective exchange rate relatively stable.

Foreign reserves increased by 13.3% to SAT\$212 million in the 12 months to November 2007, or 4.3 months of import cover. Comparing the first 5 months of FY2008 with a year earlier, exports rose by 28% because of increased fresh fish and nonu juice exports, which more than offset declines in exports of coconut products, taro, nonu fruit, and beer. Imports fell by 8% in the 5 months, narrowing the trade deficit by 14%. Earnings from tourism increased by 17%, which contributed significantly

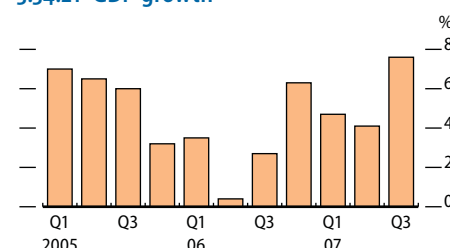
3.34.20 GDP growth



Sources: 12th Annual Palau Compact of Free Association Report for FY2006; staff estimates.

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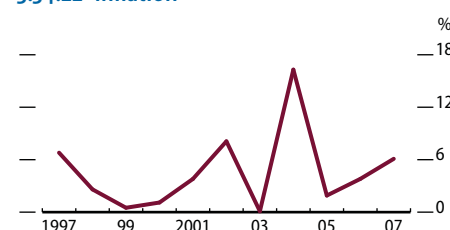
3.34.21 GDP growth



Source: Ministry of Finance, Quarterly Economic Review, various issues.

[Click here for figure data](#)

3.34.22 Inflation



Sources: Samoa Statistics Department, Ministry of Finance, available: <http://www.spc.int/prism>, downloaded 28 January 2008; Ministry of Finance, Quarterly Economic Review, July–September 2007 and Monthly Economic Performance, December 2007.

[Click here for figure data](#)

to an improvement in the current account balance, and remittances remained high (Figure 3.34.23).

GDP growth is projected to slow to 3–3.5% in FY2008 and FY2009 as the economy comes off the peak of pre-South Pacific Games construction activity and as manufacturing declines with cutbacks at an automotive-parts assembly plant, which employs about 2,000 people. Tourism and remittance flows will be the main drivers of growth, supplemented by fish exports. Inflation is expected to ease to 5.1% in FY2008 as the inflation effects of some tax increases dissipate.

The forecasts assume that the Government refocuses on economic and public sector reforms, particularly those that reduce the costs of doing business. These include reform of the commercial legal framework and facilitation of leasehold access to customary land, and ensuring access to reliable utility services at reasonable prices. Revamping state-owned enterprises has generally been slow and the enterprises have often failed to comply fully with new regulatory requirements. The merits of reform and of stimulating competition have been demonstrated by a reduction in airfares since the introduction in late 2005 of Polynesian Blue Airlines—a joint venture between Virgin Blue and government-owned Polynesian Airlines—and liberalization of the mobile telephone market in 2006, when a new entrant slashed the costs of international mobile phone calls by about 50%.

Solomon Islands

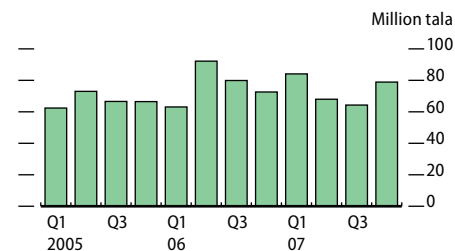
At 10% in 2007, the Solomon Islands recorded the strongest growth in the Pacific. It was driven by unsustainably high logging rates, which increased by 25% (Figure 3.34.24), and strong aid flows. Palm oil production also made a contribution, as did retailing and other services that were stimulated by demand from the presence of the Regional Assistance Mission to Solomon Islands, a partnership between the Government and 15 Pacific countries. An earthquake and tsunami that struck Gizo and Western Choiseul provinces in April 2007 caused considerable local damage and left many villagers homeless, but the economic impact was more than offset by increased aid flows.

Average inflation eased in 2007, but remained high at 7% because of higher fuel prices and a depreciation of the domestic currency against the Australian dollar. A slight tightening of monetary policy by the central bank reduced excess liquidity over the year, which led to a small increase in lending interest rates.

The current account recorded a deficit equivalent to 37% of GDP in 2007. Strong official and private inflows in the capital account raised foreign exchange reserves by about US\$12 million, to US\$115.8 million in the 12 months to January 2008, although reserves remained moderate at 4 months of imports of goods and nonfactor services (Figure 3.34.25). A surplus on the balance of payments contributed to strong growth in money supply. Credit to the private sector grew by 56% in 2007, mainly for personal loans and lending to the tourism, fisheries, transportation, and construction industries.

The budget moved into deficit last year to an estimated 1.2% of GDP from a surplus of 1.5% of GDP in 2006 as higher spending on

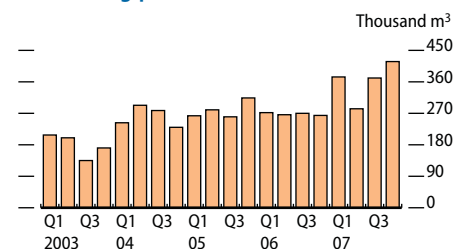
3.34.23 Gross remittances



Sources: Ministry of Finance, *Quarterly Economic Review*, various issues; *Selected Economic Indicators Report*, January to December 2007.

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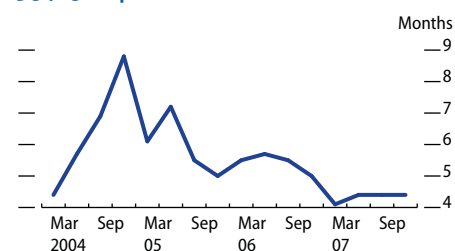
3.34.24 Log production



Sources: Central Bank of Solomon Islands, *Monthly Economic Bulletin*, various issues.

[Click here for figure data](#)

3.34.25 Import cover



Sources: Central Bank of Solomon Islands, *Monthly Economic Bulletin*, various issues; International Monetary Fund, *Article IV Consultation*, September 2007.

[Click here for figure data](#)

wages and on goods and services outweighed an increase in domestic revenues. Public sector debt continued to decline, but debt remains at uncomfortably high levels, equivalent to approximately 55% of GDP at the end of 2007, and mostly external. This is of particular concern in view of expected medium-term budget pressures from lower logging revenues, an eventual decline in donor support, and the need to fund infrastructure spending and tsunami rehabilitation work.

Economic and public sector reforms aimed at improving the environment for private sector development and the performance of state-owned enterprises continued at a slow pace, as the Government's focus naturally shifted to post-tsunami recovery efforts. A civil aviation act was prepared that, if passed in 2008, would make Solomon Islands a partner in a Pacific air services agreement and open the aviation sector to greater competition. Comprehensive reform of commercial law was initiated and legislative drafting continued for the introduction of competition in telecommunications. However, corruption and poor governance, weak infrastructure, expensive and unreliable utilities, and land tenure issues still constrain economic growth. In 2007, the country was ranked 162 of 178 in terms of the ease of registering property according to the World Bank's *Doing Business* indicators.

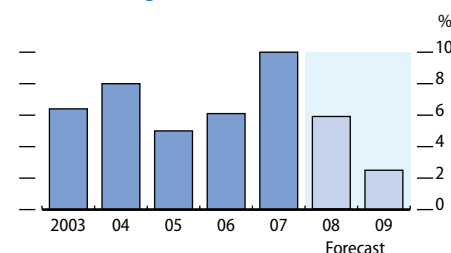
Economic growth is expected to moderate to 6.0% in 2008 as the Government curbs the upward trend in its spending in an effort to prepare for future declines in logging revenues. Further expansion of palm oil production will contribute to growth, and development of infrastructure for the Gold Ridge gold mine will continue. The current account deficit is expected to narrow to around 28% of GDP as growth in gold mine-related imports slows. Foreign reserves will be supported by inflows of aid and foreign direct investment in palm oil and gold mining. Inflation is projected to remain high in 2008.

Years of unsustainable logging and the anticipated depletion of natural forests by 2013 are projected to force a decline in logging rates from 2009. GDP growth is expected to fall to less than 3% in 2009 (Figure 3.34.26), even though gold production is expected to start by then. Failure to implement economic reforms could then see per capita GDP decline after 2010 because annual population growth of 2.8% may outpace that of GDP. Urban unemployment, especially of youth, is a major challenge.

Tonga

A 20% cut in the civil service in mid-2006 and riots that destroyed a large part of the business district of the capital, Nuku'alofa, in November that year led to a 3.5% contraction in GDP in FY2007 (ended 30 June 2007). The need to cut civil service staffing and government spending on goods and services was a result of a 2005 agreement to boost civil service wages by 60–80%. As for the consequences of the riots, a range of subsectors were hurt, including commerce, hotels and restaurants, transport and communications, financial and real estate services, and manufacturing. Tourism receipts in FY2007 dropped by 10.4% (Figure 3.34.27). Production of the major merchandise export—squash—also fell. (The state of emergency declared for the main island of Tongatapu in late 2006 as a result of the disturbances was still in force in March 2008).

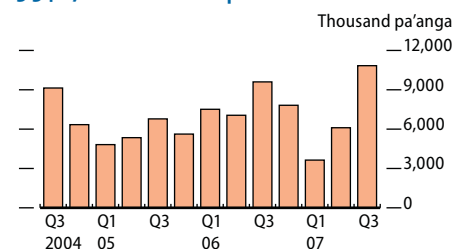
3.34.26 GDP growth



Sources: International Monetary Fund, *Article IV Consultation*, October 2006; Central Bank of Solomon Islands, *Annual Report 2006*, 21 June 2007; Solomon Islands *Budget 2008, Budget Strategy and Outlook*.

[Click here for figure data](#)

3.34.27 Tourism receipts



Source: National Reserve Bank of Tonga, *Quarterly Bulletin*, September 2007.

[Click here for figure data](#)

Inflation eased by about 2 percentage points to 5.1% in FY2007, though it then picked up to 5.8% in the first half of FY2008 on rising prices for food and oil, and currency depreciation against the Australian and New Zealand dollars.

The cuts in civil service staffing and in spending enabled the Government to run a budget surplus of T\$7.3 million in FY2007. Expenditure reductions of 15.1% outweighed revenue losses of 6.6%. For FY2008, an overall fiscal deficit of T\$4.4 million is targeted, with external grants projected to be more than double FY2007's level. Current expenditures are being raised by about 35%, mainly for purchases of goods and services, particularly technical assistance. Funding for internal security is also boosted.

Tonga's public debt was about 55% of GDP in FY2007, with external debt accounting for 86% of the total (Figure 3.34.28). The net present value of the public debt (excluding contingent liabilities) was an estimated 35% of GDP. An agreement in November 2007 for the Government to borrow US\$50 million from the People's Republic of China to finance urban reconstruction added to concerns about debt sustainability. In addition, a planned takeover by the Government of an unprofitable and debt-burdened power company involves a purchase price estimated at more than 4% of GDP.

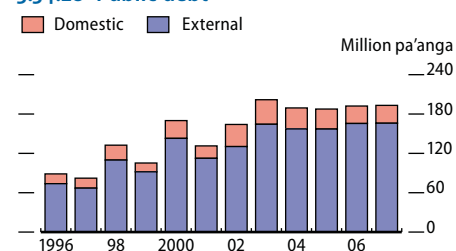
Major accomplishments have been seen in trade liberalization and revenue reforms: in July 2007 the country joined the World Trade Organization; and in recent years reliance on trade taxes has been reduced and the income tax threshold and highest marginal rate have been raised, while the maximum customs tariff was lowered to 20% in 2007. Another achievement last year was a reduction in the time required to enforce a contract from an estimated 510 to 350 days, made possible by the computerization of all criminal, commercial, and land cases at the Supreme Court. The environment for private sector development would be further improved by reform of state-owned enterprises and by better public service delivery.

The National Reserve Bank of Tonga, acting to assist in reconstruction and business recovery after the November 2006 civil disorder, reduced the reserve ratio of commercial banks and lifted ceilings that had been imposed on bank credit after unsustainable growth in borrowing by households in late 2006. The money supply grew by 14.1% in 2007, with credit to the private sector expanding by 11.4%. New legislation passed last year strengthened the central bank's institutional capacity and its independence in conducting monetary policy.

Merchandise exports fell by 14.2% in FY2007, pulled down by lower earnings from squash. Merchandise imports also slid, by 11.7%, as economic activity contracted. The services account deficit widened and remittance inflows declined, pushing out the current account deficit. Increased net inflows of official and private capital contributed to a balance-of-payments surplus of T\$8.4 million. Foreign exchange reserves rose (Figure 3.34.29) and were equal to 5.1 months of import cover by end-2007.

GDP growth is expected to resume in FY2008, at a low rate of 1%, reflecting urban reconstruction and a pickup in tourism supported by improved air services between the Fiji Islands and Vava'u in Tonga. However, growth will remain hampered by low business confidence and

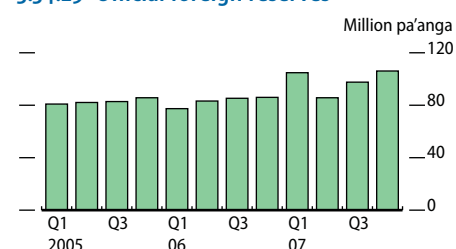
3.34.28 Public debt



Sources: National Reserve Bank of Tonga, *Quarterly Bulletin*, September 2007; Budget Statement for the Year ending 30th June 2008.

[Click here for figure data](#)

3.34.29 Official foreign reserves



Source: National Reserve Bank of Tonga, *Quarterly Bulletin*, September 2007, available: <http://www.reservebank.to>, downloaded 29 January 2008.

[Click here for figure data](#)

difficulties in the squash industry induced by low export prices. Inflation is projected to remain at about 5%, as reconstruction activity builds demand pressures and higher fuel and electricity prices feed through the economy.

Risks to the outlook arise from political uncertainties and the sociopolitical impact of limited job opportunities, particularly for young people who make up about half the population. The final session of Parliament prior to general elections in April this year ended in late-2007, before the Government's proposed political reforms to broaden representation in Parliament were enacted.

Tuvalu

Economic performance is primarily determined by trends in government expenditures and by offshore earnings. These latter come from the Tuvalu Trust Fund, fishing license fees, fees from leasing the country's ".tv" Internet domain name, remittances from overseas workers, and external grants (Figure 3.34.30). GDP in 2007 grew by an estimated 2–3%, supported by an 18.0% increase in public spending. The Trust Fund distribution to the budget fell by 15.5% and ".tv" receipts were down by 19.8%. Overall revenue levels were sustained by a 34.4% rise in fishing license fees and a 14.3% rise in external grants. Inflation was about 3%. The Australian dollar is used as domestic currency, so inflation usually tracks the trend there.

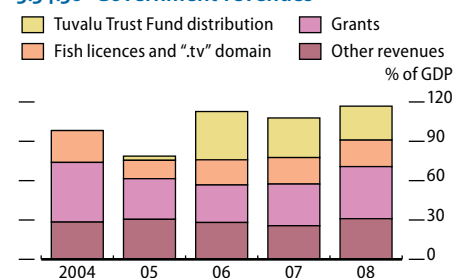
The Government raised spending on maintenance and capital projects in 2007 (the latter by an estimated 50%), although it also reduced outlays on goods and services. The net increase in spending reduced the overall budget surplus to 4.2% of GDP (Figure 3.34.31).

Net public debt was estimated at 45% of GDP at end-2005 in net present value terms and including cash holdings. Mainly due to an increase in returns from the Trust Fund (with a market value of A\$110 million at end-2007), the Government had become a net lender by the end of last year. Nevertheless, the fiscal position remains volatile. There is a risk that the Government will again accumulate unpaid bills and also crowd out private sector lending by overusing its overdraft with the National Bank of Tuvalu. Improved management of the Consolidated Investment Fund, which holds drawdowns from the Trust Fund as a financial buffer, expenditure controls, and the completion of plans to introduce a broad-based consumption tax would help stabilize the fiscal position. Revenue reforms are needed to offset a progressive reduction in import duties planned for the next 10 years under Tuvalu's ratification of the Pacific Island Country Trade Agreement.

The merchandise trade deficit runs at around 50% of GDP and is balanced by income from license fees, external grants, workers' remittances, and investment income from the Trust Fund and another fund established for the outer islands. Over the years, these flows of income from abroad have fluctuated and given rise to considerable volatility in the economy.

Further moderate economic growth is expected in 2008 on an expansion in fisheries; outer island development projects; construction of a Parliament complex, new police station, and prison; and port refurbishment. A slight rise in inflation is projected in line with that in Australia. Further ahead, climate change looms as a major challenge.

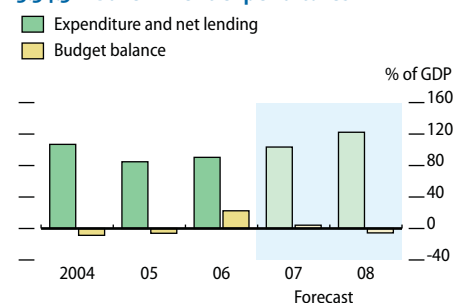
3.34.30 Government revenues



Sources: Staff calculations based on Tuvalu National Budget documents, various issues; staff estimates.

[Click here for figure data](#)

3.34.31 Government expenditures



Sources: Staff calculations based on Tuvalu National Budget documents, various issues; staff estimates.

[Click here for figure data](#)

Vanuatu

In its fifth consecutive year of growth, GDP increased in 2007 by an estimated 6.6%. This reflected strong expansion in tourism, real estate, and finance, as well as an improved contribution from agriculture. Continued political stability supported business confidence, while tourism was helped by new air services by Air New Zealand and Solomon Airlines. Total visitor arrivals rose by 8.4%, with arrivals by air climbing by 19.3%: the latter were at their highest in 5 years in the third quarter.

Government revenue collection was aided by improved compliance and the buoyant economy. This helped offset an increase in civil service wages, leaving a balanced budget for the year. The civil service wage bill in 2007 rose to 62% of total recurrent expenditures and limited ministries' ability to buy goods and services for public service delivery. The official intention is to ensure that the recurrent budget balances in 2008, but this may be difficult with a general election scheduled for July this year. Public debt has declined to less than 30% of GDP, from 40% in 2002.

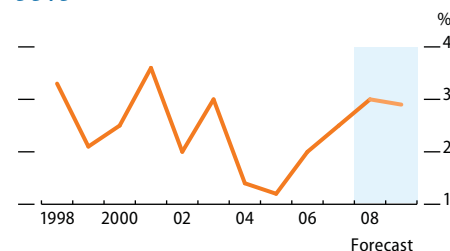
Inflation has remained in the 0–4% target range set by the Reserve Bank of Vanuatu in recent years, though increases in fuel and food prices led to a pickup in inflation in the first quarter of 2007, which prompted the central bank to tighten monetary policy. The year-average inflation rate for 2007 was 2.5%, and is expected to edge up to 3% in 2008 (Figure 3.34.32).

The central bank forecast an overall balance-of-payments deficit for 2007 and a decline in foreign reserves to 7.5 months of import cover, still well above a target level of 4 months. This reflected an increase in the current account deficit to 9.5% of GDP from 7.5% in 2006 (Figure 3.34.33). The current account deficit is expected to remain at similar levels in 2008 but is being largely covered by foreign investment.

The economy remains fragile, with a growing population scattered across many, often isolated island communities. GDP per capita is at levels similar to those of 20 years ago, with growth having failed to exceed population growth. In addition, the rural population has seen few benefits of economic growth. Internal migration continues to fuel the expansion of urban squatter settlements and unemployment. Unlike many other Pacific nations, Vanuatu does not have easy access to migration or overseas work opportunities to reduce this population pressure, so that rural development is an imperative.

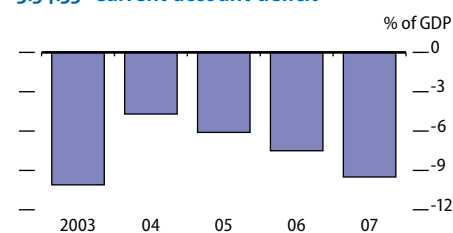
GDP growth is projected to ease to 5.7% in 2008 (Figure 3.34.34), moderating to around 4.3% in 2009. This expected slowing reflects structural constraints, which, though being addressed by the Government, make recent growth rates difficult to sustain. A historically high rate of growth is nonetheless projected, with tourism likely to benefit from expansion of air services and new public development projects. Planned infrastructure spending, largely for rural areas and funded by a \$65.9 million US Millennium Challenge Corporation Compact, is expected to be key source of increased economic activity through 2011.

3.34.32 Inflation



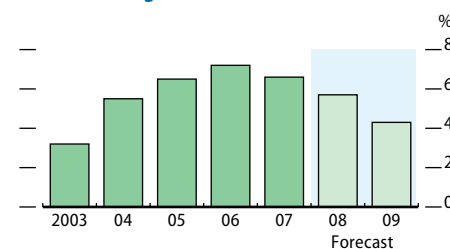
Sources: National Statistics Office, Government of Vanuatu, available: <http://www.spc.int/prism/country/vu/stats/>, downloaded 4 March 2008; *World Economic Outlook* database, October 2007; Ministry of Finance and Economic Management, *Budget Policy Statement 2008*; staff estimates. [Click here for figure data](#)

3.34.33 Current account deficit



Sources: Reserve Bank of Vanuatu, *Quarterly Economic Review*, March 2005; Ministry of Finance and Economic Management, *Half-Year Economic and Fiscal Update*, 27 July 2007 and *Budget Policy Statement 2008*, Volume 1. [Click here for figure data](#)

3.34.34 GDP growth



Sources: National Statistics Office, *National Accounts of Vanuatu 2005*; Ministry of Finance and Economic Management, *Half-Year Economic and Fiscal Update*, 27 July 2007 and *Budget Policy Statement 2008*. [Click here for figure data](#)



Part 4

Technical note

A note on statistical discrepancies in the national income accounts of selected Asian economies

Introduction

In 2006, the Philippine economy grew by 5.4%. All of its components contributed positively to this growth, except for “statistical discrepancy,” which deducted 3.9 percentage points from the 9.4 percentage points total contribution of consumption, investment, and net exports. In contrast in 2002, the country posted growth of 4.6%—but this time, the statistical discrepancy made a positive contribution, of 78% of the total. What is this statistical discrepancy? Why does it occur? And how important is it when measuring growth in developing Asia?

Gross domestic product (GDP) can be estimated in three ways: via the expenditure approach (summation of private consumption, government expenditure, investment, and net exports); production approach (total value of final goods and services produced by the economy); and income approach (total income of the factors involved in the production process). In principle, these three approaches should yield identical GDP values because total expenditure on goods and services must by definition equal the value of goods and services produced, which in turn must equal total income paid to the factors that produced those goods and services. Yet as each measurement exercise is independent, there may be differences in the resulting estimates. The difference between these estimates is called the statistical discrepancy (SD).

There has been growing concern about the existence and magnitude of the SD in national accounts statistics. A large and persistent SD is seen as a reflection of the authorities’ inability to generate accurate and reliable national accounts estimates. Considering that these numbers represent a country’s economic activity, data dependability is of utmost importance.

This technical note examines the SDs in the national income accounts of six developing Asian countries: Bangladesh, India, Republic of Korea (Korea), Philippines, Thailand, and Viet Nam. These countries were selected on the basis of availability of sufficient time series national accounts data to allow rigorous analysis. Focusing on the expenditure and production approaches to estimating GDP, this note will assess the data

collection methodologies of the selected countries to identify probable sources of the SD and its allocation across various GDP components.

Framework and methodology

The estimation procedure in this note is based on a framework proposed by Weale (1992), who showed how consistent estimates of the national accounts can be obtained by exploiting statistical information in the data. He applied the approach to allocate the SD between the measurement errors of aggregate expenditure and income estimates of the United States' real gross national product (GNP). These errors averaged 0.6% of GNP over the period 1980–2006. This note applies Weale's approach by examining, at a disaggregated level, the sources of SD using national accounts data of six Asian countries. (A similar exercise for Argentina was undertaken by Bajada [2001]). Weale's method is described in Box 4.1.1. Essentially, it uses information from the variances and covariances of observed national accounts data to draw inferences about their reliability. It then attempts to minimize the "distance" between the revised estimates, which are constrained to be consistent with the national accounts adding-up conditions, and the initial estimates, but allowing larger adjustments for elements that are believed less reliable. Underlying the approach are two assumptions: that initial estimates are subject to measurement errors; and that these measurement errors are independent of the true, but unknown, components. It follows from these assumptions that if there are two estimates of the same variable, the one that exhibits less variance can be considered the more reliable.

To illustrate the procedure described in Box 4.1.1, let \hat{Y}_1 and \hat{Y}_2 be two measures of the true value of GDP, \dot{Y} . Further, assume that \hat{Y}_{1a} and \hat{Y}_{1b} are components of \hat{Y}_1 while \hat{Y}_{2a} and \hat{Y}_{2b} are components of \hat{Y}_2 . Let the covariance matrix of \hat{Y}_{1a} , \hat{Y}_{1b} , \hat{Y}_{2a} , and \hat{Y}_{2b} be the positive definite matrix:

$$W = \begin{bmatrix} 2,069 & 57 & 1,549 & 127 \\ 57 & 598 & -86 & 18 \\ 1,549 & -86 & 1,428 & 109 \\ 127 & 18 & 109 & 97 \end{bmatrix}$$

As seen in its diagonal elements, estimates of the four variables have relatively large variances, suggesting that they are unreliable measures. The covariances (i.e., off-diagonal elements) also indicate substantial interrelations among the estimates.

The linear constraint $A = (1 \ 1 \ -1 \ -1)$, thus:

$$WA' = \begin{bmatrix} 450 \\ 723 \\ -74 \\ -61 \end{bmatrix}$$

and $AWA' = 1,308$.

Substituting the above in equation (12) in Box 4.1.1,

4.1.1 Statistical methodology

In national accounts data, estimates of the true value of gross domestic product (GDP) from the expenditure approach should equal those from the value-added approach, i.e.,

$$GDP_E = GDP_{VA} \quad (1)$$

$$C + I + G + X - M = Ag + In + Se + Ta \quad (2)$$

where

$GDP_E = C + I + G + X - M$ = expenditure measure of GDP

$GDP_{VA} = Ag + In + Se + Ta$ = value-added measure of GDP

C = consumption spending

I = total investment

G = government spending

X = exports of goods and services

M = imports of goods and services

Ag = agriculture

In = industry

Se = services

Ta = indirect taxes less subsidies.

In reported data, however, GDP_E may not equal GDP_{VA} , creating a discrepancy. Differences in estimates arise from varying data collection methods and estimation procedures of GDP components. In general, the statistical discrepancy (SD) is reported on the expenditure side, such that equations (1) and (2) become:

$$G\hat{D}P_E + SD = G\hat{D}P_{VA} \quad (3)$$

$$\hat{C} + \hat{I} + \hat{G} + \hat{X} - \hat{M} + SD = \hat{A}g + \hat{I}n + \hat{S}e + \hat{T}a \quad (4)$$

Since SD can be defined as the sum of the measurement errors of each component of GDP, equation 4 can be written as:

$$\begin{aligned} (\hat{C} + \varepsilon_c) + (\hat{I} + \varepsilon_I) + (\hat{G} + \varepsilon_G) + (\hat{X} + \varepsilon_X) - (\hat{M} + \varepsilon_M) = \\ (\hat{A}g + \varepsilon_{Ag}) + (\hat{I}n + \varepsilon_{In}) + (\hat{S}e + \varepsilon_{Se}) + (\hat{T}a + \varepsilon_{Ta}) \end{aligned} \quad (5)$$

where $\varepsilon_c, \varepsilon_I, \varepsilon_G, \varepsilon_X, \varepsilon_M, \varepsilon_{Ag}, \varepsilon_{In}, \varepsilon_{Se}$, and ε_{Ta} are the components of SD.

To show how SD can be allocated to each component, consider \dot{Y} to be a vector of true data, \hat{Y} a vector of

observed values, and ε a vector of measurement errors, i.e.,

$$\dot{Y} = \hat{Y} + \varepsilon \quad (6)$$

With the assumptions that ε and \dot{Y} are uncorrelated and that ε is identically normally distributed with mean 0 and variance V , then the true value can be estimated by maximizing the following log-likelihood function:

$$L(\dot{Y}, V | \hat{Y}) = -\frac{N}{2} \ln(2\pi) - \frac{N}{2} \ln(V) - \left[\frac{1}{2} (\dot{Y} - \hat{Y})' V^{-1} (\dot{Y} - \hat{Y}) \right] \quad (7)$$

where N is the number of observations, subject to the condition that:

$$A\dot{Y}_t = 0 \quad (8)$$

where A is a linear constraint. This leads to an estimate of \dot{Y} , i.e.,

$$\tilde{Y} = [I - VA'(AVA')^{-1}A]\hat{Y} \quad (9)$$

where I is an identity matrix and V is the unknown variance-covariance matrix.

Once estimates of the true values of the components are obtained, equation (2) will be satisfied, such that,

$$\tilde{C} + \tilde{I} + \tilde{G} + \tilde{X} - \tilde{M} - \tilde{A}g - \tilde{I}n - \tilde{S}e - \tilde{T}a = 0 \quad (10)$$

Weale (1992) shows that the maximum likelihood estimate of WA' converges in probability to VA' , i.e., $\text{plim } WA' = VA'$

$$(11)$$

where W is a maximum likelihood data covariance matrix.

Thus, equation (9) can be written as:

$$\tilde{Y} = [I - WA'(AWA')^{-1}A]\hat{Y} \quad (12)$$

From equation (12), the share of each component to SD is estimated from:

$$WA'(AWA')^{-1}A \quad (13)$$

$$\begin{bmatrix} \tilde{Y}_{1a} \\ \tilde{Y}_{1b} \\ \tilde{Y}_{2a} \\ \tilde{Y}_{2b} \end{bmatrix} = \begin{bmatrix} \hat{Y}_{1a} \\ \hat{Y}_{1b} \\ \hat{Y}_{2a} \\ \hat{Y}_{2b} \end{bmatrix} = \begin{bmatrix} 450 \\ 723 \\ -74 \\ -61 \end{bmatrix} [1,308]^{-1} \begin{bmatrix} 1 & 1 & -1 & -1 \end{bmatrix} \begin{bmatrix} \hat{Y}_{1a} \\ \hat{Y}_{1b} \\ \hat{Y}_{2a} \\ \hat{Y}_{2b} \end{bmatrix}$$

hence,

$$\begin{bmatrix} \tilde{Y}_{1a} \\ \tilde{Y}_{1b} \\ \tilde{Y}_{2a} \\ \tilde{Y}_{2b} \end{bmatrix} = \begin{bmatrix} \hat{Y}_{1a} \\ \hat{Y}_{1b} \\ \hat{Y}_{2a} \\ \hat{Y}_{2b} \end{bmatrix} - \begin{bmatrix} 0.34 & 0.34 & -0.34 & -0.34 \\ 0.55 & 0.55 & -0.55 & -0.55 \\ -0.06 & -0.06 & 0.06 & 0.06 \\ -0.05 & -0.05 & 0.05 & 0.05 \end{bmatrix} \begin{bmatrix} \hat{Y}_{1a} \\ \hat{Y}_{1b} \\ \hat{Y}_{2a} \\ \hat{Y}_{2b} \end{bmatrix}$$

The above can be further simplified:

$$\begin{bmatrix} \tilde{Y}_{1a} \\ \tilde{Y}_{1b} \\ \tilde{Y}_{2a} \\ \tilde{Y}_{2b} \end{bmatrix} = \begin{bmatrix} \hat{Y}_{1a} \\ \hat{Y}_{1b} \\ \hat{Y}_{2a} \\ \hat{Y}_{2b} \end{bmatrix} + \begin{bmatrix} 0.34 & (\hat{Y}_{2a} + \hat{Y}_{2b} - \hat{Y}_{1a} - \hat{Y}_{1b}) \\ 0.55 & (\hat{Y}_{2a} + \hat{Y}_{2b} - \hat{Y}_{1a} - \hat{Y}_{1b}) \\ 0.06 & (\hat{Y}_{1a} + \hat{Y}_{1b} - \hat{Y}_{2a} - \hat{Y}_{2b}) \\ 0.05 & (\hat{Y}_{1a} + \hat{Y}_{1b} - \hat{Y}_{2a} - \hat{Y}_{2b}) \end{bmatrix}$$

which leads to the final weights, shown in equation (13), that determine the allocation of SD to each component. Summing up \tilde{Y}_{1a} and \tilde{Y}_{1b} into \tilde{Y}_1 and \tilde{Y}_{2a} and \tilde{Y}_{2b} into \tilde{Y}_2 should lead to balanced values of \tilde{Y}_1 and \tilde{Y}_2 , which are estimates of the true value, \hat{Y} .

$$\begin{bmatrix} \tilde{Y}_{1a} \\ \tilde{Y}_{1b} \\ \tilde{Y}_{2a} \\ \tilde{Y}_{2b} \end{bmatrix} = \begin{bmatrix} \hat{Y}_{1a} \\ \hat{Y}_{1b} \\ \hat{Y}_{2a} \\ \hat{Y}_{2b} \end{bmatrix} + \begin{bmatrix} 0.34 \\ 0.55 \\ -0.06 \\ -0.05 \end{bmatrix} [SD]$$

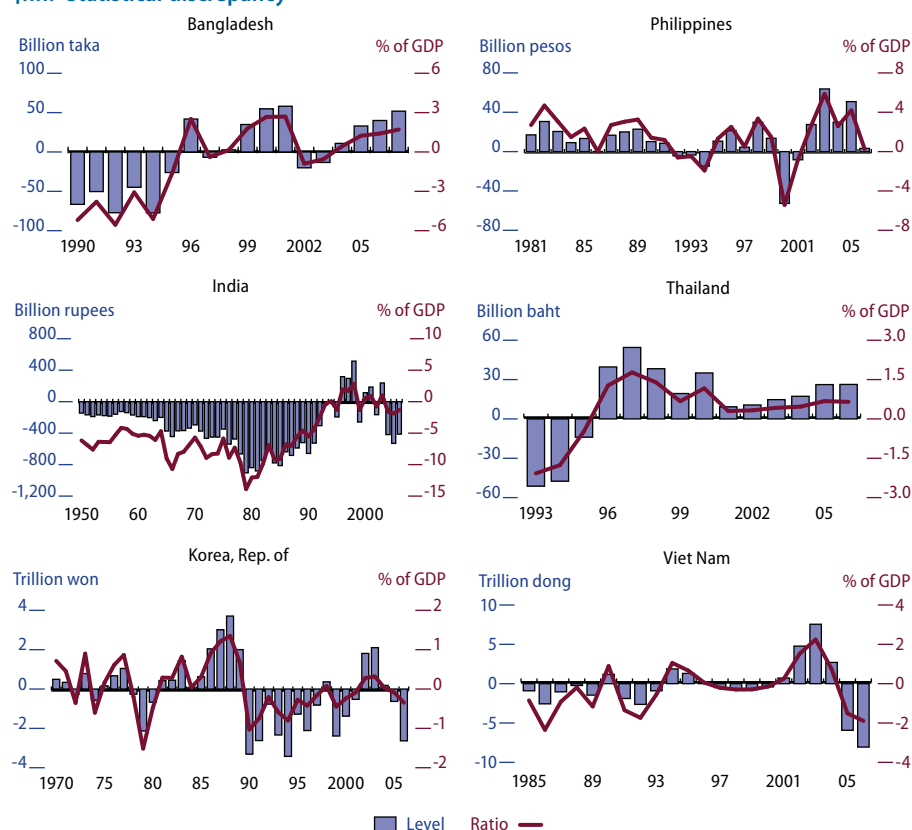
In the illustrative example, the application of the maximum likelihood estimation suggests that 89% of the SD is due to measurement errors in \hat{Y}_1 and 11% is due to \hat{Y}_2 .

Some properties of the statistical discrepancy

Figure 4.1.1 shows the SD level in the six countries. The data confirm that the SD has been volatile and has exhibited no signs of decline. As a ratio to GDP, the SD's volatility has become somewhat less pronounced, but it remains highly visible. In the last 4 or 5 years, the SDs of Bangladesh and the Philippines have generally been positive, meaning that income estimates of GDP exceed expenditure estimates. The opposite is true for India, Korea, and Viet Nam, where SDs have turned negative in recent years. Thailand's SD has been positive since 1996.

Table 4.1.1 presents summary statistics for the observed SDs. Bangladesh, India, and Viet Nam registered negative means ranging from -5.4% to -0.3% of GDP while Korea, Philippines, and Thailand posted positive means ranging from 0.1% to 1.6% of GDP. Since the mean as a measure of central tendency may give misleading results due

4.1.1. Statistical discrepancy



Source: Asian Development Outlook database.

[Click here for figure data](#)

to its sensitivity to the sign of the SD, mean absolute values of the SD are calculated as a proportion of GDP. Korea, Thailand, and Viet Nam have mean absolute rates of at most 1% of GDP. By contrast, India has overestimated its expenditure components by an average of 5.7% of GDP. Bangladesh and the Philippines have statistical discrepancies that average over 2% of GDP.

In Table 4.1.2, the impact of the SD on annual growth estimates is shown. In India for instance, the contribution of SD to GDP growth peaked at a remarkable 4,700% (in absolute terms) of GDP. This happened in 1966 when the Indian economy was estimated to have contracted by 0.03%, but in a context where the statistical discrepancy deducted 1.68 percentage points from growth. Indeed, there have been several instances in which the contribution to growth of SD has been larger than the

4.1.1 Descriptive statistics of the statistical discrepancy (% of GDP)

	Period covered	Mean	Mean absolute	Minimum	Maximum	Standard deviation	% of sample with positive SD
Bangladesh	1990–2007	-0.6	2.3	-5.6	2.7	2.8	50.0
India	1950–2006	-5.4	5.7	-13.9	2.8	3.8	12.3
Korea, Rep. of	1970–2006	0.1	0.5	-1.5	1.4	0.6	51.4
Philippines	1981–2006	1.6	2.3	-5.4	5.9	0.0	80.8
Thailand	1993–2006	0.3	1.0	-2.1	1.8	1.1	79.0
Viet Nam	1985–2006	-0.3	1.0	-2.4	2.3	1.2	36.4

SD = statistical discrepancy.

Source: Authors' calculations.

4.1.2 Statistical discrepancy and GDP growth

	Bangladesh	India	Korea, Rep. of	Philippines	Thailand	Viet Nam
Real GDP growth (%)						
Mean	5.2	4.8	6.9	2.9	4.0	6.8
Minimum	3.3	-5.2	-6.9	-7.3	-10.5	2.8
Maximum	6.6	9.6	12.0	6.8	9.2	9.5
Median	5.2	5.2	7.1	4.3	5.0	7.1
Statistical discrepancy contribution to GDP growth (percentage points)						
Mean absolute value	1.7	1.3	0.6	2.3	0.5	1.0
Minimum	-3.6	-4.3	-1.8	-7.2	-0.9	-2.4
Maximum	4.3	3.3	1.4	4.6	1.8	2.1
Median	0.5	0.0	0.2	0.1	0.1	-0.1
Statistical discrepancy contribution to GDP growth (% share)						
Mean absolute value	35.0	123.5	9.0	94.5	12.4	18.0
Minimum	-82.2	-265.2	-69.9	-529.1	-39.7	-55.0
Maximum	92.5	4,700.0	13.0	260.0	30.8	41.2
Median	10.2	5.0	0.8	5.5	1.7	-1.8

Source: Authors' calculations.

contribution of the relevant expenditure components (among others, as mentioned in the first paragraph of this technical note, the Philippines).

A simple correlation analysis does not suggest that any particular GDP component is strongly related to the SD (Table 4.1.3). Indeed, except for Bangladesh and Thailand, the SDs of all the countries show no strong correlation with any single component of GDP, whether from the expenditure side or from the economic activity side.

Given the inconclusiveness of the correlation results, a more detailed analysis to identify sources of the SD is implemented.

4.1.3 Correlation of statistical discrepancy with GDP components

	Private consumption	Government consumption	Investment	Exports	Imports	Net exports	Agriculture	Industry	Services
Bangladesh	0.67*	0.59*	0.71*	0.70*	0.77*		0.72*	0.71*	0.69*
India	0.21	0.22	0.17	0.23	0.30		0.22	0.23	0.25
Korea, Rep. of	-0.27	-0.28	-0.35	-0.17	-0.25		-0.15	-0.25	-0.26
Philippines	0.15	0.00	0.03	0.10	0.15		0.19	0.20	0.18
Thailand	0.41	0.54*	-0.27	0.40	0.27		0.42	0.42	0.48
Viet Nam	-0.05	-0.01	-0.02			-0.27	0.03	-0.05	-0.01

* Significantly higher than +/- 0.5 at 5% level.

Source: Authors' calculations.

Reconciling the estimates

Before applying the methods of Box 4.1.1, two statistical issues need to be dealt with. The estimate of the covariance matrix that is needed to apportion the SD is potentially vitiated by heteroskedasticity and by non-stationarity in the data. To circumvent these difficulties, the covariance matrix is estimated using the level differences in the estimates, normalized on the lagged level of GDP. This transformation does not affect the accounting identity, but results in homoskedastic and stationary data from which the covariance can then be calculated. Results are presented in Table 4.1.4. The numbers report the shares of the observed

SD that the estimation procedure attributes to the expenditure and income components of the national accounts.

The yellow-shaded cells show the component with the highest contribution to SD. The green-colored cells show the component next in line. Either the trade or investment variables account for the highest proportion of SD. Notable exceptions are India and Viet Nam, where agriculture contributed the highest and second-highest proportion of SD, respectively, and Bangladesh where private consumption accounted for the second-highest proportion of SD.

For all the countries studied in this note, estimates of investment are sourced mainly from annual and periodic surveys of business and industries. In estimating investment, national statistics offices frequently use data extrapolations and manipulations to approximate population from sample data and to transform survey results to national income accounts data.

For example, the value of additions and modifications to buildings and other physical structures are estimated using data from surveys of building and construction activities, building permits, and building and construction materials. In Korea, where the highest proportion of the SD is attributed to capital formation, part of the investment data is estimated from input-output tables, which are compiled only every 5 years. Further, the buildings component of gross fixed capital formation is obtained directly from the output of the construction industry after some adjustments such as deductions for repairs. Meanwhile, Thailand, aside from investment data from the government and business sectors, uses related indicators (such as tax revenues to estimate machinery and office equipment) to produce investment estimates. Also, the commodity flow method¹ is used to derive changes in stocks. Both of these require some interpolations and extrapolations, which contribute to measurement errors.

Although imports and exports are generally regarded as relatively well measured given that timely records of them are usually kept, the findings here indicate otherwise. Private consumption data tend to have fewer measurement errors than trade data, despite reliance on surveys and input-output tables, which are usually deemed less reliable than

4.1.4 Sources of statistical discrepancy

	Bangladesh	India	Korea, Rep. of	Philippines	Thailand	Viet Nam
Expenditure components	0.97	0.25	1.07	1.19	-1.82	0.98
Total consumption	0.38	-0.31	0.59	0.07	-1.52	-0.15
Private consumption	0.35	-0.35	0.47	0.03	-1.36	-0.13
Government consumption	0.03	0.04	0.12	0.04	-0.17	-0.02
Investment	0.00	0.38	1.83	0.35	-2.83	-0.02
Net exports	0.58	0.18	-1.35	0.77	2.53	1.15
Exports	-0.11	0.11	-0.83	0.73	0.13	
Imports	0.69	0.07	-0.52	0.04	2.40	
Production components	0.03	0.75	-0.07	-0.19	2.82	0.02
Agriculture	0.02	0.72	0.13	-0.05	0.10	-0.24
Industry	0.03	0.02	-0.22	-0.13	1.22	0.03
Services	-0.01	0.06	0.11	-0.01	1.51	0.23
Taxes and subsidies	-0.01	-0.04	-0.10			

Source: Authors' calculations.

government records such as customs trade data. Possibly small-sample problems, particularly for Bangladesh and Thailand, detract from the robustness of the results. Several factors have been cited to account for errors in trade data. These include underestimation of transactions, incomplete data in documents submitted by exporters and importers, failure of traders to submit required documents, undervaluation of export shipments to lessen or avoid imposition of taxes and other duties, overvaluation of the costs of imports to reduce income tax liabilities, and inability to capture some import and export flows.

A case in point is the Philippines, when in August 2005 large adjustments to its trade figures were made for the previous 3 years. The adjustments were due to intracompany import transactions as well as export transactions that were unreported (Habito 2005). A World Bank study, which looked into the trade statistics between India and Bangladesh, attributed the discrepancy between India's exports and Bangladesh's imports to " 'tax evasion' schemes where Indian exporters understate the value of their exports and Bangladeshi importers overstate the costs" (World Bank 2006). In Viet Nam, exports and imports of goods and services are derived from the balance-of-payments estimates, with imports adjusted for unrecorded cross-border trade. The International Monetary Fund has noted that the compilation of the national accounts suffers from poor data collection practices and a lack of coordination and communication between data collection agencies. Further, data on invisibles are based largely on banking records, which provide incomplete coverage and identification of the types of transactions.

In India, the agriculture data suffer from several shortcomings. First, survey results are available only after a lag of about 2 years. For example, land-use statistics for the computation of value added in agriculture are supplied with a lag of 2 or 3 years. Prices collected by state governments also are available with a lag of 1 or 2 years. Second, there is no consistent data collection methodology across the various agencies gathering information. Third, statistics for some subsectoral components, such as forestry, are not systematically obtained, and rely simply on irregular, ad hoc publications. All these factors contribute to the reduced precision of estimates for agriculture data.

In Viet Nam, where the agriculture sector contributes the second-highest proportion of SD, output is estimated using annual surveys of agricultural and livestock production. Other than the inherent sampling errors present in the surveys, a possible source of discrepancy lies in the seasonal differences in agricultural production. The difficulty lies in measuring output of crops in a continuous manner throughout the year given that the length and timing of crop production vary (the problem of measuring work in progress).

Errors in the measurement of private consumption can be attributed to the fact that information is based on various surveys and administrative record systems and on a set of indicators. Household income and expenditure surveys, which provide benchmark estimates of private consumption, are carried out every 3 to 5 years. Data derived from the more frequent surveys are then used to interpolate and extrapolate the benchmark estimates. India, Korea, and Thailand are examples of countries that apply the commodity flow method to survey data to

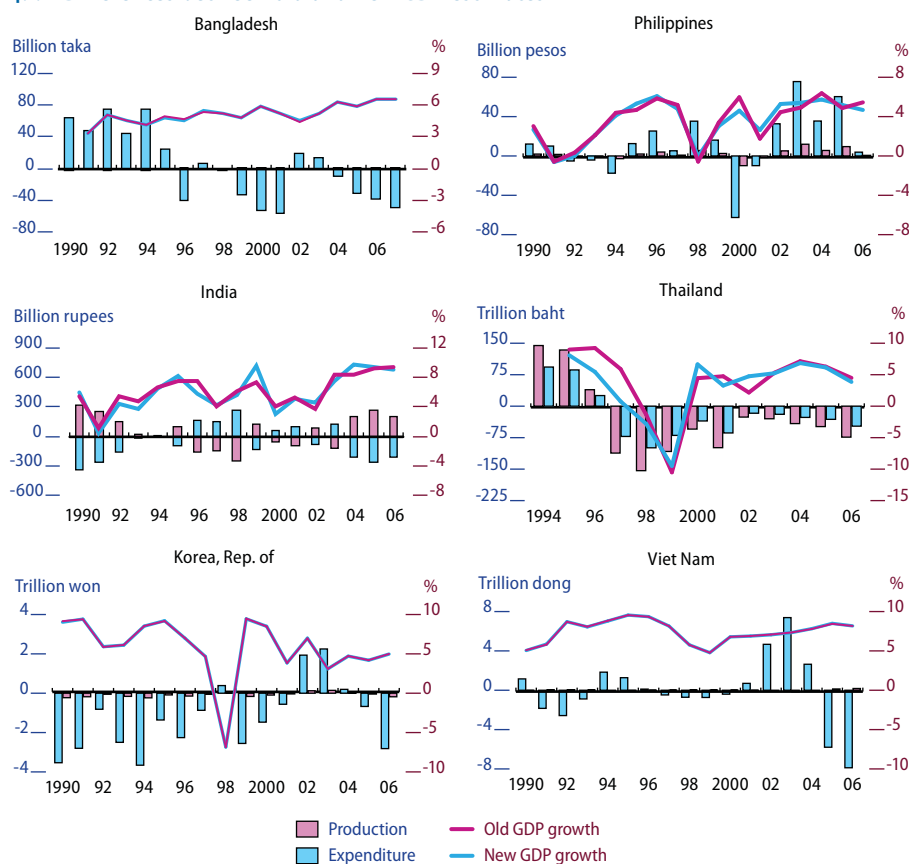
get estimates of personal consumption as well as other expenditure components of GDP.

As to the argument that data sourced primarily from government records tend to be more accurate than nongovernment sources, results do support this view. Government spending accounts for at most 4% of the measurement error.

In general, the SD is attributed more to expenditure components than to production. This supports the common notion that data support is stronger in the production accounts. Usually, estimates of GDP levels are based on the income estimates from the production side of the national accounts.

Figure 4.1.2 plots the differences between the calculated GDP levels and the old observed values. Positive values indicate underestimation of original observations. In the main, GDP estimates via the expenditure approach appear to be underrecorded for Bangladesh and the Philippines, while those for India, Korea, Thailand, and Viet Nam appear to be overestimated. True GDP values for Bangladesh and India seem to lie between observed values from the expenditure and production approaches. For Korea, Thailand, and Viet Nam, new GDP estimates are generally less than both the income and expenditure estimates. The reverse is true for the Philippines. However, while large differences in levels are apparent, revised growth rates are in line with old figures.

4.1.2 Differences between old and new GDP estimates



Sources: Asian Development Outlook database; authors' calculations.

[Click here for figure data](#)

Conclusion

This note has characterized SDs in six developing Asian countries. It has provided a short description of why SDs exist in national income accounts and has analyzed which of the various components of GDP have contributed most to SDs. This has helped provide a clearer sense of how each economy performed and how each sector contributed to growth.

The presence of SDs highlights the need to strengthen the statistical capability of government data collection agencies. The results suggest possible areas where the quality of data is poor and where government efforts to improve data quality need to be directed.

Endnote

1. A method of compiling national accounts in which the total supplies and uses of individual types of goods and services have to be balanced with each other (United Nations 2001).

References

- Bajada, C. 2001. "An Examination of the Statistical Discrepancy and Private Investment Expenditure." *Journal of Applied Economics* 4(1):27-61.
- Habito, C. 2005. "Why the trade deficit was understated." *Philippine Daily Inquirer*. 8 August. Available: http://www.census.gov.ph/data/technotes/Habito_article.html.
- International Monetary Fund. Special Data Dissemination Standards, various countries.
- Organisation for Economic Co-operation and Development. 2001. "Quarterly National Accounts in Asia: Sources and Methods." Proceedings of Joint OECD-ADB-ESCAP Workshop on Quarterly National Accounts. Bangkok, October.
- United Nations. 2001. *The 1993 System of National Accounts*. Available: <http://unstats.un.org/unsd/sna1993/introduction.asp>.
- Weale, M. 1992. "Estimation of Data Measured with error and Subject to Linear Restrictions." *Journal of Applied Econometrics* 7(7):167-74.
- World Bank. 2006. "India-Bangladesh Bilateral Trade and Potential Free Trade Agreement." *Bangladesh Development Series*. Paper No. 13. World Bank Office, Dhaka. Available: <http://siteresources.worldbank.org/INTBANGLADESH/Resources/Trade.pdf>.

Appendix: Sources of statistical discrepancy

Statistical discrepancy (SD) can result from the selection of data sources, the timing of data, or the methods used in estimating the components.

Data sources

The table lists the basic sources of data for the different components of gross domestic product (GDP). The sources can be broadly categorized into three: administrative and financial records/reports from the public and private sectors, sample surveys, and censuses. Data from these sources can either be used directly in the estimation of the GDP components or indirectly as indicators to be fed into a mathematical or statistical model. The expenditure components of GDP rely primarily on administrative/financial data while the production components are mostly drawn from sector- or establishment-based surveys. Recording errors and deficiencies commonly plague administrative-based data while sampling and nonsampling errors are inherent in survey data.

Timing of data

Discrepancies can also be attributed to the difference in the timing of data release from the different sources. Administrative-based data are more frequently released and with shorter lags than survey data. The timing issue not only affects the use of survey results (on which estimates are based) but also the recording of actual transactions. Production, especially in the agriculture sector, may span several accounting periods, while sales are recorded continuously throughout the year and can be confined to the particular year being measured.

Methodological issues

Surveys and censuses are primarily intended to obtain trends and reveal structures, and are not originally designed for national accounts purposes. Since these data may not conform exactly to national accounts definitions nor cover all the items to be measured in the accounts, measurement errors are expected. Such would be the usual case for the measurement of gross capital formation, for which information is culled from administrative and financial reports, as well as from industry surveys.

In many cases, extrapolations from sample survey data are used to approximate population data that are based on a benchmark census and value-added data that are based on a benchmark year. These extrapolations are then adopted directly in the estimation procedure or as parameters that are fed into a statistical or mathematical model. For example, data on retail trade sales and turnover are often used to estimate personal consumption expenditures. In some cases, technical coefficients from the input-output tables, which give ratios of value added to output or of intermediate consumption to value added, are also applied, especially when information is very limited. Necessarily, these methods of using survey data will have measurement errors. The input-output tables, which are revised every 5 or 10 years or so, may likewise fail to capture changes in productivity and technology.

Conversion of current price estimates to constant price estimates also contributes to differences in GDP between the production and expenditure sides. Deflators are not used consistently. For example, the wholesale price index is used to deflate manufacturing output, the consumer price index—personal consumption expenditures, and the producers' price index—agricultural output.

1 Nature of basic data					
	Bangladesh		India		Korea, Rep. of
	Frequency	Source of basic data	Frequency	Source of basic data	
Private consumption	Every 4–5 years	Household income and expenditure survey	Every 5 years	Input-output table and household surveys	Input-output table
Government consumption	M	Public administrative and financial reports	M	Public administrative and financial reports	Public administrative and financial reports
	M	Public administrative and financial reports	M	Public administrative and financial reports	Public administrative and financial reports
		Industry sector surveys	M	Private corporate administrative and financial reports	Industry sector surveys
		Foreign trade statistics	Every 5 years	Household surveys	Input-output tables
Trade	M	Foreign trade statistics (balance-of-payments-based)	Every 5 years	Input-output tables	Foreign trade statistics (balance-of-payments-based)
Agriculture		Agriculture sector surveys	A	Agriculture sector surveys	Agriculture sector surveys
		Census of Agriculture	A	Fisheries sector surveys	Fisheries sector surveys
		Farm forest and HH expenditure survey	A	Cost of cultivation studies	Price surveys
	M	Public administrative and financial reports	M	Public administrative and financial reports	
Industry	M	Price surveys	M	Price surveys	
	M	Foreign trade statistics			
	M	Input-output tables			
	M	Industry sector surveys	A	Industry sector surveys	Industry sector surveys
Services		Public administrative and financial reports	M	Public administrative and financial reports	Public administrative and financial reports
		Private corporate administrative and financial reports	M	Private corporate administrative and financial reports	Private corporate administrative and financial reports
	A	Price surveys	M	Price surveys	
	A	Industry sector census			
Services	A	Input-output table			
	M	Services sector surveys	M	Employee compensation surveys	Services sector surveys
		Public administrative and financial reports	M	Public administrative and financial reports	Public administrative and financial reports
		Population census		Population census	Private corporate administrative and financial reports
		Input-output table			
		Labor force surveys			

1 Nature of basic data (continued)

	Philippines			Thailand		Viet Nam	
	Frequency	Source of basic data	Frequency	Source of basic data	Frequency	Source of basic data	
Private consumption	Q, A	Industry sector surveys	Every 5 years	Input-output table	M	Retail trade turnover	
	M	Public administrative and financial reports	Every 2 years	Household socioeconomic surveys	M	Balance of agricultural production and use	
	Every 3 years	Family Income and Expenditure Survey			Every 2–4 years	Household living standards survey	
Government consumption	M	Public administrative and financial reports	M	Public administrative and financial reports	M	Public administrative and financial reports	
	Q, A	Industry sector surveys	A	Public administrative and financial reports	M	Public administrative and financial reports	
		Public administrative and financial reports		Private corporate administrative and financial reports		Survey of enterprises with foreign direct investment	
			M	Foreign trade statistics		Survey of private construction companies	
Trade			Q	Socio-economic survey		Balance of agricultural production and use	
	M	Foreign trade statistics (balance-of-payments-based)	M	Foreign trade statistics (balance-of-payments-based)	M	Foreign trade statistics (balance of payments-based)	
Agriculture	M	Agriculture sector surveys	Every 10 years	Agriculture sector surveys	2–3 times a year	Agriculture sector surveys	
	M	Fisheries sector surveys		Census on the agricultural sector	A	Fisheries sector surveys	
	M	Price surveys	Q, A	Industry sector surveys	Q, A	Forestry sector surveys	
	Q,A	Industry sector surveys	Every 10 years	Industry sector census	M, Q	Industry sector surveys	
Industry	M	Public administrative and financial reports			Every 5 years	Industry sector census	
		Private corporate administrative and financial reports	M	Price surveys	M	Price surveys	
		Price surveys	M	Public administrative and financial reports	M	Public administrative and financial reports	
		Industry sector census	M	Private corporate administrative and financial reports	M	Private corporate administrative and financial reports	
Services	Every 5 years	Industry sector census	Every 5 years	Input-output tables	M	Foreign trade statistics	
	M, Q, A	Services sector surveys	Every 2 years	Services sector surveys	M, Q	Services sector surveys	
	M	Public administrative and financial reports	M	Public administrative and financial reports	M	Public administrative and financial reports	
		Private corporate administrative and financial reports	M	Private corporate administrative and financial reports	M	Private corporate administrative and financial reports	
	Every 5 years	Services sector census	A	Labor force surveys			
		Population census		Services sector census			

A = annually; M = monthly; Q = quarterly.

Sources: International Monetary Fund, Dissemination Standards Bulletin Board, available: <http://dsbb.imf.org>; National Statistical Coordination Board, available: <http://www.nscb.gov.ph/technotes/sna/default.asp>; Organisation for Economic Co-operation and Development, 2001, "Quarterly National Accounts in Asia: Sources and Methods," Proceedings of Joint OECD-ADB-ESCAP Workshop on Quarterly National Accounts, Bangkok, October; Ministry of Statistics and Programme Implementation, National Accounts Statistics—Sources and Uses 1989, available: <http://mospi.nic.in>.



Statistical appendix

Statistical notes and tables

The statistical appendix presents selected economic indicators for 44 developing Asian economies of the Asian Development Bank (ADB) in a total of 23 tables. The economies are grouped into five subregions: Central Asia, East Asia, South Asia, Southeast Asia, and the Pacific. Most of the tables contain historical data for 2003 to 2007; some have forecasts for 2008 and 2009.

The data were standardized to the degree possible in order to allow comparability over time and across economies, but differences in statistical methodology, definitions, coverage, and practices make full comparability impossible. The national income accounts section is based on the United Nations System of National Accounts, while the balance-of-payments data are based on International Monetary Fund (IMF) accounting standards. Historical data were obtained from official sources, statistical publications and databases, and documents of ADB, IMF, and World Bank. Projections for 2008 and 2009 are generally staff estimates made on the basis of available quarterly or monthly data, although some projections are from governments.

Most countries report on a calendar-year basis. Some economies record their government finance data on a fiscal year basis, such as: 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 (hereafter Timor-Leste); and Uzbekistan. Republic of Palau (hereafter Palau) reports government finance and balance-of-payments data on a fiscal year basis. South Asian countries (except for Maldives and Sri Lanka) report all variables on a fiscal year basis.

Regional and subregional averages/totals are provided for nine tables (A1, A2, A8, A10, A11, A12, A13, A14, and A15). For tables A1, A2, A8, and A15, the averages are computed using weights derived from levels of gross national income (GNI) in current United States dollars (US\$) following the World Bank Atlas method. The GNI data for 2003–2006 were obtained from the World Bank's *World Development Indicators* online. Weights for 2006 were carried over through 2009. The GNI data for Cook Islands and Tuvalu were estimated using the Atlas conversion factor. Myanmar and Nauru have no GNI data. For tables A10 and A12, the regional and subregional averages were 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. Data for Myanmar and Nauru are excluded from the computation of all subregional averages/totals.

Tables A1, A2, A3, A4, A5, and A7. These tables show related data on output growth, production, and demand. Changes to the national income accounts series for some countries have been made owing to a change in source or methodology. The series for Bhutan, for example, now reflects fiscal rather than calendar year data. The series for Timor-Leste, previously reflecting non-oil GDP, is now based on non-oil, non-United Nations GDP. The series for Kiribati, Micronesia, Palau, Papua New Guinea, and Tonga have been revised due to a change in data sources.

Table A1: Growth rate of GDP (% per year). The table 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. Constant 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 countries use constant market price valuation. Fiji Islands, India, Pakistan, and Sri Lanka use constant factor costs, while Maldives and Nepal use basic prices.

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. The series for most of the Pacific countries were revised due to a change in source of population data. Data on per capita gross national product in US\$ terms for 2006, sourced from the World Bank, *World Development Indicators* online, are also shown. Per capita GNP for Cook Islands and Tuvalu 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 2006. The agriculture sector comprises 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 2006. This sector comprises manufacturing, mining and quarrying, construction, and utilities. However, construction in Uzbekistan is included in the services sector.

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 2006. Subsectors generally include trade, banking, finance, real estate, public administration, and other 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 covers those aged 10 and above. The unemployment rates of the People's Republic of China (PRC) and Viet Nam refer to unemployment in urban areas only.

Table A7: Gross domestic investment (% of GDP). This table provides the ratio of gross domestic investment (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: Afghanistan is for Kabul, Cambodia is for Phnom Penh, Marshall Islands is for Majuro, Solomon Islands is for Honiara, 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 countries). 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.

Tables A10, A12, A13, A14, A15, and A16: Balance of payments. This set of tables shows selected international economic transactions of countries as recorded in the balance of payments (BOP). These items cover annual flows, except for some countries which show data as of a specified period only. The series for Cook Islands, Fiji Islands, Kiribati, Micronesia, Papua New Guinea, and Solomon Islands have been revised due to a change in data sources.

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 country. Exports are reported on a free-on-board (f.o.b.) basis. Import data are generally reported on an f.o.b. basis, except for Afghanistan, Bhutan, Cambodia, India, Lao PDR, Myanmar, Philippines, Samoa, Singapore, Solomon Islands, and Thailand, which value them on a cost, insurance, freight (c.i.f.) basis.

Table A11: Direction of exports (% of total). This table shows the exports of developing Asian economies. Data are sourced from IMF, *Direction of Trade and Statistics*, CD-ROM (January 2008), except for Taipei, China, which were sourced from CEIC Data Company, Ltd. This table shows the percentage share of exports of each economy to other economies in developing Asia excluding the PRC; PRC only; US; Japan; European Union (EU); and others (or rest of the world). Exports to the rest of the world are derived as total exports to the world minus 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 in 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 Cambodia, Lao PDR, and Viet Nam, official transfers are excluded from the current account balance.

Table A15: Current account balance (% of GDP). The values reported in Table 14 are divided by GDP at current prices in US\$.

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 2007 data for Armenia, Azerbaijan, and Georgia cover only the first 3 quarters of the year, while those for Tajikistan refer to the first 2 quarters. The 2007 data for India are estimated based on growth of foreign investment inflows in April–December.

Table A17: External debt outstanding (US\$ million). For most economies, 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; India; Kyrgyz Republic; Philippines; Singapore; and Taipei,China the figures for 2007 are as of end-September.

Table A18: Debt service ratio (% of exports of goods and services). This table generally presents the total debt service payments of each economy, which comprise principal repayments (excluding on short-term debt) and interest payments on outstanding external debt, as a percentage of exports of goods and services. For Cambodia and Lao PDR, debt service refers to external public debt only. For Papua New Guinea and Viet Nam, exports of goods are used as the denominator in the calculation of the ratio; for the Philippines, exports of goods, services, and income are used as the denominator. 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; while for Azerbaijan, the ratio represents public and publicly guaranteed external debt service payments as a percentage of exports of goods and nonfactor services.

Table A19: Exchange rates to the US dollar (annual average). The annual average exchange rates of each economy are quoted in local currencies per US dollar. The rate for 2007 for India is for the period 1 April 2007–14 March 2008.

Table A20: Gross international reserves (US\$ million). Gross international reserves are defined as the US\$ value of holdings of foreign exchange, special drawing rights (SDR), reserve position in the IMF, and gold at the end of a given period. For Turkmenistan, gold is excluded in the computation. For Marshall Islands; Samoa; Solomon Islands; Taipei,China; Tonga; and Vanuatu, this heading refers to foreign exchange reserves only. In some countries, the rubric comprises foreign assets and reserves of national monetary authorities and national oil funds, i.e., foreign assets of the Maldives Monetary Authority, net foreign reserves of

the State Bank of Pakistan, assets of the National Oil Fund of Azerbaijan, and official external assets of Kiribati. The 2007 data for India are as of 14 March 2008 only, while those for Tajikistan are as of end-October.

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 expressed as a percentage of GDP in nominal terms. For Cambodia (since 2006), PRC, India, Mongolia, Kazakhstan, and Tajikistan, transactions are those reported by the general government; for Taipei, China, by the Directorate General of Budget, Accounting and Statistics. The series for Cook Islands, Kiribati, Timor-Leste, and Tuvalu reflects revised data due to a change in source. For the Republic of Korea, government revenues exclude social security contributions.

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; while that for Tajikistan includes externally financed public investment programs. One-time expenditures are excluded for Pakistan.

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 the Republic of Korea, revenues incorporate the repayment on government-guaranteed debts but exclude social security contributions. For Singapore, revenues refer to receipts credited to the three accounts listed for the previous table, including investment income, capital receipts, and investment adjustments. Grants are excluded in Cambodia, Lao PDR, Malaysia, Singapore, and Thailand; 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. The difference is also computed as a share of GDP at current prices. 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 and nonbudgetary balances. Some off-budget accounts are included in the computation of the fiscal balance for Turkmenistan.

Table A1 Growth rate of GDP (% per year)

	2003	2004	2005	2006	2007	2008	2009
Central Asia	9.2	9.3	11.6	13.2	11.6	7.5	8.4
Armenia	14.0	10.5	13.9	13.3	13.7	10.0	8.0
Azerbaijan	10.4	10.2	29.6	33.4	25.4	15.7	18.0
Georgia	11.1	5.9	9.6	9.4	12.0	6.5	7.0
Kazakhstan	9.3	9.6	9.7	10.7	8.5	5.0	6.3
Kyrgyz Republic	7.0	7.0	-0.2	3.1	8.2	7.6	7.6
Tajikistan	10.2	10.6	6.7	7.0	7.8	8.0	8.0
Turkmenistan	17.1	14.7	9.0	9.0	10.0	10.0	10.0
Uzbekistan	4.4	7.7	7.0	7.2	9.5	7.8	7.2
East Asia	7.3	8.4	8.3	9.1	9.3	8.1	8.2
China, People's Rep. of	10.0	10.1	10.4	11.1	11.4	10.0	9.8
Hong Kong, China	3.0	8.5	7.1	7.0	6.3	4.5	4.8
Korea, Rep. of	3.1	4.7	4.2	5.1	5.0	5.0	5.2
Mongolia	5.4	13.3	7.6	8.6	9.9	9.5	9.0
Taipei, China	3.5	6.2	4.2	4.9	5.7	4.2	5.6
South Asia	7.8	7.3	9.0	9.0	8.4	7.6	8.1
Afghanistan, Islamic Rep. of	15.1	9.4	16.4	6.1	13.9	9.0	9.0
Bangladesh	5.3	6.3	6.0	6.6	6.5	6.0	6.5
Bhutan	9.0	7.0	6.9	7.8	17.0	14.4	7.2
India	8.5	7.5	9.4	9.6	8.7	8.0	8.5
Maldives	8.5	9.5	-4.6	19.1	6.6	8.0	7.0
Nepal	3.8	4.4	2.9	3.1	2.3	3.8	4.3
Pakistan	4.7	7.5	9.0	6.6	7.0	6.3	6.5
Sri Lanka	5.9	5.4	6.2	7.7	6.7	6.0	6.0
Southeast Asia	5.4	6.5	5.7	6.0	6.5	5.7	6.0
Cambodia	8.5	10.0	13.5	10.8	9.6	7.5	7.0
Indonesia	4.8	5.0	5.7	5.5	6.3	6.0	6.2
Lao People's Dem. Rep.	5.8	6.9	7.3	8.3	8.0	7.7	7.8
Malaysia	5.8	6.8	5.0	5.9	6.3	5.4	5.9
Myanmar	13.8	13.6	13.6	12.7	-	-	-
Philippines	4.9	6.4	4.9	5.4	7.3	6.0	6.2
Singapore	3.5	9.0	7.3	8.2	7.7	5.2	5.8
Thailand	7.1	6.3	4.5	5.1	4.8	5.0	5.2
Viet Nam	7.3	7.8	8.4	8.2	8.5	7.0	8.1
The Pacific	2.1	3.8	2.9	2.3	3.1	4.4	3.3
Cook Islands	8.2	4.3	0.2	1.4	3.0	3.5	3.5
Fiji Islands	1.1	5.4	0.7	3.6	-3.9	1.6	1.6
Kiribati	-1.5	2.3	2.5	1.1	0.5	1.0	1.0
Marshall Islands, Rep. of	3.4	5.6	1.7	1.3	2.0	1.0	1.0
Micronesia, Fed. States of	2.9	-3.3	-0.6	-2.3	-2.5	-3.5	-3.0
Nauru	-	-	-14.5	6.3	-27.3	-2.4	-4.4
Palau, Rep. of	0.6	6.0	5.3	5.4	5.7	2.0	3.0
Papua New Guinea	2.2	2.7	3.4	2.6	6.2	6.6	4.6
Samoa	3.1	3.3	5.1	2.6	4.0	3.0	3.0
Solomon Islands	6.4	8.0	5.0	6.1	10.0	6.0	2.5
Timor-Leste, Dem. Rep. of	0.1	4.1	6.2	-5.8	7.8	6.5	4.9
Tonga	3.2	1.4	2.3	1.9	-3.5	1.0	2.0
Tuvalu	4.0	4.0	2.0	1.0	2.0	2.0	2.0
Vanuatu	3.2	5.5	6.5	7.2	6.6	5.7	4.3
Average	7.1	7.9	8.1	8.6	8.7	7.6	7.8

- = data not available.

Table A2 Growth rate of per capita GDP (% per year)

	2003	2004	2005	2006	2007	2008	2009	Per capita GNP, US\$, 2006
Central Asia	8.8	8.7	10.8	12.2	10.5	7.6	8.3	
Armenia	14.1	10.4	13.7	13.2	13.5	10.0	8.0	1,930
Azerbaijan	9.6	9.4	28.4	32.0	22.6	15.7	18.0	1,850
Georgia	11.8	6.5	9.4	7.4	12.9	7.3	7.9	1,560
Kazakhstan	9.2	9.0	8.8	9.6	7.2	5.0	6.3	3,790
Kyrgyz Republic	8.0	10.1	4.0	9.4	17.0	20.8	15.0	490
Tajikistan	8.0	8.3	4.5	5.4	6.3	6.5	6.4	390
Turkmenistan	15.3	12.9	7.3	7.3	-	-	-	-
Uzbekistan	3.2	6.5	6.5	6.0	8.1	6.3	5.7	610
East Asia	6.8	7.8	7.6	8.5	8.7	7.6	7.7	
China, People's Rep. of	9.4	9.4	9.6	10.4	10.8	9.4	9.2	2,010
Hong Kong, China	3.2	7.6	6.6	6.3	5.2	3.6	4.0	28,460
Korea, Rep. of	2.6	4.3	4.0	4.8	4.6	4.7	4.9	17,690
Mongolia	4.7	11.4	7.0	5.6	8.1	8.3	7.8	880
Taipei, China	3.1	5.8	3.8	4.4	5.2	3.7	5.0	17,230
South Asia	6.1	5.7	7.4	7.4	6.8	6.3	6.8	
Afghanistan, Islamic Rep. of	10.3	5.3	12.1	2.1	10.9	6.2	6.2	-
Bangladesh	3.8	4.9	4.6	5.2	5.1	4.3	4.7	480
Bhutan	7.6	5.6	5.6	6.4	15.4	12.8	5.7	1,410
India	6.7	5.8	7.8	8.1	7.2	6.5	6.9	820
Maldives	6.8	8.0	-6.2	16.4	5.1	6.4	-	2,680
Nepal	14.4	2.1	0.6	0.9	0.3	-	-	290
Pakistan	2.6	6.0	6.9	4.7	4.6	-	-	770
Sri Lanka	4.5	4.3	5.1	6.6	-	-	-	1,300
Southeast Asia	4.3	4.8	3.9	4.8	4.5	3.7	4.2	
Cambodia	6.7	8.2	11.2	8.2	7.2	5.8	4.2	480
Indonesia	3.5	3.7	3.4	5.1	4.7	4.4	5.0	1,420
Lao People's Dem. Rep.	2.9	4.0	-1.4	6.0	6.4	5.9	6.0	500
Malaysia	3.6	4.6	2.8	3.9	4.3	3.7	4.2	5,490
Myanmar	11.6	11.4	11.4	10.5	-	-	-	-
Philippines	2.7	4.2	2.8	3.4	5.3	3.9	4.2	1,420
Singapore	4.9	7.6	4.8	4.8	3.3	4.0	4.6	29,320
Thailand	6.2	4.6	4.5	4.8	4.0	1.6	1.8	2,990
Viet Nam	5.8	6.3	7.0	6.8	5.6	5.6	6.7	690
The Pacific	0.6	2.0	1.2	0.5	1.7	2.9	1.9	
Cook Islands	8.2	-5.4	0.7	-3.8	8.6	1.0	3.0	-
Fiji Islands	-0.1	5.6	0.8	3.8	-3.8	1.8	1.8	3,300
Kiribati	-3.2	0.6	0.0	-0.7	-1.4	-0.9	-0.9	1,230
Marshall Islands, Rep. of	2.7	4.5	0.2	0.6	1.2	0.0	0.0	3,000
Micronesia, Fed. States of	2.7	-3.4	-0.7	-2.3	-2.6	-3.5	-3.0	2,380
Nauru	-	-	-14.8	14.0	-20.7	-2.7	-4.7	-
Palau, Rep. of	-0.2	5.2	4.5	4.7	5.2	1.5	2.5	7,990
Papua New Guinea	0.3	0.1	0.6	-0.3	4.0	4.4	2.4	770
Samoa	2.8	3.0	4.8	2.3	3.7	2.7	2.7	2,270
Solomon Islands	3.7	5.2	2.5	3.5	7.3	3.5	0.3	680
Timor-Leste, Dem. Rep. of	-1.9	-1.1	2.8	-8.8	4.5	3.2	1.7	840
Tonga	2.9	1.0	2.0	1.6	-4.0	0.5	1.5	2,170
Tuvalu	3.8	3.8	1.8	0.8	1.9	1.9	1.9	-
Vanuatu	0.6	2.8	3.5	5.5	3.9	3.0	1.7	1,710
Average	6.3	7.0	7.0	7.8	7.7	6.8	7.0	

- = not available.

Table A3 Growth rate of value added in agriculture (% per year)

	2003	2004	2005	2006	2007	Sector share 2006, %
Central Asia						
Armenia	4.1	14.2	11.2	0.5	9.6	18.5
Azerbaijan	0.9	1.5	7.5	0.9	-1.7	7.2
Georgia	10.3	-7.9	12.0	-11.7	3.8	17.4
Kazakhstan	2.2	-0.1	7.1	6.0	8.4	7.9
Kyrgyz Republic	3.2	4.1	-4.2	1.7	1.5	31.5
Tajikistan	9.4	-	-	-	-	-
Turkmenistan	9.5	-	-	-	-	-
Uzbekistan	6.8	10.1	5.6	-	-	-
East Asia						
China, People's Rep. of	2.5	6.3	5.2	5.0	3.7	10.5
Hong Kong, China	-6.3	2.8	-1.1	-5.0	-8.8	0.1
Korea, Rep. of	-5.3	9.2	0.7	-1.5	1.1	3.7
Mongolia	4.6	18.6	11.1	7.5	15.8	24.8
Taipei, China	-0.1	-4.1	-8.1	6.1	-2.9	1.4
South Asia						
Afghanistan, Islamic Rep. of	19.8	-9.5	9.2	-27.0	19.8	23.1
Bangladesh	3.1	4.1	2.2	4.9	3.2	21.8
Bhutan	2.4	2.0	1.1	1.0	2.1	21.8
India	10.0	0.0	5.9	3.8	2.6	18.5
Maldives	1.8	3.0	11.7	-0.3	-16.3	8.6
Nepal	3.3	4.8	3.5	1.1	0.7	36.8
Pakistan	4.1	2.4	6.5	1.6	5.0	21.3
Sri Lanka	2.0	-0.3	1.8	6.1	2.7	12.3
Southeast Asia						
Cambodia	10.5	-0.9	15.7	5.5	4.5	29.6
Indonesia	3.8	2.8	2.7	3.4	3.5	14.2
Lao People's Dem. Rep.	2.2	3.5	2.5	2.9	2.7	42.7
Malaysia	6.0	4.7	2.6	5.2	2.2	7.7
Myanmar	11.7	11.0	12.1	9.2	3.3	48.5
Philippines	3.8	5.2	2.0	3.8	5.1	18.8
Singapore	1.9	12.7	-1.2	15.5	0.2	0.1
Thailand	12.7	-2.4	-1.9	3.8	3.9	8.9
Viet Nam	3.6	4.4	4.0	3.4	3.4	18.7
The Pacific						
Cook Islands	28.3	-2.6	-3.7	-4.5	-	13.0
Fiji Islands	-4.0	5.0	1.1	-0.6	-2.0	14.3
Kiribati	51.1	15.1	-41.7	6.0	-	4.0
Marshall Islands, Rep. of	0.6	4.5	0.2	10.2	-	10.0
Micronesia, Fed. States of	2.2	-2.3	-1.2	-2.3	-	18.9
Nauru	-	-	-	-	-	-
Palau, Rep. of	1.5	2.9	1.8	6.8	8.4	3.2
Papua New Guinea	5.0	4.6	1.8	0.7	3.7	37.8
Samoa	-3.9	-6.9	4.8	-4.1	1.9	11.5
Solomon Islands	32.8	20.3	2.9	3.2	-	31.3
Timor-Leste, Dem. Rep. of	-0.4	6.0	6.3	0.0	-	32.3
Tonga	3.8	-3.3	-3.0	-0.5	-1.2	25.2
Tuvalu	-	-	-	-	-	-
Vanuatu	6.5	7.2	-4.4	2.4	4.9	16.9

- = not available.

Table A4 Growth rate of value added in industry (% per year)

	2003	2004	2005	2006	2007	Sector share 2006, %
Central Asia						
Armenia	27.6	8.1	14.8	18.3	12.0	47.2
Azerbaijan	19.2	17.9	56.9	56.7	26.0	76.7
Georgia	16.2	12.8	12.3	13.5	12.8	27.0
Kazakhstan	9.2	11.2	10.7	13.4	7.5	36.9
Kyrgyz Republic	12.7	3.0	-9.8	-6.9	9.3	20.2
Tajikistan	4.9	-	-	-	-	-
Turkmenistan	13.5	-	-	-	-	-
Uzbekistan	3.2	5.0	8.9	-	-	-
East Asia						
China, People's Rep. of	12.7	11.1	11.7	13.0	13.4	58.1
Hong Kong, China	-4.9	-2.1	-1.2	-2.0	-0.9	8.6
Korea, Rep. of	6.1	8.8	5.7	6.6	5.5	44.2
Mongolia	4.3	21.2	5.5	6.9	7.1	34.4
Taipei, China	4.0	8.9	6.3	7.0	9.2	30.4
South Asia						
Afghanistan, Islamic Rep. of	6.1	32.1	23.9	21.3	13.3	30.5
Bangladesh	7.3	7.6	8.3	9.7	9.5	29.0
Bhutan	12.3	5.8	3.6	6.6	39.9	37.7
India	7.4	10.3	10.1	11.0	8.9	26.7
Maldives	8.3	12.9	3.0	10.8	10.2	15.5
Nepal	3.1	1.4	3.0	4.3	2.2	16.9
Pakistan	4.2	16.3	12.1	5.0	6.8	25.9
Sri Lanka	4.9	5.7	7.9	8.4	7.2	28.4
Southeast Asia						
Cambodia	12.0	16.6	12.7	18.3	7.5	30.2
Indonesia	3.8	3.9	4.7	4.5	4.7	43.7
Lao People's Dem. Rep.	11.5	12.5	15.9	17.1	14.0	32.0
Malaysia	7.5	7.3	3.4	4.9	3.3	44.9
Myanmar	20.8	21.5	19.9	21.9	9.8	16.5
Philippines	4.0	5.2	3.8	4.5	6.6	32.5
Singapore	1.2	10.6	8.1	10.5	7.3	32.1
Thailand	9.6	7.9	5.4	5.7	5.4	47.2
Viet Nam	10.5	10.2	10.6	10.4	10.6	41.0
The Pacific						
Cook Islands	16.7	10.6	-10.0	-0.1	-	8.7
Fiji Islands	1.1	10.0	-6.5	5.9	-5.8	24.7
Kiribati	-6.4	2.4	9.0	-0.2	-	8.4
Marshall Islands, Rep. of	7.8	4.5	0.2	-5.6	-	21.4
Micronesia, Fed. States of	2.2	1.0	-1.2	-2.3	-	5.7
Nauru	-	-	-	-	-	-
Palau, Rep. of	-4.1	10.2	14.0	9.9	9.9	20.0
Papua New Guinea	4.6	1.9	6.0	3.2	7.7	33.9
Samoa	3.6	5.4	3.1	-2.8	5.4	25.1
Solomon Islands	-3.4	1.3	9.2	3.4	-	26.8
Timor-Leste, Dem. Rep. of	-15.1	-0.7	10.6	-16.3	-	12.9
Tonga	2.4	-1.0	9.7	-2.2	-1.1	17.3
Tuvalu	-	-	-	-	-	-
Vanuatu	3.6	5.4	7.2	7.0	7.3	9.7

- = not available.

Table A5 Growth rate of value added in services (% per year)

	2003	2004	2005	2006	2007	Sector share 2006, %
Central Asia						
Armenia	10.4	13.1	14.7	14.6	12.5	34.3
Azerbaijan	11.5	11.2	8.3	9.3	25.1	21.5
Georgia	10.3	9.1	8.1	16.9	14.4	55.6
Kazakhstan	11.0	10.8	10.4	10.9	11.9	55.3
Kyrgyz Republic	7.3	11.9	8.4	9.0	12.4	48.3
Tajikistan	13.6	-	-	-	-	-
Turkmenistan	26.6	-	-	-	-	-
Uzbekistan	3.2	7.4	7.1	-	-	-
East Asia						
China, People's Rep. of	9.5	10.1	10.5	10.8	11.4	31.4
Hong Kong, China	4.3	9.9	7.5	7.2	7.2	91.4
Korea, Rep. of	1.6	1.9	3.4	4.2	4.8	52.1
Mongolia	7.0	3.4	9.4	6.1	8.9	40.7
Taipei, China	3.4	5.3	3.5	3.9	4.3	68.1
South Asia						
Afghanistan, Islamic Rep. of	13.7	16.2	14.6	18.5	12.4	46.4
Bangladesh	5.4	5.7	6.4	6.4	6.7	49.1
Bhutan	8.2	10.3	13.3	13.2	10.2	40.5
India	8.5	9.1	10.3	11.1	10.7	54.7
Maldives	9.5	9.7	-8.2	23.8	8.6	75.9
Nepal	3.7	6.8	2.5	4.7	4.1	46.4
Pakistan	5.2	5.8	8.5	9.6	8.0	52.8
Sri Lanka	7.3	6.7	6.4	7.8	7.2	59.4
Southeast Asia						
Cambodia	5.9	13.3	12.7	10.3	10.0	40.2
Indonesia	6.4	7.1	7.9	7.4	8.9	42.1
Lao People's Dem. Rep.	7.2	7.5	6.7	7.4	7.2	25.3
Malaysia	4.2	6.4	6.8	7.4	10.0	47.4
Myanmar	14.6	14.5	13.1	13.9	6.5	35.0
Philippines	6.1	7.7	6.8	6.7	8.7	48.7
Singapore	3.5	8.5	6.7	7.2	7.8	67.8
Thailand	3.5	6.8	5.0	4.8	4.3	43.8
Viet Nam	6.5	7.3	8.5	8.3	8.7	40.3
The Pacific						
Cook Islands	3.7	4.8	2.3	2.5	-	78.4
Fiji Islands	1.0	3.6	5.0	5.0	-4.5	61.0
Kiribati	0.9	1.4	5.8	1.2	-	87.6
Marshall Islands, Rep. of	0.6	4.5	2.5	3.0	-	68.6
Micronesia, Fed. States of	3.1	-3.9	-0.4	-2.3	-	75.5
Nauru	-	-	-	-	-	-
Palau, Rep. of	1.7	5.3	3.6	4.3	4.6	76.8
Papua New Guinea	-1.5	-0.7	2.9	4.5	8.3	28.2
Samoa	4.7	4.8	6.0	6.2	3.8	64.7
Solomon Islands	-2.5	1.5	0.3	7.5	-	41.9
Timor-Leste, Dem. Rep. of	-6.5	-2.3	-2.0	1.6	-	54.8
Tonga	3.2	4.5	2.7	2.0	-5.2	57.6
Tuvalu	-	-	-	-	-	-
Vanuatu	2.3	5.1	9.4	8.4	6.9	73.4

- = not available.

Table A6 Unemployment rate (%)

	2003	2004	2005	2006	2007
Central Asia					
Armenia	10.1	9.6	8.1	7.4	7.1
Azerbaijan	1.4	1.4	1.4	1.3	1.3
Georgia	11.5	12.6	13.8	13.6	-
Kazakhstan	9.6	9.2	8.7	7.2	6.6
Kyrgyz Republic	9.0	8.5	8.1	8.3	-
Tajikistan	2.4	2.0	2.0	2.3	2.6
Turkmenistan	2.5	4.2	-	-	-
Uzbekistan	0.2	0.2	0.3	-	-
East Asia					
China, People's Rep. of	4.3	4.2	4.2	4.1	4.0
Hong Kong, China	7.9	6.8	5.6	4.8	4.0
Korea, Rep. of	3.6	3.7	3.7	3.5	3.2
Mongolia	3.5	3.6	3.3	3.2	3.0
Taipei, China	5.0	4.4	4.1	3.9	3.9
South Asia					
Afghanistan, Islamic Rep. of	3.4	3.4	-	-	-
Bangladesh	4.3	-	-	-	-
Bhutan	-	-	-	-	-
India	-	-	-	-	-
Maldives	-	-	-	-	-
Nepal	-	-	-	-	-
Pakistan	8.3	7.7	7.7	6.2	-
Sri Lanka	8.4	8.3	7.7	6.7	-
Southeast Asia					
Cambodia	-	-	-	-	-
Indonesia	9.5	9.9	11.2	10.3	9.1
Lao People's Dem. Rep.	-	-	-	-	-
Malaysia	3.6	3.5	3.5	3.4	3.1
Myanmar	-	-	-	-	-
Philippines	11.3	11.8	11.5	8.0	7.3
Singapore	4.0	3.4	3.1	2.7	2.1
Thailand	2.2	2.1	1.8	1.5	1.4
Viet Nam	2.2	2.1	2.5	-	-
The Pacific					
Cook Islands	-	-	-	-	-
Fiji Islands	8.1	5.8	5.9	6.4	-
Kiribati	-	-	6.1	-	-
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)

	2003	2004	2005	2006	2007
Central Asia					
Armenia	24.3	24.9	30.5	33.6	-
Azerbaijan	53.0	58.4	40.1	29.0	22.4
Georgia	27.7	28.3	28.6	26.7	-
Kazakhstan	25.7	26.3	31.0	33.0	30.4
Kyrgyz Republic	11.8	14.5	16.4	24.2	18.8
Tajikistan	11.0	19.7	13.1	-	-
Turkmenistan	25.4	23.4	23.0	23.9	-
Uzbekistan	20.8	23.9	23.0	-	-
East Asia					
China, People's Rep. of	41.2	43.3	43.9	44.6	44.5
Hong Kong, China	21.9	21.8	20.6	21.7	21.4
Korea, Rep. of	30.0	30.4	30.1	29.9	29.4
Mongolia	35.5	34.5	37.0	35.1	-
Taipei, China	18.4	22.7	21.4	21.3	21.2
South Asia					
Afghanistan, Islamic Rep. of	33.0	46.1	44.6	46.0	40.3
Bangladesh	23.4	24.0	24.5	24.7	24.3
Bhutan	59.8	63.9	-	-	-
India	28.2	32.2	35.5	35.9	-
Maldives	26.9	36.0	-	-	-
Nepal	21.4	24.5	26.5	26.0	25.3
Pakistan	16.8	16.6	19.1	21.8	23.0
Sri Lanka	21.6	24.7	26.1	27.4	-
Southeast Asia					
Cambodia	21.2	17.4	20.1	21.5	-
Indonesia	25.6	24.1	24.7	24.5	23.2
Lao People's Dem. Rep.	-	-	-	-	-
Malaysia	22.8	23.0	20.3	20.7	21.5
Myanmar	11.0	12.0	-	-	-
Philippines	16.8	16.7	14.6	14.3	14.7
Singapore	16.0	21.7	19.9	20.0	22.6
Thailand	25.0	26.8	31.4	28.5	26.8
Viet Nam	35.4	35.5	35.6	35.7	40.4
The Pacific					
Cook Islands	-	-	-	-	-
Fiji Islands	22.1	19.1	19.0	-	-
Kiribati	-	-	-	-	-
Marshall Islands, Rep. of	56.9	56.5	56.9	57.0	-
Micronesia, Fed. States of	38.2	37.9	38.3	39.3	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	-	-	-	-	-
Samoa	-	-	-	-	-
Solomon Islands	-	-	-	-	-
Timor-Leste, Dem. Rep. of	29.8	20.9	20.2	20.7	-
Tonga	18.9	18.0	18.5	17.6	-
Tuvalu	-	-	-	-	-
Vanuatu	19.4	21.2	21.6	-	-

- = not available.

Table A8 Inflation (% per year)

	2003	2004	2005	2006	2007	2008	2009
Central Asia	5.3	6.1	7.6	8.0	11.6	14.4	10.2
Armenia	4.7	7.0	0.6	2.9	4.4	5.5	5.0
Azerbaijan	2.2	6.7	9.6	8.3	16.7	13.0	12.0
Georgia	4.8	5.7	8.3	9.0	9.2	9.5	7.0
Kazakhstan	6.4	6.9	7.6	8.6	11.4	17.4	10.7
Kyrgyz Republic	3.0	4.0	4.4	5.6	10.2	12.0	10.0
Tajikistan	16.4	7.2	7.3	10.1	13.1	17.0	10.0
Turkmenistan	5.6	5.9	10.7	8.2	6.5	9.0	9.0
Uzbekistan	3.8	3.7	7.8	6.8	12.0	10.9	10.5
East Asia	1.3	3.3	2.0	1.6	3.9	4.7	4.2
China, People's Rep. of	1.2	3.9	1.8	1.5	4.8	5.5	5.0
Hong Kong, China	-2.6	-0.4	1.0	2.0	2.0	3.4	2.8
Korea, Rep. of	3.5	3.6	2.8	2.2	2.5	3.4	3.0
Mongolia	5.0	8.2	12.7	5.1	9.0	10.5	9.5
Taipei, China	-0.3	1.6	2.3	0.6	1.8	2.3	1.6
South Asia	5.0	6.3	5.3	5.9	5.3	5.5	5.6
Afghanistan, Islamic Rep. of	24.1	13.2	12.3	5.1	9.8	10.2	7.2
Bangladesh	4.4	5.8	6.5	7.2	7.2	9.0	8.0
Bhutan	2.1	3.6	4.8	4.9	5.2	4.5	4.5
India	5.4	6.4	4.4	5.4	4.4	4.5	5.0
Maldives	-2.9	6.4	3.3	3.5	7.4	6.0	6.0
Nepal	4.8	4.0	4.5	8.0	6.4	7.0	6.5
Pakistan	3.1	4.6	9.3	7.9	7.8	8.0	6.5
Sri Lanka	2.6	7.9	10.6	9.6	20.2	16.2	14.0
Southeast Asia	3.4	4.2	6.3	7.1	4.0	5.7	4.7
Cambodia	1.2	3.8	5.9	4.7	5.9	5.5	5.0
Indonesia	6.8	6.1	10.5	13.1	6.4	6.8	6.5
Lao People's Dem. Rep.	15.5	10.5	7.2	6.9	4.5	5.0	6.0
Malaysia	1.1	1.4	3.1	3.6	2.0	2.7	2.5
Myanmar	24.9	3.8	10.7	25.7	36.9	-	-
Philippines	3.5	6.0	7.6	6.2	2.8	4.0	3.6
Singapore	0.5	1.7	0.5	1.0	2.1	5.0	3.3
Thailand	1.8	2.8	4.5	4.6	2.3	4.0	3.5
Viet Nam	3.1	7.8	8.3	7.5	8.3	18.3	10.2
The Pacific	8.2	3.1	2.4	3.0	4.0	5.0	4.0
Cook Islands	2.0	0.9	2.5	3.4	2.4	3.0	2.8
Fiji Islands	4.2	2.8	2.4	2.5	4.8	4.6	3.7
Kiribati	1.9	-1.0	-0.3	-1.5	3.5	3.5	3.1
Marshall Islands, Rep. of	-2.8	2.2	4.4	4.3	3.4	3.4	2.8
Micronesia, Fed. States of	0.1	2.3	4.2	4.8	2.8	3.5	2.8
Nauru	3.1	2.4	2.4	3.2	2.9	3.0	2.9
Palau, Rep. of	0.9	5.0	3.9	4.5	3.8	3.5	2.8
Papua New Guinea	14.7	2.2	1.8	2.4	2.5	5.2	4.0
Samoa	0.1	16.3	1.9	3.8	6.1	5.1	4.1
Solomon Islands	10.0	6.9	7.3	8.4	7.0	7.0	4.9
Timor-Leste, Dem. Rep. of	0.1	0.8	1.8	4.1	8.9	7.0	6.6
Tonga	10.7	11.8	10.0	7.2	5.1	5.3	4.2
Tuvalu	3.3	2.8	3.2	3.8	3.0	3.5	3.1
Vanuatu	3.0	1.4	1.2	2.0	2.5	3.0	2.9
Average	2.3	4.0	3.4	3.3	4.3	5.1	4.6

- = not available.

Table A9 Change in money supply (% per year)

	2003	2004	2005	2006	2007
Central Asia					
Armenia	10.4	22.3	27.8	32.9	30.0
Azerbaijan	29.6	47.5	22.5	86.8	71.6
Georgia	22.8	42.4	26.5	39.7	49.7
Kazakhstan	34.2	68.2	26.3	78.1	25.5
Kyrgyz Republic	33.5	32.0	9.9	51.6	33.3
Tajikistan	40.9	9.8	25.9	59.7	82.7
Turkmenistan	40.9	12.7	27.9	55.9	40.4
Uzbekistan	27.1	47.8	54.3	36.8	46.0
East Asia					
China, People's Rep. of	19.6	14.9	16.3	16.9	16.7
Hong Kong, China	8.4	9.3	5.1	15.4	20.8
Korea, Rep. of	3.0	6.3	7.0	12.5	10.8
Mongolia	49.6	20.4	34.6	34.8	56.3
Taipei, China	5.8	7.4	6.6	5.3	0.9
South Asia					
Afghanistan, Islamic Rep. of	50.6	31.9	12.3	22.0	14.2
Bangladesh	15.6	13.8	16.8	19.5	17.0
Bhutan	28.7	4.0	10.7	41.4	8.6
India	16.7	12.3	21.2	21.3	21.2
Maldives	14.5	32.7	11.7	20.6	23.7
Nepal	9.8	12.8	8.3	15.4	14.0
Pakistan	18.0	19.6	19.1	15.1	19.3
Sri Lanka	15.3	19.6	19.1	17.8	10.0
Southeast Asia					
Cambodia	15.3	30.0	16.1	38.2	62.9
Indonesia	8.1	8.1	16.4	14.9	18.9
Lao People's Dem. Rep.	19.2	22.3	8.2	30.1	22.1
Malaysia	11.1	25.1	15.6	17.1	9.5
Myanmar	11.0	33.3	25.1	26.8	31.2
Philippines	4.2	10.3	10.3	22.7	9.0
Singapore	8.1	6.2	6.2	19.4	13.4
Thailand	4.9	5.4	8.2	6.0	-
Viet Nam	24.9	29.5	29.7	33.6	46.0
The Pacific					
Cook Islands	9.9	9.6	-5.2	22.4	-5.8
Fiji Islands	25.2	10.4	15.0	19.8	10.4
Kiribati	-	-	-	-	-
Marshall Islands, Rep. of	-3.3	15.4	14.9	-	-
Micronesia, Fed. States of	-3.7	-0.1	1.6	-8.5	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	-4.4	14.8	29.5	38.9	27.3
Samoa	14.0	8.3	15.6	13.7	5.9
Solomon Islands	25.8	13.3	39.8	28.2	28.6
Timor-Leste, Dem. Rep. of	40.5	5.5	21.4	28.0	44.0
Tonga	13.4	18.6	12.1	14.4	14.1
Tuvalu	-	-	-	-	-
Vanuatu	-0.8	9.8	11.6	7.0	16.1

- = not available.

Table A10 Growth rate of merchandise exports (% per year)

	2003	2004	2005	2006	2007	2008	2009
Central Asia	27.8	41.2	36.1	39.6	27.5	29.1	16.6
Armenia	35.5	6.1	36.1	2.0	12.8	15.0	15.0
Azerbaijan	13.9	42.6	104.4	70.1	46.6	61.3	3.5
Georgia	38.0	31.5	34.7	13.2	23.2	9.0	15.0
Kazakhstan	32.0	55.7	37.4	37.0	24.7	20.2	23.2
Kyrgyz Republic	18.5	24.2	-6.3	18.0	40.7	56.0	31.8
Tajikistan	29.6	21.0	-68.5	1.2	9.4	8.6	11.1
Turkmenistan	21.1	11.2	28.3	44.7	-	-	-
Uzbekistan	29.1	31.6	11.6	22.8	7.0	5.6	-
East Asia	22.6	28.0	19.0	19.7	18.9	14.4	14.4
China, People's Rep. of	34.6	35.4	28.5	27.2	25.7	19.0	18.0
Hong Kong, China	12.1	15.9	11.2	9.7	8.9	7.8	8.8
Korea, Rep. of	20.7	30.6	12.1	14.8	14.1	11.0	11.0
Mongolia	16.2	39.0	22.5	44.6	22.5	15.9	11.4
Taipei, China	11.3	21.1	8.8	12.9	10.1	6.0	8.0
South Asia	20.8	24.0	21.0	20.1	16.2	14.5	16.6
Afghanistan, Islamic Rep. of	46.7	-13.2	9.2	0.4	3.3	8.0	8.7
Bangladesh	9.5	15.9	14.0	21.5	15.8	12.0	15.0
Bhutan	8.9	39.7	34.5	47.2	64.5	33.9	9.0
India	23.3	28.5	23.4	21.8	18.1	16.0	18.0
Maldives	14.9	19.1	-10.7	39.4	2.8	-	-
Nepal	-13.8	14.8	11.4	2.6	4.3	6.1	4.3
Pakistan	19.1	13.8	16.2	14.9	4.4	8.0	10.0
Sri Lanka	9.2	12.2	10.2	8.5	12.5	8.0	9.0
Southeast Asia	12.8	20.1	16.2	17.3	12.3	8.0	9.3
Cambodia	17.9	24.1	12.4	26.9	9.5	5.0	7.0
Indonesia	8.4	10.4	22.9	19.0	14.0	10.7	11.3
Lao People's Dem. Rep.	11.6	8.3	52.2	20.3	50.6	6.6	4.8
Malaysia	11.0	21.1	11.8	13.4	9.6	7.9	7.8
Myanmar	1.9	4.4	21.7	46.2	13.0	-	-
Philippines	2.7	9.8	3.8	15.6	6.0	7.5	10.4
Singapore	15.0	23.3	16.8	18.2	10.1	4.0	6.2
Thailand	18.2	21.6	15.2	17.0	18.1	11.0	10.0
Viet Nam	20.6	31.4	22.5	22.7	21.5	18.7	23.5
The Pacific	31.6	12.3	22.1	20.6	15.3	-	-
Cook Islands	34.9	7.8	18.9	1.7	-	-	-
Fiji Islands	30.1	3.5	3.6	0.7	-0.8	8.9	-
Kiribati	-29.3	-24.3	37.5	-57.3	-	-	-
Marshall Islands, Rep. of	26.5	28.7	28.6	-10.1	-	-	-
Micronesia, Fed. States of	1.1	-37.7	8.8	-8.1	30.6	-	-
Nauru	-	-	-81.6	86.7	616.3	-	-
Palau, Rep. of	-58.7	-30.1	128.1	1.3	-	-	-
Papua New Guinea	34.4	15.6	28.4	27.3	18.1	-9.2	-6.9
Samoa	8.6	-20.0	0.6	-13.7	33.4	-	-
Solomon Islands	28.9	31.2	6.3	16.9	20.9	-	-
Timor-Leste, Dem. Rep. of	33.3	0.0	12.5	-11.1	25.0	-	-
Tonga	-1.1	-21.2	15.9	-4.1	-14.2	20.0	-
Tuvalu	31.5	-	-	-	-	-	-
Vanuatu	32.4	43.3	0.3	-0.9	1.6	-	-
Average	19.6	25.6	18.6	19.5	17.1	13.1	13.3

- = not available.

Table A11 Direction of exports (% of total)

From \ To	Developing Asia		China, People's Rep. of		Japan		United States		European Union		Others	
	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006
Central Asia	9.2	9.2	4.1	7.5	0.5	0.9	1.7	2.6	28.1	42.7	56.4	37.1
Armenia	7.8	6.8	0.2	1.1	0.1	0.0	12.6	6.1	36.9	54.0	42.5	32.0
Azerbaijan	7.1	12.0	0.3	0.1	0.0	0.0	0.5	1.5	63.6	57.2	28.6	29.1
Georgia	16.2	32.6	0.3	1.0	0.1	0.0	2.2	5.6	24.0	24.3	57.2	36.4
Kazakhstan	5.4	4.4	6.8	10.9	0.1	1.0	2.1	3.0	23.0	50.6	62.6	30.1
Kyrgyz Republic	29.0	37.9	8.8	4.8	0.1	0.1	0.6	1.2	37.6	4.3	23.9	51.7
Tajikistan	16.5	9.6	0.4	0.7	-	0.0	0.1	0.0	30.1	45.4	52.9	44.3
Turkmenistan	6.4	14.3	0.3	0.2	-	0.0	0.5	1.2	21.5	10.1	71.3	74.2
Uzbekistan	23.6	18.9	0.5	10.4	3.2	3.3	1.5	2.8	26.8	25.6	44.3	39.0
East Asia	25.9	27.4	11.7	14.3	11.4	8.0	21.8	17.5	15.2	16.5	13.9	16.3
China, People's Rep. of	32.9	33.0	-	-	16.3	9.2	20.4	20.5	16.1	19.1	14.3	18.1
Hong Kong, China	10.2	9.8	34.1	46.7	5.5	4.9	23.0	15.0	15.5	13.9	11.8	9.7
Korea, Rep. of	23.8	22.2	10.2	20.3	11.3	7.7	20.9	12.7	13.7	14.6	20.2	22.5
Mongolia	4.0	1.0	49.8	71.7	1.5	0.5	24.3	7.3	7.7	3.8	12.6	15.7
Taipei, China	38.2	35.0	2.9	23.1	11.2	7.3	23.6	14.4	15.2	11.1	8.8	9.1
South Asia	17.3	19.5	1.6	6.5	3.6	2.6	24.2	18.3	26.3	23.7	26.9	29.4
Afghanistan, Islamic Rep. of	46.0	49.8	3.4	0.1	0.3	0.2	1.9	15.2	35.3	17.5	13.1	17.3
Bangladesh	5.4	5.1	0.2	0.7	1.2	1.1	31.7	24.9	40.1	46.8	21.5	21.4
Bhutan	-	-	-	-	-	-	-	-	-	-	-	-
India	19.2	20.6	1.8	7.7	4.1	3.0	21.1	16.8	24.1	21.0	29.8	30.8
Maldives	32.0	48.8	-	0.3	4.1	10.3	44.0	1.3	18.5	30.2	1.4	9.1
Nepal	44.5	69.5	-	0.2	1.4	1.0	27.4	11.6	23.0	12.1	3.7	5.6
Pakistan	18.5	20.6	2.6	5.3	2.6	1.1	24.9	20.8	27.7	22.1	23.6	30.1
Sri Lanka	8.6	14.3	0.1	0.4	4.2	2.5	40.1	27.5	28.2	33.8	18.9	21.5
Southeast Asia	37.4	40.2	3.7	8.3	12.6	10.1	18.2	13.7	14.4	12.7	13.7	15.1
Cambodia	8.2	22.3	2.1	0.4	0.9	1.0	65.4	53.2	20.5	18.2	2.9	5.0
Indonesia	33.1	36.0	4.2	7.4	22.1	18.5	13.0	11.0	13.7	11.7	13.7	15.5
Lao People's Dem. Rep.	43.4	58.3	1.5	3.9	2.8	1.0	2.2	0.7	26.0	10.1	24.1	26.0
Malaysia	40.3	41.1	2.9	7.0	12.3	8.5	19.5	18.1	13.3	12.3	11.7	12.9
Myanmar	35.2	72.3	5.6	5.2	5.4	5.1	22.0	-	16.4	7.4	15.5	10.0
Philippines	30.5	32.5	1.6	9.3	13.4	15.6	27.3	17.3	16.5	17.5	10.7	7.8
Singapore	44.1	49.1	3.8	9.6	7.3	5.4	16.7	10.0	13.5	11.1	14.7	14.9
Thailand	30.8	32.8	3.9	8.8	14.2	12.3	20.5	14.7	15.7	13.5	15.0	17.9
Viet Nam	25.8	18.4	10.3	5.6	17.2	12.0	4.9	20.8	20.0	19.4	21.9	23.8
The Pacific	11.2	11.4	5.2	6.0	10.3	7.8	5.3	3.2	11.1	7.8	56.9	63.7
Cook Islands	-	-	-	-	-	-	-	-	-	-	-	-
Fiji Islands	14.3	15.4	0.0	0.1	4.1	5.3	21.1	16.8	16.5	14.2	44.0	48.2
Kiribati	-	-	-	-	-	-	-	-	-	-	-	-
Marshall Islands, Rep of	-	-	-	-	-	-	-	-	-	-	-	-
Micronesia, Fed. States of	-	-	-	-	-	-	-	-	-	-	-	-
Nauru	-	-	-	-	-	-	-	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	7.6	7.6	6.5	5.7	11.2	8.1	1.3	1.3	10.2	7.3	63.2	70.0
Samoa	18.1	13.7	0.1	0.0	0.3	0.6	10.6	3.0	3.0	0.6	67.9	82.0
Solomon Islands	42.3	24.8	12.0	47.9	20.7	8.9	0.7	1.1	10.6	5.6	13.6	11.6
Timor-Leste, Dem. Rep. of	-	-	-	-	-	-	-	-	-	-	-	-
Tonga	6.3	17.7	-	0.1	48.5	27.7	30.0	39.6	6.5	1.3	8.7	13.7
Tuvalu	-	-	-	-	-	-	-	-	-	-	-	-
Vanuatu	60.7	79.4	0.4	0.4	18.7	11.4	9.7	0.9	5.7	3.4	4.8	4.5
Developing Asia	29.1	30.1	8.4	12.1	11.3	8.1	20.4	16.2	15.6	16.3	15.2	17.2

- = not available.

Table A12 Growth rate of merchandise imports (% per year)

	2003	2004	2005	2006	2007	2008	2009
Central Asia	25.3	34.0	20.7	27.3	33.5	14.8	21.0
Armenia	28.1	5.8	33.1	20.6	70.8	20.0	15.0
Azerbaijan	49.3	31.5	21.4	21.1	5.2	14.7	11.4
Georgia	35.2	36.9	33.7	37.2	28.3	12.4	10.4
Kazakhstan	18.8	44.6	30.1	34.2	37.5	15.5	25.1
Kyrgyz Republic	26.6	25.0	22.3	62.1	52.0	16.7	25.8
Tajikistan	24.6	20.2	-21.5	38.0	39.2	8.2	3.3
Turkmenistan	40.8	22.1	-6.4	-13.2	-	-	-
Uzbekistan	10.0	27.3	8.1	14.4	22.5	9.9	-
East Asia	23.9	28.7	14.4	16.6	15.6	14.8	15.3
China, People's Rep. of	39.8	35.8	17.6	19.7	20.0	20.0	20.0
Hong Kong, China	12.2	17.0	10.2	11.6	10.3	9.0	9.3
Korea, Rep. of	18.0	25.6	16.4	18.6	15.3	12.5	12.0
Mongolia	9.8	8.9	21.8	23.6	41.3	20.9	12.9
Taipei, China	13.2	32.2	8.6	11.0	8.2	6.5	9.2
South Asia	22.8	39.5	30.2	21.6	24.5	20.4	21.3
Afghanistan, Islamic Rep. of	74.6	16.1	20.5	10.0	15.0	13.2	-1.4
Bangladesh	13.1	13.0	20.6	12.1	16.6	20.0	16.0
Bhutan	1.6	27.3	75.5	-5.6	15.1	19.5	23.4
India	24.1	48.6	32.1	21.8	28.5	22.0	24.0
Maldives	20.2	36.3	16.1	24.4	14.8	-	-
Nepal	7.1	15.9	12.5	17.8	11.3	14.0	14.5
Pakistan	20.1	20.0	37.8	33.3	8.0	13.0	10.0
Sri Lanka	9.3	19.9	10.8	15.7	10.2	9.5	9.0
Southeast Asia	10.0	24.7	18.5	13.8	12.3	11.0	11.6
Cambodia	13.0	22.5	20.2	20.9	14.1	12.0	11.0
Indonesia	10.9	28.0	37.2	6.3	15.0	17.5	19.0
Lao People's Dem. Rep.	3.4	54.2	23.8	13.4	-1.7	62.7	12.5
Malaysia	4.8	25.6	9.5	14.2	11.9	10.5	8.8
Myanmar	-2.6	-11.9	0.6	48.0	18.4	-	-
Philippines	3.1	8.0	8.0	10.9	8.1	9.0	9.5
Singapore	8.5	27.3	16.3	18.5	9.5	4.8	5.8
Thailand	17.4	25.7	25.8	7.9	9.6	14.0	15.0
Viet Nam	27.9	26.6	15.0	22.1	35.5	23.5	23.0
The Pacific	15.2	15.7	9.6	18.3	17.6	-	-
Cook Islands	40.3	12.1	9.2	1.0	-	-	-
Fiji Islands	33.9	18.3	13.1	12.8	1.8	5.4	-
Kiribati	-6.8	1.6	24.0	5.1	-	-	-
Marshall Islands, Rep. of	17.3	-4.1	12.0	-3.0	-	-	-
Micronesia, Fed. States of	7.8	14.2	2.5	3.7	-8.4	-	-
Nauru	-	-	-8.2	17.8	10.8	-	-
Palau, Rep. of	-8.8	21.6	-2.0	9.6	-	-	-
Papua New Guinea	10.3	22.4	4.6	30.5	30.9	-8.2	0.2
Samoa	5.6	6.6	17.9	14.5	8.1	-	-
Solomon Islands	47.2	3.2	67.4	27.8	42.2	-	-
Timor-Leste, Dem. Rep. of	-11.0	-16.0	-16.0	2.9	62.4	-	-
Tonga	21.1	11.5	27.5	15.6	-11.7	22.8	-
Tuvalu	30.4	-	-	-	-	-	-
Vanuatu	16.7	22.2	17.9	12.6	10.3	-	-
Average	19.7	28.5	16.9	16.5	15.9	14.4	15.2

- = not available.

Table A13 Trade balance (US\$ million)

	2003	2004	2005	2006	2007	2008	2009
Central Asia	3,978	7,174	14,222	23,523	19,068	37,026	38,842
Armenia	-434	-458	-588	-896	-2,124	-2,607	-2,998
Azerbaijan	-98	161	3,299	7,745	10,155	24,425	24,780
Georgia	-636	-916	-1,214	-2,019	-2,676	-3,078	-3,295
Kazakhstan	3,679	6,785	10,322	14,642	15,163	19,781	23,627
Kyrgyz Republic	-133	-171	-419	-982	-1,584	-1,399	-1,654
Tajikistan	-120	-135	-622	-986	-1,477	-1,597	-1,618
Turkmenistan	885	705	1,997	4,598	-	-	-
Uzbekistan	835	1,202	1,447	1,420	1,610	1,500	-
East Asia	85,496	103,324	177,109	255,214	355,690	399,452	438,397
China, People's Rep. of	44,652	58,982	134,189	217,746	316,567	367,692	412,220
Hong Kong, China	-5,775	-9,311	-7,631	-14,029	-19,699	-25,623	-29,871
Korea, Rep. of	21,952	37,569	32,683	27,905	29,409	27,390	26,470
Mongolia	-200	-29	-29	189	-25	-125	-175
Taipei, China	24,867	16,113	17,897	23,404	29,437	30,117	29,752
South Asia	-21,660	-44,456	-68,340	-85,056	-119,585	-154,098	-197,147
Afghanistan, Islamic Rep. of	-2,486	-3,443	-4,335	-4,942	-5,893	-6,765	-6,465
Bangladesh	-2,215	-2,319	-3,297	-2,889	-3,458	-5,114	-6,067
Bhutan	-93	-105	-249	-123	13	88	11
India	-13,718	-33,702	-51,904	-63,171	-94,510	-124,377	-164,753
Maldives	-262	-384	-494	-590	-704	-	-
Nepal	-902	-1,052	-1,193	-1,531	-1,765	-2,083	-2,482
Pakistan	-444	-1,208	-4,352	-8,441	-9,711	-11,837	-13,021
Sri Lanka	-1,539	-2,243	-2,517	-3,370	-3,555	-4,009	-4,370
Southeast Asia	72,351	68,956	67,631	99,772	111,826	95,857	85,273
Cambodia	-581	-680	-1,018	-1,056	-1,377	-1,825	-2,196
Indonesia	24,562	20,152	17,533	29,660	33,084	30,849	26,651
Lao People's Dem. Rep.	-127	-349	-329	-335	19	-532	-680
Malaysia	25,727	27,572	33,155	36,682	37,287	36,555	37,828
Myanmar	541	929	1,547	2,226	2,355	-	-
Philippines	-5,851	-5,684	-7,773	-6,732	-8,236	-9,717	-10,163
Singapore	29,427	31,040	37,084	43,397	49,165	49,102	53,210
Thailand	3,759	1,460	-8,254	994	11,973	9,115	2,093
Viet Nam	-5,107	-5,484	-4,314	-5,065	-12,443	-17,690	-21,471
The Pacific	-121	-229	201	342	545	-	-
Cook Islands	15	12	24	26	-14	-15	-14
Fiji Islands	-389	-564	-707	-888	-923	-946	-
Kiribati	-75	-77	-95	-103	-	-	-
Marshall Islands, Rep. of	-60	-53	-56	-56	-	-	-
Micronesia, Fed. States of	-93	-120	-122	-129	-111	-	-
Nauru	-	-19	-20	-23	-19	-	-
Palau, Rep. of	-80	-101	-92	-102	-	-	-
Papua New Guinea	1,017	1,095	1,753	2,182	2,323	2,081	1,769
Samoa	-134	-147	-175	-204	-218	-	-
Solomon Islands	4	25	-17	-34	-74	-	-
Timor-Leste, Dem. Rep. of	-186	-155	-128	-133	-219	-	-
Tonga	-57	-69	-90	-107	-95	-117	-
Tuvalu	-19	-	-	-	-	-	-
Vanuatu	-65	-74	-93	-110	-125	-	-
Total	140,044	134,769	190,824	293,795	367,544	379,241	367,118

- = not available.

Table A14 Current account balance (US\$ million)

	2003	2004	2005	2006	2007	2008	2009
Central Asia	-1,715	-1,353	1,169	6,758	5,754	8,518	9,525
Armenia	-189	-20	-52	-117	-436	-428	-462
Azerbaijan	-2,021	-2,589	167	3,708	8,000	13,937	18,157
Georgia	-370	-348	-628	-1,069	-1,491	-1,643	-1,546
Kazakhstan	-273	335	-1,056	-1,795	-7,013	-6,682	-5,345
Kyrgyz Republic	-42	29	-29	-386	-600	-638	-856
Tajikistan	-5	-57	-58	-70	-476	-528	-423
Turkmenistan	304	82	875	3,351	3,400	-	-
Uzbekistan	881	1,215	1,949	3,136	4,370	4,500	-
East Asia	103,342	131,105	212,105	303,065	418,173	460,752	517,510
China, People's Rep. of	45,875	68,659	160,818	249,866	353,049	410,760	463,108
Hong Kong, China	16,469	15,730	20,180	22,935	27,399	21,277	28,955
Korea, Rep. of	11,950	28,174	14,981	5,385	5,954	-2,610	-5,530
Mongolia	-186	64	107	218	69	93	111
Taipei, China	29,234	18,478	16,019	24,661	31,701	31,232	30,866
South Asia	16,878	-1,938	-13,388	-16,082	-29,799	-30,936	-41,867
Afghanistan, Islamic Rep. of	-456	-265	-183	-444	-119	-50	-150
Bangladesh	176	176	-557	824	952	543	863
Bhutan	-138	-122	-235	-38	114	141	38
India	14,083	-2,470	-9,902	-9,766	-22,072	-29,483	-40,443
Maldives	-31	-122	-270	-369	-472	-541	-544
Nepal	149	198	161	198	50	-	-
Pakistan	3,165	1,314	-1,753	-4,990	-6,878	-	-
Sri Lanka	-70	-647	-649	-1,497	-1,373	-1,546	-1,631
Southeast Asia	45,523	37,942	36,017	73,271	95,235	97,798	96,833
Cambodia	-492	-435	-592	-525	-713	-991	-1,152
Indonesia	8,106	1,564	278	10,836	11,009	9,128	8,662
Lao People's Dem. Rep.	-43	-189	-193	-542	-609	-513	-517
Malaysia	13,322	15,079	19,984	25,467	29,713	25,187	27,472
Myanmar	-100	251	444	1,046	1,099	-	-
Philippines	288	1,628	1,984	5,347	6,351	6,428	7,192
Singapore	21,589	18,234	22,273	29,766	39,157	58,369	64,206
Thailand	4,784	2,767	-7,642	2,174	14,923	8,750	-
Viet Nam	-1,931	-957	-519	-299	-5,695	-8,560	-9,030
The Pacific	-48	-72	433	11	-30	-	-
Cook Islands	15	12	24	26	-14	-15	-14
Fiji Islands	-86	-301	-377	-668	-679	-761	-
Kiribati	6	-13	-39	-43	-58	-60	-
Marshall Islands, Rep. of	-17	-4	-7	-5	-	-	-
Micronesia, Fed. States of	1	-42	-36	-38	-15	-	-
Nauru	-	-42	-48	-54	-56	-	-
Palau, Rep. of	10	13	15	-13	-	-	-
Papua New Guinea	140	122	608	411	271	272	132
Samoa	-14	-21	-24	-26	-10	-	-
Solomon Islands	28	67	2	11	-144	-945	-
Timor-Leste, Dem. Rep. of	-85	103	292	411	688	-	-
Tonga	-5	8	-6	-23	-25	-46	-
Tuvalu	-12	-	-	-	-	-	-
Vanuatu	-28	-15	-22	-43	-43	-	-
Total	163,979	165,685	236,335	367,022	489,333	534,579	582,118

- = not available.

Table A15 Current account balance (% of GDP)

	2003	2004	2005	2006	2007	2008	2009
Central Asia	-3.0	-1.8	0.9	3.3	1.8	3.7	4.8
Armenia	-6.7	-0.5	-1.1	-1.8	-4.7	-4.5	-4.9
Azerbaijan	-27.8	-29.8	1.3	18.7	27.0	38.0	40.0
Georgia	-9.3	-6.8	-9.8	-13.8	-14.7	-13.6	-11.5
Kazakhstan	-0.9	0.8	-1.8	-2.2	-6.8	-5.6	-4.1
Kyrgyz Republic	-2.2	1.3	-1.2	-13.6	-16.0	-14.6	-17.0
Tajikistan	-1.3	-4.0	-2.5	-2.5	-15.2	-15.3	-11.1
Turkmenistan	2.7	0.6	5.1	15.3	13.0	12.0	12.0
Uzbekistan	8.7	10.2	14.3	18.4	21.1	18.5	17.5
East Asia	3.9	4.3	6.0	7.5	8.6	7.5	6.7
China, People's Rep. of	2.8	3.6	7.2	9.4	10.9	9.9	8.6
Hong Kong, China	10.4	9.5	11.4	12.1	13.3	9.5	12.0
Korea, Rep. of	2.0	4.1	1.9	0.6	0.6	-0.2	-0.5
Mongolia	-12.8	3.5	4.6	6.9	1.8	2.0	2.0
Taipei, China	9.6	5.6	4.5	6.7	8.3	7.3	6.6
South Asia	2.3	-0.2	-1.3	-1.4	-2.1	-2.5	-2.8
Afghanistan, Islamic Rep. of	-10.3	-4.9	-2.8	-6.3	-1.4	-0.5	-1.2
Bangladesh	0.3	0.3	-0.9	1.3	1.4	0.7	1.0
Bhutan	-23.6	-17.9	-30.4	-4.3	10.5	10.1	2.4
India	2.3	-0.4	-1.2	-1.1	-1.9	-2.2	-2.6
Maldives	-4.5	-15.7	-36.0	-39.8	-45.0	-45.0	-40.0
Nepal	2.4	2.7	2.0	2.2	0.5	1.0	1.0
Pakistan	3.8	1.3	-1.6	-3.9	-4.8	-6.3	-5.8
Sri Lanka	-0.4	-3.1	-2.7	-5.3	-4.3	-4.3	-4.2
Southeast Asia	6.4	4.7	3.9	6.9	7.6	5.8	5.5
Cambodia	-10.6	-8.2	-9.4	-7.2	-8.5	-10.6	-11.1
Indonesia	3.5	0.6	0.1	2.9	2.5	1.9	1.6
Lao People's Dem. Rep.	-2.0	-7.5	-6.7	-15.5	-15.0	-12.2	-11.4
Malaysia	12.1	12.1	14.6	16.3	15.9	11.6	11.7
Myanmar	0.0	0.0	0.0	-	-	-	-
Philippines	0.4	1.9	2.0	4.5	4.4	4.3	4.5
Singapore	23.2	16.7	18.6	21.8	24.3	23.2	24.0
Thailand	3.4	1.7	-4.3	1.1	6.1	3.0	1.0
Viet Nam	-4.9	-2.1	-1.0	-0.5	-8.0	-10.3	-9.4
The Pacific	-1.0	0.2	7.2	6.2	8.7	-	-
Cook Islands	10.4	7.0	13.3	14.1	-6.4	-6.6	-6.4
Fiji Islands	-3.6	-11.0	-12.6	-21.1	-19.6	-21.0	-
Kiribati	10.1	-19.5	-58.2	-62.1	-76.3	-	-
Marshall Islands, Rep. of	-14.1	-3.1	-5.0	-3.8	-	-	-
Micronesia, Fed. States of	0.3	-18.5	-15.3	-16.2	-6.5	-	-
Nauru	-	-147.7	-187.0	-192.2	-243.0	-	-
Palau, Rep. of	7.8	9.4	10.4	-8.6	-	-	-
Papua New Guinea	3.9	3.1	12.4	7.4	4.3	4.1	1.9
Samoa	-4.4	-5.6	-5.6	-5.8	-2.0	-	-
Solomon Islands	11.9	25.3	0.7	3.1	-37.0	-28.0	-
Timor-Leste, Dem. Rep. of	-28.8	33.3	88.0	125.8	179.3	-	-
Tonga	-3.1	4.0	-2.6	-9.6	-10.1	-	-
Tuvalu	-62.7	-	-	-	-	-	-
Vanuatu	-10.1	-4.7	-6.1	-7.5	-9.5	-	-
Average	3.9	3.4	4.3	5.7	6.4	5.3	4.7

- = not available.

Table A16 Foreign direct investment (US\$ million)

	2003	2004	2005	2006	2007
Central Asia					
Armenia	121	248	239	453	355
Azerbaijan	3,227	3,535	1,679	-601	-2,934
Georgia	331	483	542	1,076	1,400
Kazakhstan	2,092	4,157	1,971	6,221	4,176
Kyrgyz Republic	46	132	43	182	225
Tajikistan	32	272	54	339	163
Turkmenistan	226	354	418	731	-
Uzbekistan	70	187	88	164	-
East Asia					
China, People's Rep. of	53,505	60,630	72,406	72,634	82,658
Hong Kong, China	13,653	34,035	33,627	45,058	59,879
Korea, Rep. of	3,526	9,246	6,309	3,586	1,579
Mongolia	201	236	317	367	500
Taipei, China	453	1,898	1,625	7,424	7,272
South Asia					
Afghanistan, Islamic Rep. of	58	187	271	238	290
Bangladesh	376	385	800	743	760
Bhutan	2	3	9	6	73
India	4,322	5,987	8,901	21,991	27,288
Maldives	14	15	10	14	15
Nepal	12	0	2	-6	5
Pakistan	771	906	1,459	3,450	5,026
Sri Lanka	171	217	234	451	545
Southeast Asia					
Cambodia	74	121	375	475	820
Indonesia	-597	1,896	8,336	4,914	5,571
Lao People's Dem. Rep.	420	450	500	650	770
Malaysia	2,473	4,624	3,967	6,047	-
Myanmar	291	-	-	-	-
Philippines	491	688	1,854	2,921	2,928
Singapore	8,969	9,025	6,986	12,502	11,837
Thailand	4,614	5,786	7,545	7,978	8,285
Viet Nam	1,450	1,610	1,889	2,315	2,400
The Pacific					
Cook Islands	-	-	-	-	-
Fiji Islands	-	-	-	-	-
Kiribati	-	-	-	-	-
Marshall Islands, Rep. of	2	4	6	6	-
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)

	2003	2004	2005	2006	2007
Central Asia					
Armenia	1,098	1,183	1,099	1,206	1,360
Azerbaijan	1,568	1,625	1,673	1,916	2,200
Georgia	1,856	1,861	1,737	1,697	1,675
Kazakhstan	22,920	32,713	43,249	74,023	93,924
Kyrgyz Republic	1,966	2,110	2,001	2,217	2,286
Tajikistan	1,031	822	887	859	1,265
Turkmenistan	1,472	1,247	907	712	-
Uzbekistan	4,249	4,322	4,133	3,938	4,937
East Asia					
China, People's Rep. of	208,452	247,701	281,612	323,000	345,900
Hong Kong, China	371,575	429,336	453,201	516,832	691,316
Korea, Rep. of	157,394	172,259	187,882	260,061	380,665
Mongolia	1,240	1,360	1,312	1,414	1,529
Taipei, China	63,054	80,888	86,732	85,833	88,714
South Asia					
Afghanistan, Islamic Rep. of	621	692	11,949	12,083	1,883
Bangladesh	16,953	17,953	18,416	18,603	19,703
Bhutan	406	529	608	677	756
India	111,645	132,973	138,129	169,629	190,516
Maldives	290	332	397	574	-
Nepal	2,968	3,069	3,122	3,249	3,218
Pakistan	33,352	33,307	34,037	35,655	38,699
Sri Lanka	10,649	11,345	11,369	12,235	16,130
Southeast Asia					
Cambodia	1,808	2,043	2,123	2,248	2,464
Indonesia	135,401	137,024	130,652	128,736	130,247
Lao People's Dem. Rep.	1,916	2,132	2,196	2,507	2,625
Malaysia	49,141	52,786	52,301	51,858	54,525
Myanmar	6,937	6,797	7,038	7,420	7,606
Philippines	57,395	54,846	54,186	53,367	54,427
Singapore	194,406	214,833	233,435	273,807	326,086
Thailand	51,783	51,312	52,040	59,643	61,486
Viet Nam	14,100	14,410	17,400	19,483	21,300
The Pacific					
Cook Islands	-	-	-	-	-
Fiji Islands	252	268	293	435	241
Kiribati	34	40	47	47	52
Marshall Islands, Rep. of	86	94	93	102	111
Micronesia, Fed. States of	63	64	65	68	60
Nauru	-	-	-	-	310
Palau, Rep. of	19	34	32	38	-
Papua New Guinea	1,380	1,367	1,245	1,198	1,128
Samoa	153	164	167	161	-
Solomon Islands	148	153	143	151	147
Timor-Leste, Dem. Rep. of	-	-	-	-	-
Tonga	75	77	81	82	83
Tuvalu	-	-	-	-	-
Vanuatu	97	121	82	86	-

- = not available.

Table A18 Debt service ratio (% of exports of goods and services)

	2003	2004	2005	2006	2007
Central Asia					
Armenia	15.6	9.7	4.4	2.3	-
Azerbaijan	5.0	3.4	2.8	1.1	1.0
Georgia	16.5	17.0	13.1	13.4	9.8
Kazakhstan	35.2	36.2	37.1	25.6	32.8
Kyrgyz Republic	23.1	22.9	17.3	10.9	-
Tajikistan	12.0	3.0	11.3	7.4	6.2
Turkmenistan	11.6	9.6	5.6	0.0	-
Uzbekistan	20.8	17.1	14.1	11.3	-
East Asia					
China, People's Rep. of	7.6	3.5	3.3	2.4	2.0
Hong Kong, China	-	-	-	-	-
Korea, Rep. of	7.3	4.4	3.2	4.3	5.3
Mongolia	4.5	3.2	2.8	1.8	2.4
Taipei, China	0.0	2.9	5.4	3.2	2.6
South Asia					
Afghanistan, Islamic Rep. of	3.8	3.9	5.7	1.6	1.5
Bangladesh	5.8	5.0	4.8	4.0	3.6
Bhutan	5.3	4.3	6.4	5.1	4.2
India	16.1	6.0	9.9	4.8	-
Maldives	3.7	4.1	6.5	4.5	5.7
Nepal	9.8	8.8	9.4	9.3	10.7
Pakistan	22.8	32.5	14.9	13.8	12.9
Sri Lanka	11.6	11.6	7.9	12.7	-
Southeast Asia					
Cambodia	2.6	1.5	1.3	1.1	0.5
Indonesia	32.2	30.1	24.5	24.8	19.2
Lao People's Dem. Rep.	6.7	7.5	7.7	4.0	6.1
Malaysia	6.4	4.6	5.4	4.8	3.8
Myanmar	4.0	3.9	2.8	-	-
Philippines	16.9	13.8	13.5	12.0	9.9
Singapore	-	-	-	-	-
Thailand	16.0	8.5	10.8	11.3	11.1
Viet Nam	8.0	6.7	5.2	5.3	5.5
The Pacific					
Cook Islands	-	-	-	-	-
Fiji Islands	3.1	1.5	1.2	1.7	3.0
Kiribati	2.9	3.1	3.3	3.6	-
Marshall Islands, Rep. of	20.9	20.8	20.9	32.3	-
Micronesia, Fed. States of	5.3	7.4	6.7	9.1	6.0
Nauru	-	-	-	-	-
Palau, Rep. of	1.5	1.8	1.6	-	-
Papua New Guinea	1.5	1.4	0.7	1.3	3.5
Samoa	38.0	53.7	50.8	89.6	-
Solomon Islands	9.3	5.9	7.2	4.3	4.3
Timor-Leste, Dem. Rep. of	-	-	-	-	-
Tonga	5.2	8.1	8.5	9.1	10.5
Tuvalu	-	-	-	-	-
Vanuatu	1.5	1.6	1.1	1.7	-

- = not available.

Table A19 Exchange rates to the US dollar (annual average)

	Currency	Symbol	2003	2004	2005	2006	2007
Central Asia							
Armenia	Dram	AMD	578.8	533.5	457.7	416.0	342.1
Azerbaijan	Azerbaijan new manat	AZN	1.0	1.0	0.9	0.9	0.9
Georgia	Georgian lary	GEL	2.1	1.9	1.8	1.8	1.7
Kazakhstan	Tenge	T	149.6	136.0	132.9	126.1	122.6
Kyrgyz Republic	Som	Som	43.7	42.7	41.0	40.2	37.3
Tajikistan	Somoni	TJS	3.1	3.0	3.1	3.3	3.4
Turkmenistan	Turkmen manat	TMM	5,200.0	5,200.0	5,200.0	5,200.0	5,200.0
Uzbekistan	Sum	SUM	971.0	1,020.0	1,115.0	1,220.0	1,263.7
East Asia							
China, People's Rep. of	Yuan	CNY	8.3	8.3	8.2	8.0	7.6
Hong Kong, China	Hong Kong dollar	HK\$	7.8	7.8	7.8	7.8	7.8
Korea, Rep. of	Won	W	1,191.9	1,143.7	1,024.1	955.1	929.2
Mongolia	Togrog	MNT	1,146.5	1,185.3	1,205.3	1,177.4	1,170.4
Taipei, China	NT dollar	NT\$	34.4	33.4	32.2	32.5	32.8
South Asia							
Afghanistan, Islamic Rep. of	Afghani	AF	49.0	47.8	49.7	49.9	50.1
Bangladesh	Taka	Tk	57.9	58.9	61.4	67.1	69.0
Bhutan	Ngultrum	Nu	47.9	45.4	44.6	44.7	44.2
India	Indian rupee/s	Re/Rs	46.0	44.9	44.3	45.3	40.2
Maldives	Rufiyaa	Rf	12.8	12.8	12.8	12.8	12.8
Nepal	Nepalese rupee/s	NRe/NRs	77.9	73.8	71.9	71.9	70.6
Pakistan	Pakistan rupee/s	PRs/PRs	58.5	57.6	59.4	59.9	60.6
Sri Lanka	Sri Lanka rupee/s	SLRe/SLRs	96.5	101.2	100.5	104.0	110.6
Southeast Asia							
Cambodia	Riel	KR	3,979.0	4,019.0	4,097.0	4,107.0	4,060.0
Indonesia	Rupiah	Rp	8,573.4	8,934.6	9,712.0	9,020.0	9,136.2
Lao People's Dem. Rep.	Kip	KN	10,569.0	10,585.5	10,655.2	10,159.9	9,680.0
Malaysia	Ringgit	RM	3.8	3.8	3.8	3.7	3.4
Myanmar	Kyat	MK	5.7	5.6	5.9	5.6	5.6
Philippines	Peso	P	54.3	56.1	55.0	51.2	45.9
Singapore	Singapore dollar	S\$	1.7	1.7	1.7	1.6	1.5
Thailand	Baht	B	41.5	40.2	40.2	37.9	34.6
Viet Nam	Dong	D	15,509.6	15,704.0	15,858.9	15,994.3	16,063.2
The Pacific							
Cook Islands	New Zealand dollar	NZ\$	1.7	1.5	1.4	1.5	1.4
Fiji Islands	Fiji dollar	F\$	1.9	1.7	1.7	1.7	1.6
Kiribati	Australian dollar	A\$	1.5	1.4	1.3	1.3	1.2
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\$	1.5	1.4	1.3	1.3	1.2
Palau, Rep. of	US dollar	US\$	1.0	1.0	1.0	1.0	1.0
Papua New Guinea	Kina	K	3.6	3.2	3.1	3.1	3.0
Samoa	Tala	ST	3.0	2.8	2.7	2.8	2.6
Solomon Islands	Sol. Islands dollar	SI\$	7.5	7.5	7.5	7.6	7.7
Timor-Leste, Dem. Rep. of	US dollar	US\$	1.0	1.0	1.0	1.0	1.0
Tonga	Pa'anga	T\$	2.2	2.0	1.9	2.0	2.0
Tuvalu	Australian dollar	A\$	1.5	1.4	1.3	1.3	1.2
Vanuatu	Vatu	Vt	122.2	111.9	109.0	110.0	104.0

- = not available.

Table A20 Gross international reserves (US\$ million)

	2003	2004	2005	2006	2007
Central Asia					
Armenia	502	548	669	1,072	1,657
Azerbaijan	803	1,075	1,178	2,500	4,273
Georgia	196	387	479	931	1,361
Kazakhstan	4,962	9,277	7,070	19,126	17,392
Kyrgyz Republic	389	565	612	817	1,091
Tajikistan	118	172	189	204	274
Turkmenistan	2,673	2,729	4,445	5,024	-
Uzbekistan	1,659	2,146	2,895	4,604	6,500
East Asia					
China, People's Rep. of	408,151	614,500	821,514	1,068,490	1,540,000
Hong Kong, China	118,388	123,569	124,278	133,204	152,702
Korea, Rep. of	155,281	198,994	210,317	238,882	262,150
Mongolia	203	208	333	718	972
Taipei, China	206,632	241,738	253,290	266,148	270,311
South Asia					
Afghanistan, Islamic Rep. of	820	1,283	1,662	2,064	2,335
Bangladesh	2,470	2,705	2,930	3,484	5,077
Bhutan	373	383	367	479	599
India	112,959	141,514	151,622	199,179	306,488
Maldives	160	204	187	232	309
Nepal	1,159	1,447	1,476	1,834	2,401
Pakistan	9,525	10,554	9,791	10,760	13,345
Sri Lanka	2,329	2,196	2,458	2,515	3,100
Southeast Asia					
Cambodia	737	809	915	1,097	1,621
Indonesia	36,296	36,321	34,724	42,586	56,920
Lao People's Dem. Rep.	209	223	234	327	530
Malaysia	44,167	66,216	70,151	83,286	101,300
Myanmar	781	873	1,026	2,039	3,307
Philippines	17,063	16,228	18,494	22,967	33,754
Singapore	96,244	112,575	116,173	136,261	162,957
Thailand	42,148	49,832	52,066	66,985	87,455
Viet Nam	5,620	6,314	8,557	11,425	19,931
The Pacific					
Cook Islands	-	-	-	-	-
Fiji Islands	548	636	471	529	618
Kiribati	561	605	592	-	-
Marshall Islands, Rep. of	4	6	2	0	-
Micronesia, Fed. States of	92	56	51	48	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	492	663	765	1,427	2,453
Samoa	52	69	84	64	80
Solomon Islands	33	80	96	102	118
Timor-Leste, Dem. Rep. of	61	182	523	1,006	1,692
Tonga	17	44	42	41	45
Tuvalu	-	-	-	-	-
Vanuatu	41	59	70	102	103

- = not available.

Table A21 Central government expenditures (% of GDP)

	2003	2004	2005	2006	2007
Central Asia					
Armenia	19.2	17.5	18.6	18.1	18.0
Azerbaijan	27.2	26.5	22.5	26.5	24.8
Georgia	17.5	18.9	24.9	29.2	32.5
Kazakhstan	22.7	22.1	27.0	22.1	24.4
Kyrgyz Republic	23.8	27.5	28.4	28.5	29.4
Tajikistan	19.1	20.3	23.0	21.6	27.3
Turkmenistan	19.4	18.9	19.7	14.6	16.9
Uzbekistan	33.9	32.3	32.5	29.2	30.3
East Asia					
China, People's Rep. of	18.1	17.8	18.5	19.2	20.1
Hong Kong, China	20.0	18.7	16.9	15.5	14.7
Korea, Rep. of	22.7	22.3	23.2	23.9	24.8
Mongolia	37.1	35.0	27.5	33.3	38.4
Taipei, China	22.4	21.3	21.2	20.1	19.2
South Asia					
Afghanistan, Islamic Rep. of	14.5	15.3	16.6	21.5	22.6
Bangladesh	13.7	13.3	13.8	13.9	13.5
Bhutan	35.6	34.1	37.4	35.3	38.2
India	28.0	27.1	26.5	27.4	27.8
Maldives	38.2	36.0	59.0	58.5	66.4
Nepal	14.8	14.3	14.9	14.7	16.0
Pakistan	18.4	16.7	17.2	18.5	20.7
Sri Lanka	23.0	23.0	24.2	24.5	24.3
Southeast Asia					
Cambodia	16.3	14.9	13.7	14.4	13.9
Indonesia	18.7	18.7	18.4	20.1	19.1
Lao People's Dem. Rep.	19.0	15.1	18.2	18.7	17.1
Malaysia	27.1	25.1	24.1	24.9	23.4
Myanmar	-	-	10.0	-	-
Philippines	19.5	18.3	17.7	17.3	17.3
Singapore	14.1	14.0	13.2	14.1	12.7
Thailand	17.2	17.5	18.4	16.7	19.8
Viet Nam	30.6	32.4	30.5	31.2	32.4
The Pacific					
Cook Islands	31.6	29.5	32.0	32.3	32.6
Fiji Islands	30.2	28.0	27.4	28.4	22.2
Kiribati	121.7	137.3	135.4	123.6	126.4
Marshall Islands, Rep. of	69.0	59.5	64.8	65.0	66.9
Micronesia, Fed. States of	72.0	75.6	63.9	64.5	64.0
Nauru	-	-	56.8	92.7	81.5
Palau, Rep. of	62.2	61.5	52.9	55.9	57.9
Papua New Guinea	30.0	32.8	34.8	33.9	37.1
Samoa	32.6	31.1	34.6	31.4	35.5
Solomon Islands	31.4	30.7	32.3	36.3	41.7
Timor-Leste, Dem. Rep. of	60.0	69.4	71.0	57.3	80.0
Tonga	31.3	26.9	26.3	37.7	32.7
Tuvalu	149.8	106.9	84.8	90.4	103.5
Vanuatu	22.5	20.9	20.2	22.7	29.2

- = not available.

Table A22 Central government revenues (% of GDP)

	2003	2004	2005	2006	2007
Central Asia					
Armenia	18.0	15.8	16.7	16.6	18.2
Azerbaijan	24.2	24.5	20.8	23.1	22.7
Georgia	16.2	22.0	23.4	26.3	29.4
Kazakhstan	21.8	21.9	27.6	22.9	22.7
Kyrgyz Republic	18.7	23.1	24.7	26.4	27.1
Tajikistan	17.3	17.9	20.1	23.3	20.9
Turkmenistan	18.0	19.3	20.5	19.8	17.6
Uzbekistan	34.0	32.9	33.8	34.1	32.4
East Asia					
China, People's Rep. of	16.0	16.5	17.2	18.4	20.8
Hong Kong, China	16.8	20.4	17.9	19.5	21.9
Korea, Rep. of	20.9	20.0	20.5	21.2	22.5
Mongolia	33.4	33.1	30.1	36.6	40.6
Taipei, China	19.7	18.5	20.7	19.5	19.0
South Asia					
Afghanistan, Islamic Rep. of	11.4	13.9	17.6	18.3	19.7
Bangladesh	10.3	10.1	10.5	10.7	10.3
Bhutan	25.3	36.0	30.5	34.5	34.7
India	19.4	19.7	19.8	21.1	22.3
Maldives	34.8	34.5	48.1	51.8	58.5
Nepal	13.4	13.4	14.1	13.1	14.0
Pakistan	14.8	14.3	13.8	14.2	14.9
Sri Lanka	15.3	15.0	15.7	16.4	16.6
Southeast Asia					
Cambodia	9.6	10.3	10.3	11.4	10.8
Indonesia	17.0	17.6	17.9	19.1	17.9
Lao People's Dem. Rep.	11.1	11.4	11.9	12.8	14.0
Malaysia	22.1	21.0	20.5	21.6	20.7
Myanmar	-	-	-	-	-
Philippines	14.8	14.5	15.0	16.2	17.1
Singapore	21.5	20.9	22.2	21.0	24.9
Thailand	17.5	17.6	17.9	18.1	17.7
Viet Nam	25.8	27.8	25.9	27.1	27.3
The Pacific					
Cook Islands	35.0	34.3	37.1	37.6	37.0
Fiji Islands	24.4	24.9	24.1	25.6	22.7
Kiribati	127.9	120.8	132.8	118.4	123.9
Marshall Islands, Rep. of	67.3	58.2	62.2	65.9	66.3
Micronesia, Fed. States of	74.9	59.6	58.6	59.1	61.3
Nauru	-	-	28.5	56.5	64.1
Palau, Rep. of	53.7	53.0	52.6	53.4	50.5
Papua New Guinea	29.0	34.4	34.9	37.0	38.8
Samoa	32.0	30.3	34.8	31.6	36.6
Solomon Islands	31.6	35.8	34.8	37.8	40.5
Timor-Leste, Dem. Rep. of	62.0	78.9	107.0	177.9	312.8
Tonga	28.4	28.5	28.7	33.0	34.2
Tuvalu	121.3	98.1	78.8	112.8	107.7
Vanuatu	20.7	22.1	23.5	23.2	29.1

- = not available.

Table A23 Fiscal balance of central government (% of GDP)

	2003	2004	2005	2006	2007
Central Asia					
Armenia	-1.3	-1.7	-1.9	-1.5	0.1
Azerbaijan	-3.0	-2.0	-1.6	-3.4	-2.1
Georgia	-1.3	3.2	-1.5	-3.0	-3.1
Kazakhstan	-0.9	-0.2	0.6	0.8	-1.7
Kyrgyz Republic	-5.2	-4.5	-3.7	-2.1	-2.2
Tajikistan	-1.7	-2.4	-2.9	1.7	-6.4
Turkmenistan	-1.3	0.4	0.8	5.1	0.7
Uzbekistan	0.1	0.6	1.2	5.2	2.3
East Asia					
China, People's Rep. of	-2.2	-1.3	-1.2	-0.8	0.7
Hong Kong, China	-3.2	1.7	1.0	4.0	7.2
Korea, Rep. of	-1.8	-2.3	-2.6	-2.7	-2.3
Mongolia	-3.7	-1.8	2.6	3.3	2.2
Taipei, China	-2.7	-2.8	-0.6	-0.6	-0.2
South Asia					
Afghanistan, Islamic Rep. of	-3.1	-1.4	1.0	-3.1	-2.9
Bangladesh	-3.4	-3.2	-3.3	-3.2	-3.2
Bhutan	-10.4	1.9	-6.9	-0.8	-3.4
India	-8.5	-7.5	-6.7	-6.4	-5.5
Maldives	-3.4	-1.6	-10.9	-6.7	-7.9
Nepal	-1.4	-0.9	-0.8	-1.6	-2.0
Pakistan	-3.6	-2.4	-3.3	-4.3	-5.8
Sri Lanka	-7.8	-8.0	-8.5	-8.1	-7.7
Southeast Asia					
Cambodia	-6.7	-4.6	-3.4	-3.0	-3.2
Indonesia	-1.7	-1.1	-0.5	-1.0	-1.2
Lao People's Dem. Rep.	-7.9	-3.8	-6.3	-5.8	-3.1
Malaysia	-5.0	-4.1	-3.6	-3.3	-2.8
Myanmar	-	-6.0	-4.0	-	-
Philippines	-4.6	-3.8	-2.7	-1.1	-0.2
Singapore	7.4	6.9	9.0	6.9	12.2
Thailand	0.4	0.1	-0.7	1.1	-1.7
Viet Nam	-4.8	-4.7	-4.6	-4.1	-4.9
The Pacific					
Cook Islands	1.2	1.8	2.4	2.5	0.1
Fiji Islands	-5.8	-3.1	-3.3	-2.8	0.4
Kiribati	6.2	-16.5	-2.6	-5.2	-2.5
Marshall Islands, Rep. of	-1.7	-1.4	-2.6	0.9	-0.7
Micronesia, Fed. States of	2.9	-16.0	-5.3	-5.4	-2.7
Nauru	-	-	-28.2	-36.2	-17.4
Palau, Rep. of	-2.3	-6.8	-3.3	-1.3	-7.4
Papua New Guinea	-1.0	1.6	0.1	3.1	1.7
Samoa	-0.6	-0.8	0.3	0.3	1.1
Solomon Islands	0.2	5.1	2.5	1.5	-1.2
Timor-Leste, Dem. Rep. of	2.0	9.4	36.0	120.7	232.9
Tonga	-2.9	1.6	2.4	-4.7	1.4
Tuvalu	-28.5	-8.7	-6.1	22.5	4.2
Vanuatu	-1.8	1.2	3.3	0.5	-0.1

- = not available.

