World economy

United States

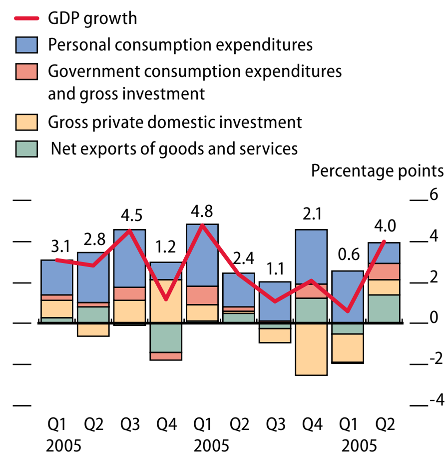
Boosted by strong expansion in business investment, public spending, and net exports, growth in the second quarter of 2007 accelerated to 4.0% (quarter on quarter, seasonally adjusted annualized rate) from a tepid 0.6% in the first (Figure 1.2.1). But the persistent housing slump remains a major risk to economic performance. For the sixth consecutive quarter, private residential investment contracted. On a 12-month moving average basis, housing starts have been declining since April 2006 (Figure 1.2.2), but the inventory of unsold homes is still high. With this overhang, and rising defaults and foreclosures among subprime mortgage-holders continuing to depress the housing market, house prices are likely to drop further (Box 1.2.1).

Facing subprime mortgage anxieties, many US consumers have lost confidence: the August consumer confidence reading dipped to its lowest in a year. Personal consumption expenditures grew by only 1.4% in the second quarter, slowing sharply from 3.7% in the first. Real disposable personal income, too, barely increased in the second quarter, and a pickup in gasoline and food prices depressed spending on nondurable goods. Consumers also face increasing headwinds from falling home prices, rising interest burdens, and slowing employment opportunities. In addition, recent weakness in equity markets associated with the subprime disruptions could add to consumer woes.

On the upside, the strong second quarter rebound reflects underlying strength in corporate spending and resilient business activity. The recovery of corporate profits in the first half of the year set the stage for ongoing improvement of nonresidential investment. Industrial production continued to improve, albeit at a moderate pace, and robust export demand has provided a cushion against slowing consumer spending. Combined with lower inventory levels, additional production should help sustain corporate momentum. This relatively benign business climate is helping hold up the job market: unemployment has stayed low at about 4.5% since the last quarter of 2006, although the July data showed a mild uptick to 4.6%.

Slower growth has helped keep price pressures at bay, with inflation at 2.4% in July. But although core inflation (excluding food and energy prices) remained tame, the headline figure accelerated to an annualized rate of 4.5% for the first 7 months of 2007, compared with an increase of 2.5% for the whole of 2006. Given insipient inflation pressures, the Federal Reserve held overnight rates steady at 5.25% in the wake of August's financial turbulence. It did, though, lower the discount rate on 17 August—the rate charged on direct Federal Reserve loans to banks—providing the necessary liquidity to banks that sought it. Markets now expect that the Federal Reserve will lower interest rates, reflecting the impact of tightening credit market conditions on demand. (Figure 1.2.3).

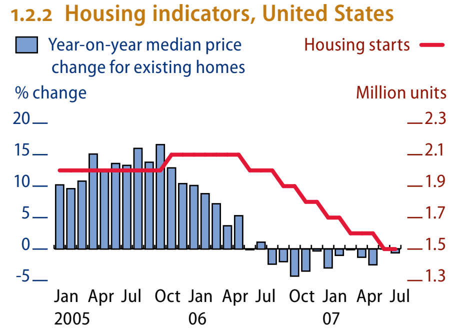
1.2.1 Contributions to growth (demand), United States



Source: US Bureau of Economic Analysis, available: www.bea.gov, downloaded 31 August 2007.

Click here for figure data

1.2.2 Housing indicators, United States



Sources: CEIC Data Company Ltd.; National Association of Realtors, available: www.realtor.org; US Census Bureau, available: www.census.gov; all downloaded 31 August 2007.

Click here for figure data

1.2.1 Credit market disruptions

Distress that had been building in the United States (US) subprime mortgage market since 2006 spilled over into global credit markets in August 2007. Though some normalcy appears to be returning to markets, it is still difficult to tell how disruptive these developments may eventually turn out to be. Credit risks have been repriced, volatility has increased, and investor and consumer confidence has been jolted. If troubles were to deepen in the US housing market and greater credit market problems surfaced, this could aggravate and spread the malaise.

The root of the problem

The genesis of the current subprime mortgage distress can be traced back to the US housing boom. Riding it in 2001–2005, US residential mortgage lending saw rapid growth with an increasing portion made to borrowers with less than perfect credit histories—hence the term "subprime."

Subprime borrowers are charged much higher interest rates than prime borrowers (to compensate for their higher default risks) and their mortgages are often at adjustable (rather than fixed) rates. But booming housing markets, against a backdrop of historically low interest rates and increasing competition among mortgage lenders, induced lenders to relax their loan conditions.

A proliferation of new types of mortgages—also known as "affordability products," which required little or no downpayment and with initial "teaser" interest payments that were set very low—also allowed subprime borrowers to gain easier access to credit. As a result, the subprime mortgage market grew rapidly after 2003—according to some estimates, to as much as one fifth of new mortgages by 2006, from just below one tenth in 2003.

As the Federal Reserve began to raise its policy rates after July 2004 and the US housing market cooled, homeowners—particularly those with adjustable-rate mortgages—faced rising interest payments. Among subprime borrowers especially, monthly loan payments rose sharply as the initial low rates were reset to higher, normal rates. Those with shaky credit histories and little accumulated housing equity also found it increasingly hard to refinance their mortgage on better terms or to pay it off by selling their home.

Consequently, delinquencies on subprime mortgages picked up significantly after mid-2005, to nearly 15% of subprime adjustable-rate mortgages in the first quarter of 2007, compared with about 10% 2 years earlier (according to the US Mortgage Bankers Association). The number of foreclosures also doubled over the same period.

Rising defaults and foreclosures eroded the value of subprime mortgage debts and securities collateralized by them. This hit subprime lenders directly. Some 20 mortgage lenders have reportedly shut down or filed for bankruptcy in the past few months. Many smaller subprime lenders operating on very thin margins have also gone bankrupt, as the lending business has slowed and as the value of mortgage loans in the secondary market has declined. Investors in mortgage-related securities, especially those exposed to subprime loans, have suffered significant losses as well.

Avenues of contagion

Deterioration in the credit quality of subprime mortgages has spread quickly to broad asset classes held by a wide spectrum of investor groups around the globe. The source of contagion has been a boom in credit derivatives, such as collateralized debt obligations (CDOs). CDOs arise from a pool of debts, including subprime mortgage debts. This pool is then partitioned into different "tranches" representing different degrees of risk and sold off to investors with different risk appetites.

Unlike typical mortgage-backed securities, which pool only mortgage debts, CDOs bundle various types of debt into securities structured in such a way that losses from defaults are borne successively, in their entirety, from low-ranking through to high-ranking tranches, thus protecting the latter from the immediate loss. CDO tranches are then awarded credit ratings based on the layers of protection given to each tranche by the subordinate (i.e., lower) tranches as well as on the credit quality of the underlying collateral.

In this process, these structured securities are effectively severed from the credit risk of the original issuer of collateralized debts and rely solely on their own credit ratings. This means that a CDO tranche that includes unrated "junk" assets in its mix of assets used as collateral could still be "AAA-rated." Such a lack of transparency about the exact nature of the underlying collateral and credit quality behind CDOs amplified the August market sell-off amid widespread credit concerns.

Typically, prime mortgages have been pooled, repackaged, and sold to financial intermediaries, which still account for the majority of mortgage-backed securities in the secondary mortgage market. Financial innovation using securitization and credit derivatives, however, has allowed mortgage lenders to sell the riskier portion of mortgage loans to a widespread group of financial institutions. International demand for these securities has been very strong. In an environment awash with liquidity, institutional investors, including pension funds, insurance companies, and highly leveraged hedge funds, bought these securities for their relatively high returns.

1.2.1 Credit market disruptions *(continued)*

Estimated losses from defaulting subprime loans are large in absolute terms, but are limited relative to the size of the market. Although growing rapidly, subprime mortgages account for only about 15% of total outstanding mortgage loans in the US, which is estimated to be about $10 trillion (Agarwal and Ho 2007).

If 30% of these subprime loans default (or twice as high as the current delinquency rate) and banks can recoup only 60% of their loan values (implying a house price fall of nearly half), potential losses could be as high as $180 billion. Yet this would still account for less than 2% of the total US mortgage market and less than 0.5% of US consumer wealth.

Credit quality deterioration could, though, spread beyond subprime mortgages to other mortgages and consumer credit markets. As adjustable-rate mortgages—prime or subprime—become reset over the next couple of years, higher interest payments may put more mortgage-holders under pressure. Delinquency rates on "Alt-A" mortgages, which fall between the prime and subprime categories, are starting to climb. Recent tightening in regulatory standards for mortgage lending, in a context of flat or falling home prices, is also expected to exacerbate problems, at least in the short run. As refinancing conditions turn tougher, existing borrowers are left with little recourse for cash, leading to a greater number of defaults and foreclosures. Higher defaults are also feared in subprime credit card markets as households become strapped for cash.

Direct exposure to the subprime mortgage market might be limited in its total amount, but has been diffused among a wide range of investor groups. More than half total mortgage loans have been securitized and sold to broader investor groups including banks, insurance companies, pension funds, and other institutional investors. The estimated amount of US residential mortgage-related securities reached about $5.8 trillion in January 2007, out of which $850 billion was held by non-US investors (IMF 2007).

Banks and other financial institutions could suffer more losses as credit ratings on mortgage-related securities start to reflect the deterioration in credit quality of the underlying collateral. Losses are likely to be concentrated among the holders of the riskier portion of the securitized interests, such as low-ranking tranches of CDOs.

As credit quality of mortgages worsens, credit ratings for mortgage-related securities drop, which will trigger investors to reappraise these securities at market value (the "mark-to-market" practice). This process normally takes some time, as not all delinquent loans default and lead to foreclosure, a legal procedure that lasts longer than a year. However, highly leveraged investors, such as hedge funds, have already come under pressure. In the midst of heightened uncertainty, investors in and lenders to hedge funds demand more cash and collateral, forcing hedge funds to liquidate their holdings and realize losses.

Reappraisal of credit risks has also affected global stock and bond prices. Stock prices of banking and financial institutions have plummeted. Heightened risk aversion has also led global investors to retreat from risky assets, including those in emerging markets. As investors begin to require higher compensation for assuming risk, high-yield, high-risk corporate bond spreads have widened sharply. With share prices falling and credit conditions tightening, firms will face tougher financing conditions for new investment. Consumer and business confidence are also slipping.

References

Agarwal, S., and C.T. Ho. 2007. "Comparing the Prime and Subprime Mortgage Markets." Chicago Fed Letter No. 241. The Federal Reserve Bank of Chicago. August.

International Monetary Fund (IMF). 2007. *Global Financial Stability Report*. Washington, DC. Available: www.imf.org.

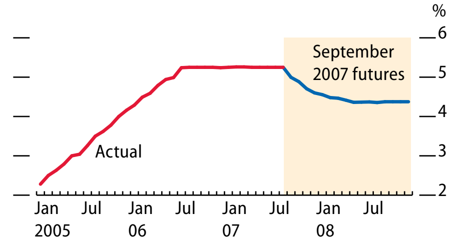
Broadening global expansion and a weakening dollar have boosted exports, while import growth has slowed. The contribution of net exports to growth turned positive in the April–June quarter. With slowing growth of domestic demand, the growth of exports is expected to continue to outpace that of imports. Nevertheless, given base effects, the trade deficit has persisted. In January–June 2007, the seasonally adjusted deficit reached $352.7 billion, down only by $29.5 billion from the same period a year earlier. There was a smaller deficit in goods trade and a larger surplus in services trade.

Government spending expanded robustly in the second quarter, but planned improvements in the fiscal situation seem to be on track. Tax receipts continue to rise, reducing the projected fiscal deficit (excluding the surplus income on the social security trust fund) for 2007 to 3.1%

of GDP from 3.3% in 2006. For 2008, the fiscal deficit is projected to be maintained at 3.1%.

All these influences point to 1.9% growth in GDP in 2007, followed by an investment-led recovery to 2.6% in 2008. But risks are tilted to the downside. The housing market slump is unlikely to quickly reverse and seems to have longer to run. This is likely to affect personal consumption spending. The Federal Reserve's expected interest rate cut (or cuts) may ease some of the housing pain and are likely to provide an additional boost to future investment spending.

1.2.3 Federal Funds rate, United States



Sources: Federal Reserve Board, available: www.federalreserve.gov; FutureSource.com, available: www.futuresource.com; both downloaded 3 September 2007.
Click here for figure data

Japan

Economic growth experienced a significant setback in the second quarter, but a moderate expansion for the year as a whole is still expected. Second quarter GDP growth in 2007 turned to a negative 1.2% (quarter on quarter, seasonally adjusted annualized rate), in contrast to the first quarter's strong outturn of 3.0% (Figure 1.2.4). But on a year-on-year basis, this still represented a moderate expansion of 1.7%, although down from 2.6% in the previous quarter.

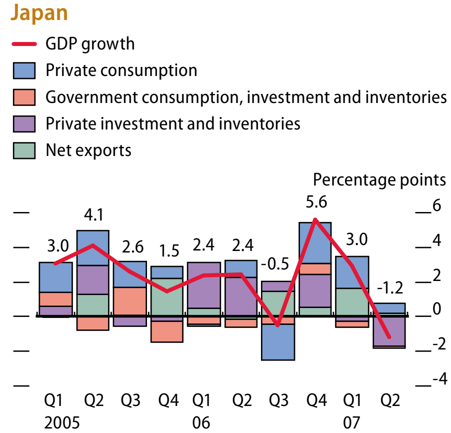
A sharp fall in corporate spending has been the main reason behind the second quarter's setback. Private nonresidential investment, which had been the key driver of the economic recovery over the past few years, fell by 4.8% again after a 0.8% decline in the first quarter. Although business investment tends to be the most volatile component of GDP, increasing economic uncertainties, associated with moderating export growth and the prolonged downcycle of the global high-tech industry, appear to have weighed on investor sentiment.

On the upside, however, corporate profits remain strong. Generally robust export growth so far this year has also tightened capacity constraints both in terms of physical capital and labor. Prospects for a quick turnaround in investment growth remain supported for now on tightened production capacity and strong corporate profits. Adding to this, industrial production is making a modest recovery. Although the combination of a major shutdown in car production and the loss of significant production capacity caused by an earthquake dented industrial production in July, a steady increase in domestic and external demand is expected to support a mild rebound.

There is certainly greater dissonance over Japan's economic strength. The latest data suggest that the economy may be losing growth momentum. Increasing odds of a more severe slowdown in US growth could make a more visible impact on exports. Already, the automobile industry has suffered its second consecutive month of export decline in August. This, together with rising inventory levels and slowing machinery orders, could cut short a tentative recovery in production growth. But support can come from continued tightening in the job market. Corporate hiring is gathering pace, which will ultimately exert a positive influence on wages.

Consumers hold the key to sustained recovery. Private consumption grew by only 1.0% in the second quarter, down from 3.4% in the first. Consumer confidence has also slipped (Figure 1.2.5) as wage growth continues to disappoint, curbing the pace of consumption growth.

1.2.4 Contributions to growth (demand), Japan



Source: Economic and Social Research Institute of Japan, available: www.esri.cao.go.jp, downloaded 10 September 2007.
Click here for figure data

Constant efforts by firms to contain labor costs have been one factor behind the sluggish wage growth. Structural changes in the labor market from the mass retirement of baby boomers and increased participation of part-time workers have also tended to depress average wage levels, at least temporarily. But labor shortages are likely to intensify, largely for demographic reasons, putting upward pressure on wages and so eventually bolstering consumer spending.

Consumer price inflation has slid again so far this year. Although a mild upward trend in producer prices remains in place, this has been largely due to the rise in oil and commodity prices. Core inflation, which excludes fresh food prices, turned negative in February (Figure 1.2.6). With mixed signals about the strength of the economy and a potential return to deflation, the Bank of Japan has kept policy rates at 0.5% since February. The gradual pace of consumption growth, alongside weak inflation, suggests that the central bank will maintain its cautious approach into 2008.

A relatively healthy expansion should continue in Japan, with growth reaching 2.1% in 2007 and 2.2% in 2008. Corporate spending is seen resuming, given healthy export earnings, tight capacity levels, and benign funding conditions. Although consumption growth has been lagging, firming labor market conditions should gradually lift wage income and ultimately support consumer spending.

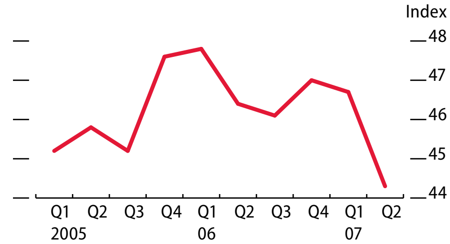
Still, there are concerns that the July earthquake and the August financial turmoil may further depress consumer and investor sentiment. Recent falls in equity and property prices have already hit consumer confidence. At the height of the global credit concerns, the yen strengthened sharply as a global reappraisal of risks triggered an unwinding of the "carry trade." If weaker US demand spreads globally and the yen (after a recent decline) resumes its rise, exports could be affected, damping business activity and corporate spending.

Euro zone

Growth in the euro zone remains strong, though moderating. The second quarter registered 1.4% growth (quarter on quarter, seasonally adjusted annualized rate), down from 2.8% in the first (Figure 1.2.7) due to slippages in growth of the zone's major economies—primarily Germany, France, and Italy. But underlying demand strength paints a relatively bright outlook.

Rising capacity utilization, following a strong expansion in industrial production since 2006, has encouraged corporate spending and hiring. Investment growth advanced to 9.8% in the first quarter of 2007. Although the pace has relaxed, business investment is still solid. Production capacity remains tight, while healthy corporate profits and favorable funding conditions are continuing to support capital spending. Brisk business activity has also exerted a positive influence on consumer spending through developments in the labor market. Average unemployment is dropping fast, to 7.0% in the second quarter, the lowest in a decade (Figure 1.2.8). The firmer labor market is translating into wage income growth, and should eventually provide support to consumer spending.

1.2.5 ESRI consumer confidence, Japan

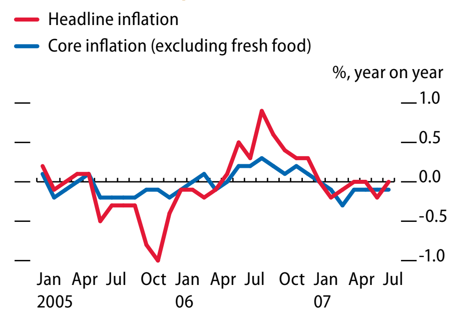


ESRI = Economic and Social Research Institute of Japan.

Source: CEIC Data Company Ltd., downloaded 3 September 2007.

Click here for figure data

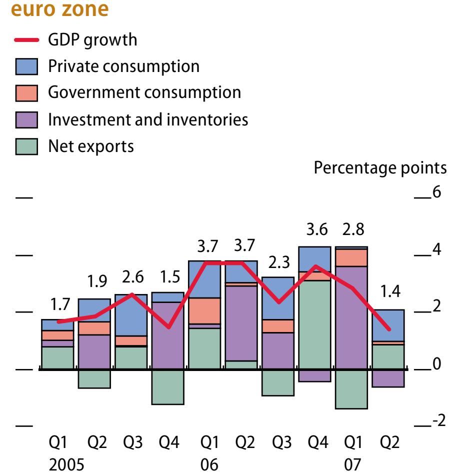
1.2.6 Inflation, Japan



Source: CEIC Data Company Ltd., downloaded 31 August 2007.

Click here for figure data

1.2.7 Contributions to growth (demand), euro zone



Source: Eurostat, available: epp.eurostat.ec.europa.eu, downloaded 5 September 2007.

Click here for figure data

After a weak start to the first quarter, private consumption is recovering in the major economies. German consumer demand was hard hit by the 3 percentage point hike in value-added tax (VAT) that came into force in January. VAT now stands at 19%. Private consumption in Germany contracted in the first quarter, but early indicators such as retail sales and consumer confidence indexes point to a subsequent recovery.

Although headline inflation has fallen below the European Central Bank's target rate of 2.0%, largely due to stabilization in global oil prices early this year, inflation pressures are resurfacing (Figure 1.2.9). Less slack in production capacity and the labor market could translate into higher prices and wages. Strong job creation, alongside falling unemployment, is already strengthening workers' bargaining powers. In May, the German metal workers' union won a 4.1% rise, which may signal the beginning of broader wage increases. Robust monetary and credit growth over the past few years also remains a risk to longer-term price stability. At its 6 September meeting, the European Central Bank held its main policy rate at 4.0%. Given the strength of growth, further policy rate increases by the central bank are expected for the remainder of 2007, to keep inflation at bay.

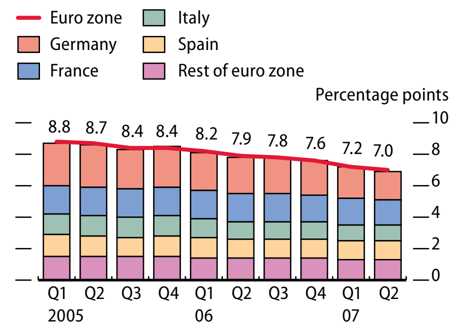
Fiscal sustainability remains a significant concern for the euro zone. Germany has made progress in this area with its January VAT increase, and Italy's efforts are also showing in its declining fiscal deficit figures. But with solid growth since mid-2005, which helped limit the rise in the government deficit-to-GDP ratio to under the 3.0% ceiling of the stability and growth pact, political pressures for greater welfare spending are rising. In France, proposed tax reforms—which include exempting overtime pay from income taxes, capping direct taxes at 50.0% of income, abolishing inheritance taxes, and making interest payments on home mortgages tax deductible—could push the fiscal deficit once more over the pact's ceiling.

The euro zone economy is expected to grow at 2.6% in 2007 and 2.4% in 2008. The outlook for consumption remains bright, with consumer confidence buoyant (Figure 1.2.10), average earnings rising, and the unemployment rate on a downward trend. In addition, proposed tax reforms in France could bolster consumption growth. A more expensive euro is affecting export performance and industrial production to a degree, but support from consumers is expected to sustain the growth momentum into 2008. Business investment should also advance at a healthy pace, given the strength of underlying demand and tightened production capacity. Although growth of industrial production has moderated, due mainly to slowing exports, a modest deceleration could be helpful for relaxing capacity constraints a little, thus easing the pressure exerted by monetary tightening.

World trade and commodity prices

After expansion of 10.2% in 2006, the volume of world trade moderated in the first half of 2007 as US demand slackened. But relatively brisk demand elsewhere continues to support world trade activity, with growth projected to reach 7.5% in 2007 (Table 1.2.1). While better than expected economic performance in the euro zone largely compensated

1.2.8 Contributions to unemployment, euro zone

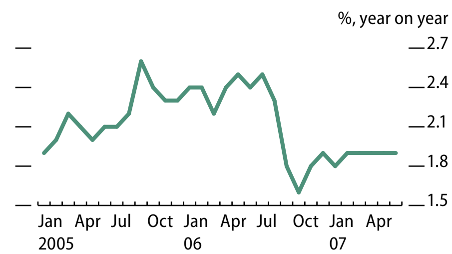


Note: Data for Italy through first quarter only.

Source: Eurostat, available: epp.eurostat.ec.europa.eu, downloaded 3 September 2007.

Click here for figure data

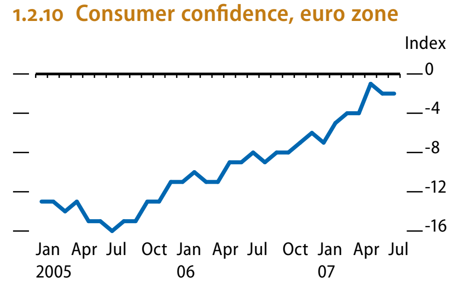
1.2.9 Inflation, euro zone



Source: Eurostat, available: epp.eurostat.ec.europa.eu, downloaded 31 August 2007.

Click here for figure data

1.2.10 Consumer confidence, euro zone



Source: European Commission, available: ec.europa.eu, downloaded 31 August 2007.

Click here for figure data

for softer demand in Japan and the US, economies in developing parts of the world continued to power ahead. The PRC registered another record in the rate of growth of industrial production, as its exports to Europe rose by more than 30% year on year in the first half of 2007. With the PRC playing a leading role as an assembly, processing, and reexporting hub, and with tight backward linkages to the rest of developing Asia, regional partners' exports to the PRC again rose strongly.

A weakening in US high-tech equipment demand, however, took a toll on industrial production across East and Southeast Asia (apart from the PRC). Growth in worldwide sales of semiconductors, a proxy for global high-tech sales, declined to 2.1% in the first 6 months of 2007 compared with 8.7% in the same period of 2006, as shipments to the US contracted by 8.8%. Growth of semiconductor sales in the Asia-Pacific region also fell by more than half to 5.9%, comparing the two periods. Monthly growth of semiconductor sales (in 3-month moving average terms) shows that the downward trend may not yet be over (Figure 1.2.11). The book-to-bill ratio (also in 3-month moving average terms), an indicator of orders vis-à-vis deliveries that precedes global activity by 6–9 months, has also slid for two consecutive months, to 0.84 in July, implying that the slump could stretch further through the rest of the year and into early 2008.

Falling unit prices have accelerated the downswing in the global high-tech industry. Prices of major memory chip units, such as dynamic random access memory (DRAM), have tumbled on fierce global competition and excess inventories (Figure 1.2.12). A rapid expansion in manufacturing capacity over the past few years has contributed to a buildup in inventories. While falling chip prices are weighing down revenue growth, inventory adjustments in the high-tech industry have squeezed production. Reflecting persistent price declines, the Semiconductor Industry Association sharply revised down its 2007 forecast for global semiconductor sales growth to 1.8% in June, from its February projection of 10%.

Global oil prices have risen again, on robust demand and renewed supply interruptions. Benchmark Brent crude, having stabilized at about $60 per barrel in the first quarter of 2007 from last year's peak of nearly $80, hit almost $80 per barrel in early September on the back of supply concerns arising from lower than expected US inventory levels, and severe weather disturbances. Oil demand has been driven in part by strong demand from the PRC and India, and in part by better than expected global economic performance. But the supply side has seen

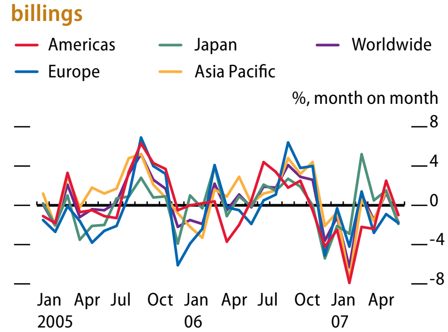
1.2.1 Baseline assumptions for external conditions, 2005–2008

	2005 Actual	2006 Actual	2007 *ADO 2007*	2007 *Update*	2008 *ADO 2007*	2008 *Update*
GDP growth (%)						
Industrial countries[a]	2.3	2.7	2.3	2.2	2.6	2.5
United States	3.1	2.9	2.5	1.9	3.0	2.6
Euro zone	1.5	2.7	2.2	2.6	2.1	2.4
Japan	1.9	2.2	2.0	2.1	2.3	2.2
Memorandum items						
US Federal Funds rate (%, average)	3.2	5.0	5.1	5.2	4.9	4.7
Brent crude oil spot prices ($ per barrel, annual average)	54.4	65.4	57.0	64.0	54.0	65.0
Nonfuel commodity prices (% change)[b]	13.4	24.7	-4.5	12.4	-8.4	-3.0
CPI inflation (OECD, annual average)	2.5	2.6	2.1	1.9	2.0	2.0
World trade volume (% increase)	7.6	10.2	7.5	7.5	8.0	8.0

[a] Growth rates for industrial countries are a GDP-weighted average for the US, euro zone, and Japan.
[b] World Bank's non-oil commodity price index.

Sources: US Bureau of Economic Analysis, available: www.bea.gov, downloaded 31 August 2007; Economic and Social Research Institute of Japan, available: www.esri.cao.go.jp, downloaded 10 September 2007; Eurostat, available: epp.eurostat.ec.europa.eu, downloaded 5 September 2007; CEIC Data Company Ltd., downloaded 31 August 2007; World Bank, *Commodity Price Data (Pink Sheet)*, available: www.worldbank.org, downloaded 7 September 2007; Organisation for Economic Co-operation and Development, *Main Economic Indicators*, available: www.oecd.org, downloaded 31 August 2007; World Bank, *Prospects for the Global Economy—Forecast Summary*, available: www.worldbank.org, downloaded 31 August 2007; staff estimates.

1.2.11 Growth in global semiconductor billings



Source: Semiconductor Industry Association, available: www.sia-online.org, downloaded 31 August 2007.

Click here for figure data

little change: the Organization of the Petroleum Exporting Countries (OPEC) has cut output to meet its lower quotas, set in February this year, while growth from non-OPEC countries has been sluggish due to delays in production from new projects. Tighter market conditions have been further aggravated by supply disruptions in Iraq and Nigeria, and persistent geopolitical uncertainties on oil supply. The Brent crude oil price is projected to stay elevated at over $70 per barrel for the remainder of 2007 and 2008, on the basis of current futures prices (Figure 1.2.13).

Prices of non-oil commodities advanced further (Figure 1.2.14). Metals and minerals prices continued to register double-digit growth rates, rising by 21.3% in the first 8 months of the year. Strong demand from industry and supply disruptions (in some cases) contributed to significant gains in nickel, tin, and lead. Nickel prices soared, rising by 103.9% to end-August, mainly attributed to swelling demand for stainless steel (particularly in the PRC), since about two thirds of global nickel output is used in its manufacture.

Agricultural food prices also surged, led by fats, oilseeds, and grains. Heavy demand from the PRC and India, combined with weather-related supply shortfalls, sent wheat, soybeans and oil, palm oil, and coconut oil prices higher from early this year. Rising (crude) oil prices also reignited demand for biofuels, lifting prices of soybeans and maize. This has resulted in rising costs of feeds, trickling down to higher costs of beef, pork, and poultry, as well as of cooking oil. Higher prices of soybeans and maize have also encouraged farmers to switch to planting them instead of grains, thus pushing grain prices higher.

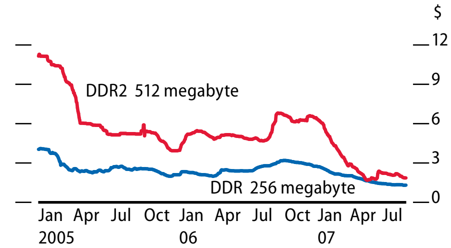
These developments in non-oil commodity markets call for a reassessment of *ADO 2007*'s price projections. Non-oil commodity prices are now seen increasing by 12.4% in 2007. But the prospect of moderating demand from the PRC, together with improving supply conditions, is starting to ease price pressures. Having, it seems, peaked this year, non-oil commodity prices are expected to stabilize gradually over the course of 2008.

Capital flows and financial markets

Developing Asia's financial markets tumbled in August amid concerns over US subprime mortgages and spreading global credit fears. With the notable exception of the PRC, in Asia most equities skidded, credit risk spreads widened, and currencies faltered. Despite this apparently high vulnerability of the region's financial markets to global turbulence, strong growth and generally sound macroeconomic fundamentals are helping the region restore calm to financial markets with relative ease. Asian shares are already bouncing back, limiting the losses from the market sell-off.

The environment for external funding remains broadly positive. On the back of a robust growth outlook, developing Asian markets have attracted heavy private capital inflows. In 2006, net private flows reached an all-time high of $254.5 billion (Figure 1.2.15). Although the pace of equity investment flows has eased (mainly due to a slowdown in offshore issuance of initial public offerings by PRC corporations in response to government efforts to stem investment), net private debt inflows have

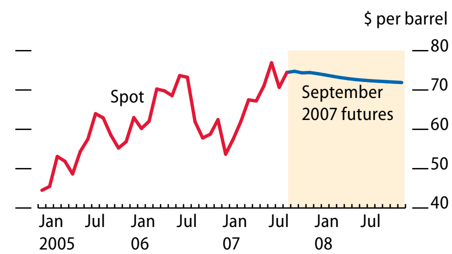
1.2.12 Selected DRAM prices



DRAM = dynamic random access memory; DDR = double data rate.

Source: Bloomberg, downloaded 5 September 2007.

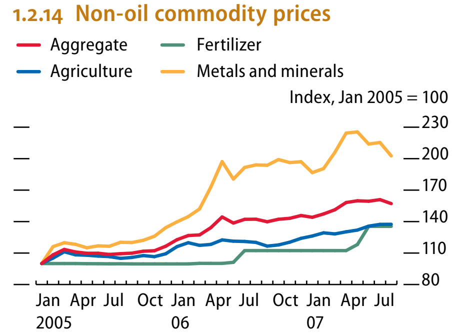
1.2.13 Brent spot and forward prices



Sources: Energy Information Administration, available: www.eia.gov; FutureSource.com, available: www.futuresource.com; both downloaded 10 September 2007.

Click here for figure data

1.2.14 Non-oil commodity prices



Source: World Bank *Commodity Price Data (Pink Sheet)*, various issues, available: www.worldbank.org, downloaded 7 September 2007.

Click here for figure data

been climbing. While the repricing of credit risks triggered by the recent financial ferment is likely to slow credit inflows to the region, this may in fact help in mitigating the risk of overheating in some of developing Asia's asset markets.

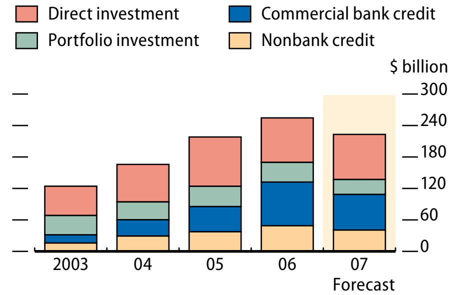
Sovereign credit spreads have widened in the wake of the US subprime turmoil (Figure 1.2.16). Heightened financial volatility and a sharp reversal in risk appetite—together with elevated funding costs—are expected to narrow external funding opportunities for Asian borrowers. But with ample current account surpluses and large foreign reserve holdings, they have less need of external funding. Despite continued low funding costs, the region's strong fiscal position has slowed new issuance of sovereign debt over the past few years.

In fact, many of the larger developing economies in the region have started to invest abroad. The PRC Government has relaxed regulations and granted incentives to targeted industries, encouraging a surge in outward direct investment. India's outward direct investment has also climbed rapidly, to $9.7 billion in 2006 from only $1.8 billion in 2005, as firms have established production, manufacturing, and distribution operations elsewhere.

Robust export growth, along with continued capital inflows, has lifted foreign reserve holdings held by developing Asia's central banks. In the first half of 2007, their reserve accumulation amounted to $360.1 billion, or almost 40% of the worldwide total (see also Box 1.1.2.). Led by the People's Bank of China, all major Asian central banks have reserve holdings that can cover their country's short-term external obligations, even under the most stringent standards for reserve adequacy.

Although the risk of repercussions from the subprime and credit turbulence seriously affecting growth cannot be ruled out, developing Asia's reduced external funding requirements and improved economic fundamentals are expected to buffer impacts. Price adjustments in these markets have been in line with ongoing corrections globally, and have broadly tracked those in both mature and other emerging markets. This resilience reflects robust growth, low inflation, and sound fiscal and external positions.

1.2.15 Net private flows to Asia-Pacific

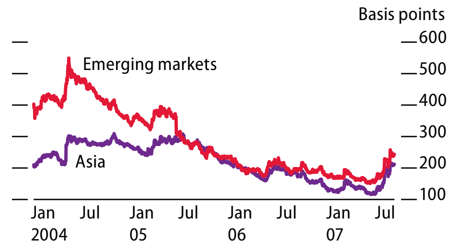


Note: Asia-Pacific consists of People's Rep. of China; Hong Kong, China; India; Indonesia; Rep. of Korea; Malaysia; Pakistan; Philippines; Taipei,China; and Thailand.

Source: The Institute of International Finance, Inc., *Capital Flows to Emerging Market Economies*, various issues, available: www.iif.com, downloaded 31 August 2007.

Click here for figure data

1.2.16 Sovereign credit spreads, emerging markets including Asia



Source: Bloomberg, downloaded 3 September 2007.