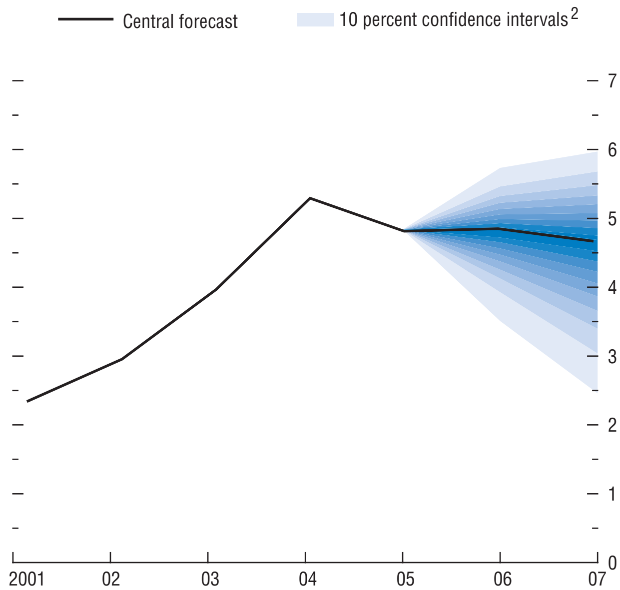
CHAPTER I ECONOMIC PROSPECTS AND POLICY ISSUES

Notwithstanding higher oil prices and natural disasters, global growth has continued to exceed expectations, aided by benign financial market conditions and continued accommodative macroeconomic policies. Looking forward, the baseline forecast is for continued strong growth, although—as illustrated in Figure 1.1—risks remain slanted to the downside, the more so since key vulnerabilities—notably the global imbalances—continue to increase. With the risks associated with inaction rising with time, the principal challenge for global policymakers is to take advantage of the unusually favorable conjuncture to address these vulnerabilities. In particular, an orderly resolution of global imbalances will require measures to facilitate a rebalancing of demand across countries and a realignment of exchange rates over the medium term, with the U.S. dollar needing to depreciate significantly from current levels, and currencies in surplus countries—including in parts of Asia and among oil producers—to appreciate.

The momentum and resilience of the global economy in 2005 continued to exceed expectations (Table 1.1 and Figure 1.2). Despite higher oil prices and natural disasters, activity in the second half of 2005 was stronger than earlier projected, particularly among emerging market countries; accounting also for statistical revisions in China,[1] global GDP growth is estimated at 4.8 percent, 0.5 percentage point higher than projected last September. At the same time, incoming data have been generally positive. Global industrial production has picked up markedly from mid-2005; the services sector

Figure 1.1. Prospects for World GDP Growth[1]
(Percent)

Global growth is projected to remain about 4¾ percent in 2006 and 2007, but the risks are slanted to the downside, the more so as time progresses (see text for a detailed discussion).



Source: IMF staff estimates.
[1]This so-called fan chart shows the uncertainty around the *World Economic Outlook* central forecast with the 90 percent probability interval. See Box 1.3 for details.
[2]Shaded areas of the same gradient above and below the central forecast add up to 10 percent.

[1]Following recent revisions to Chinese national accounts data, its share of global GDP (measured on a purchasing power parity, or PPP, basis) increased by 1½ percentage points to 15.4 percent. Since China's growth has been relatively high, this has raised global GDP growth by 0.1 percentage point in almost every year since 1992 (see Box 1.6).

Table 1.1. Overview of the *World Economic Outlook* Projections

(Annual percent change unless otherwise noted)

			Current Projections		Difference from September 2005 Projections	
	2004	2005	2006	2007	2006	2007
World output	**5.3**	**4.8**	**4.9**	**4.7**	**0.6**	**0.3**
Advanced economies	3.3	2.7	3.0	2.8	0.2	–0.2
United States	4.2	3.5	3.4	3.3	0.2	–0.3
Euro area	2.1	1.3	2.0	1.9	0.2	–0.3
Germany	1.6	0.9	1.3	1.0	0.1	–0.5
France	2.1	1.4	2.0	2.1	0.3	–0.4
Italy	0.9	0.1	1.2	1.4	–0.2	–0.3
Spain	3.1	3.4	3.3	3.2	0.3	0.2
Japan	2.3	2.7	2.8	2.1	0.8	0.5
United Kingdom	3.1	1.8	2.5	2.7	0.3	–0.1
Canada	2.9	2.9	3.1	3.0	–0.2	–0.2
Other advanced economies	4.6	3.7	4.1	3.7	0.2	–0.3
Newly industrialized Asian economies	5.8	4.6	5.2	4.5	0.5	–0.6
Other emerging market and developing countries	7.6	7.2	6.9	6.6	0.8	0.7
Africa	5.5	5.2	5.7	5.5	–0.1	0.6
Sub-Sahara	5.6	5.5	5.8	5.7	–0.1	0.5
Central and eastern Europe	6.5	5.3	5.2	4.8	0.7	0.2
Commonwealth of Independent States	8.4	6.5	6.0	6.1	0.3	0.6
Russia	7.2	6.4	6.0	5.8	0.8	0.8
Excluding Russia	11.1	6.7	6.0	6.6	–0.8	–0.1
Developing Asia	8.8	8.6	8.2	8.0	1.0	0.8
China	10.1	9.9	9.5	9.0	1.3	1.0
India	8.1	8.3	7.3	7.0	1.0	0.5
ASEAN-4	5.8	5.2	5.1	5.7	–0.4	–0.1
Middle East	5.4	5.9	5.7	5.4	0.6	0.6
Western Hemisphere	5.6	4.3	4.3	3.6	0.5	0.1
Brazil	4.9	2.3	3.5	3.5	—	—
Mexico	4.2	3.0	3.5	3.1	—	—
Memorandum						
European Union	2.5	1.8	2.4	2.3	0.2	–0.2
World growth based on market exchange rates	4.0	3.4	3.6	3.4	0.4	0.1
World trade volume (goods and services)	**10.4**	**7.3**	**8.0**	**7.5**	**0.6**	**0.5**
Imports						
Advanced economies	8.9	5.8	6.2	5.6	0.4	–0.1
Other emerging market and developing countries	15.8	12.4	12.9	11.9	1.0	1.3
Exports						
Advanced economies	8.5	5.3	6.6	6.1	0.3	0.2
Other emerging market and developing countries	14.6	11.5	10.9	10.3	0.6	1.0
Commodity prices (U.S. dollars)						
Oil[1]	30.7	41.3	14.8	2.9	0.9	5.7
Nonfuel (average based on world commodity export weights)	18.5	10.3	10.2	–5.5	12.3	–1.1
Consumer prices						
Advanced economies	2.0	2.3	2.3	2.1	0.3	0.1
Other emerging market and developing countries	5.7	5.4	5.4	4.8	–0.4	–0.4
London interbank offered rate (percent)[2]						
On U.S. dollar deposits	1.8	3.8	5.0	5.1	0.5	0.5
On euro deposits	2.1	2.2	3.0	3.4	0.6	0.7
On Japanese yen deposits	0.1	0.1	0.3	0.9	0.1	0.4

Note: Real effective exchange rates are assumed to remain constant at the levels prevailing during February 9–March 9, 2006. See Statistical Appendix for details and groups and methodologies.

[1]Simple average of spot prices of U.K. Brent, Dubai, and West Texas Intermediate crude oil. The average price of oil in U.S. dollars a barrel was $53.35 in 2005; the assumed price is $61.25 in 2006, and $63.00 in 2007.

[2]Six-month rate for the United States and Japan. Three-month rate for the euro area.

remains resilient; global trade growth is close to double-digit levels; consumer confidence and labor market conditions are strengthening; and forward-looking indicators, notably business confidence, have risen (Figure 1.3).

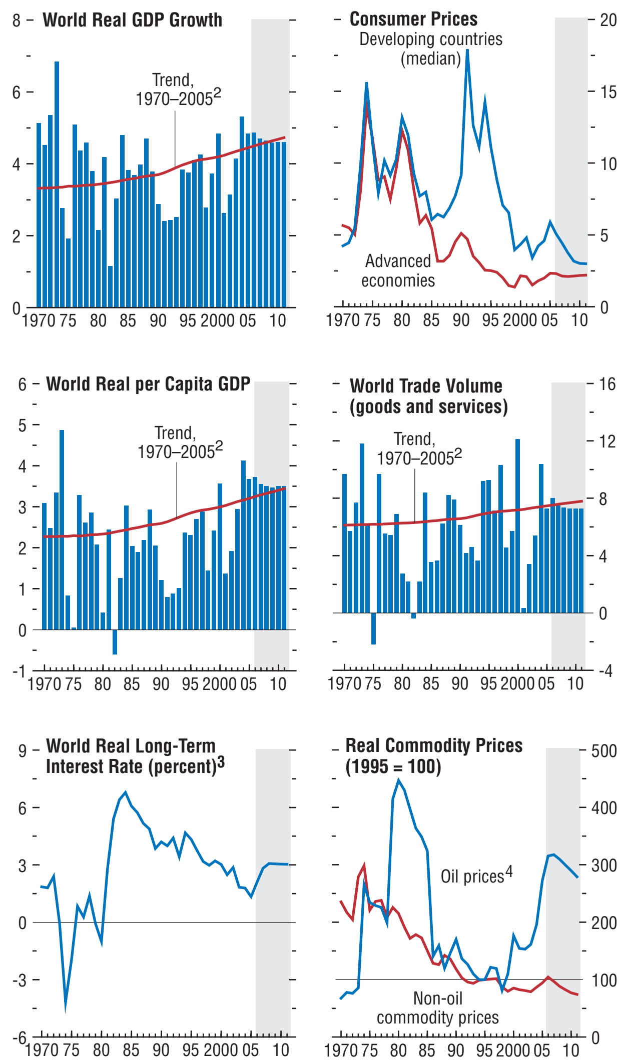
From a regional perspective, the expansion is becoming more broadly based. Among industrial countries, despite a weak fourth quarter, the United States remains the main engine of growth, but the Japanese expansion is well established, and there are signs of a more sustained recovery in the euro area, although domestic demand growth remains subdued. Growth in most emerging and developing countries remains solid, with the buoyancy of activity in China, India, and Russia—which together accounted for two-thirds of the upward revision to global growth in 2005 relative to that expected at the time of the September 2005 *World Economic Outlook*—being particularly striking. Consistent with the strength of corporate profits and improved balance sheets, investment in major industrial countries appears to be picking up, although—with some exceptions, most importantly China—less so in emerging market countries, including many in Asia.

Oil prices remain high and volatile. After easing from Katrina-related highs, crude oil prices fluctuated in the range of \$60–66 per barrel[2] over the past three months, with comfortable inventory levels—particularly in the United States—counterbalancing rising geopolitical uncertainties in the Islamic Republic of Iran and in Iraq and threats to oil production in Nigeria. With crude oil consumption somewhat lower than expected in 2005, prices are being increasingly driven by concerns about future supply, with the International Energy Agency assessing both upstream and downstream investment to be significantly below desirable levels (see Appendix 1.1); futures markets suggest prices will remain close to current levels for the fore-

[2]The oil price used in the *World Economic Outlook* is a simple average of the spot prices for West Texas Intermediate, U.K. Brent, and Dubai crudes.

Figure 1.2. Global Indicators[1]
(Annual percent change unless otherwise noted)

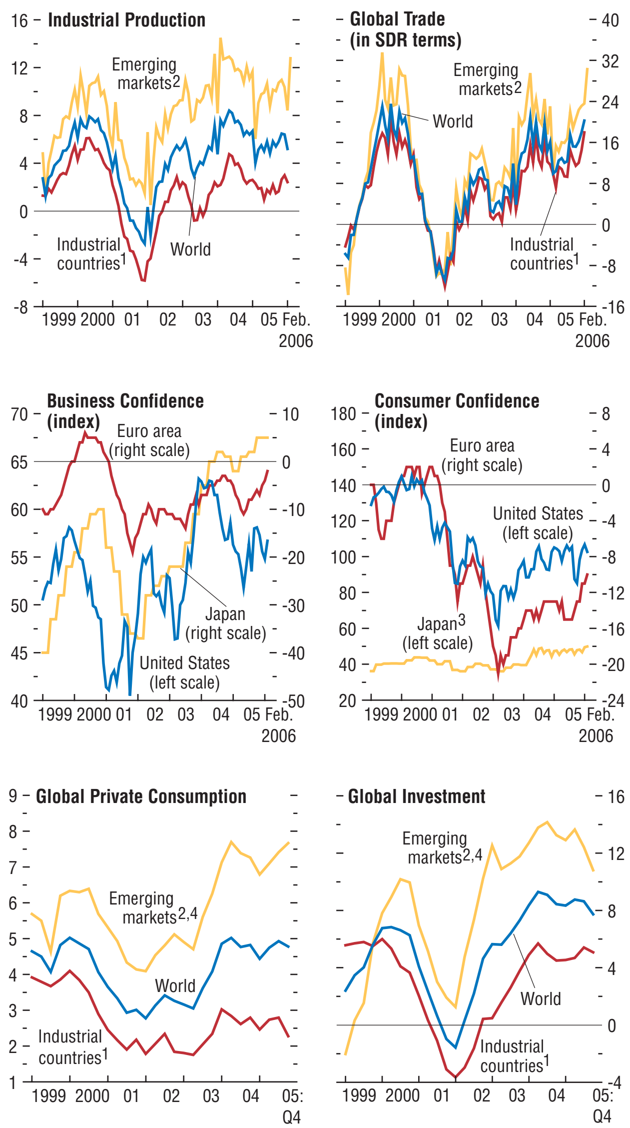
Global growth remains noticeably above the historical trend, while inflation and long-run interest rates are unusually low.



[1]Shaded areas indicate IMF staff projections. Aggregates are computed on the basis of purchasing-power-parity (PPP) weights unless otherwise noted.
[2]Average growth rates for individual countries, aggregated using PPP weights; the aggregates shift over time in favor of faster-growing countries, giving the line an upward trend.
[3]GDP-weighted average of the 10-year (or nearest maturity) government bond yields less inflation rates for the United States, Japan, Germany, France, Italy, the United Kingdom, and Canada. Excluding Italy prior to 1972.
[4]Simple average of spot prices of U.K. Brent, Dubai Fateh, and West Texas Intermediate crude oil.

Figure 1.3. Current and Forward-Looking Indicators
(Percent change from a year ago unless otherwise noted)

Global industrial production has turned up, while business and consumer confidence are generally improving.



Sources: Business confidence for the United States, the Institute for Supply Management; for the euro area, the European Commission; and for Japan, Bank of Japan. Consumer confidence for the United States, the Conference Board; for the euro area, the European Commission; and for Japan, Cabinet Office; all others, Haver Analytics.

[1] Australia, Canada, Denmark, euro area, Japan, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States.

[2] Argentina, Brazil, Bulgaria, Chile, China, Colombia, Czech Republic, Estonia, Hong Kong SAR, Hungary, India, Indonesia, Israel, Korea, Latvia, Lithuania, Malaysia, Mexico, Pakistan, Peru, the Philippines, Poland, Romania, Russia, Singapore, Slovak Republic, Slovenia, South Africa, Taiwan Province of China, Thailand, Turkey, Ukraine, and Venezuela.

[3] Japan's consumer confidence data are based on a diffusion index, where values greater than 50 indicate improving confidence.

[4] Data for China, India, Pakistan, and Russia are interpolated.

seeable future. Nonfuel commodity prices—particularly metals—rose strongly in 2005, reflecting both cyclical and supply-side factors, but are projected to moderate in 2006–07 as supply responds to higher prices. The semiconductor cycle has also turned up, particularly in Asia, and while forward-looking indicators are mixed and prices continue to decline, industry analysts expect some pickup in revenue growth in 2006.

Global financial market conditions remain very favorable, characterized by unusually low risk premiums and volatility.[3] Global short-term interest rates have continued to rise, led by the United States. With tightening cycles in the euro area and Japan less advanced or yet to begin, short-term interest rate differentials have widened considerably (Figure 1.4). Despite some recent increase, long-run interest rates remain below average, and the yield curve has flattened, the more so in the most cyclically advanced countries. Interest rate spreads—in both industrial countries and emerging markets—remain close to historic lows (Figure 1.5), reflecting both improved fundamentals but also a search for yield in an environment of easy liquidity, accompanied by buoyant inflows to emerging markets (Table 1.2), with many having already prefinanced their borrowing needs for 2006. Given this favorable environment, equity prices have risen significantly, particularly outside the United States, with some markets looking increasingly richly valued; property prices have been more diverse, although signs of a slowdown have increased in some cyclically advanced countries, notably the United States.

The flattening of the yield curve has raised questions about the durability of the current expansion, particularly in the United States. Certainly, there is a considerable body of evidence supporting the view that a flatter yield curve is a leading indicator of an economic slowdown, although the relationship has weakened

[3] See the April 2006 *Global Financial Stability Report* for a detailed discussion.

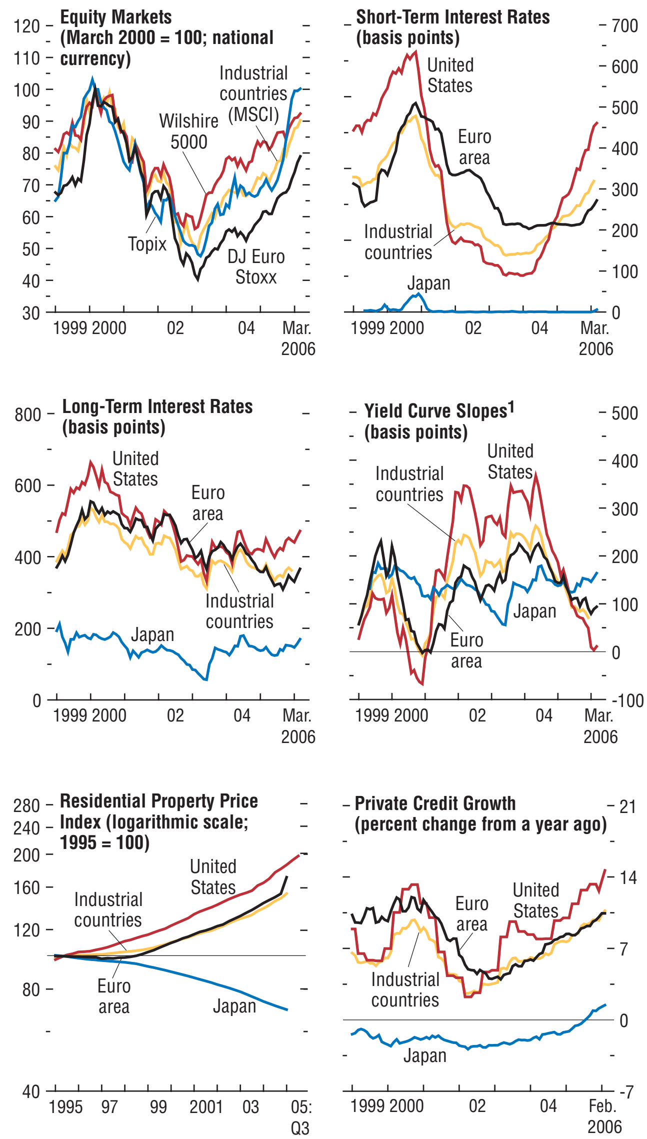
noticeably since the 1980s. However, the yield curve is only one such indicator, and others—such as equity markets and credit spreads—do not suggest a slowdown (indeed, the OECD's aggregate measure of leading indicators, which includes the yield curve slope, is rising both in the United States and elsewhere). More generally, the interpretation of the flattening of the yield curve is clearly related to the factors causing the unusually low level of long-run interest rates (see Box 1.1, p. 20), and how they will evolve over time. In this regard, as discussed below, the future behavior of the corporate sector, which is presently accumulating record net savings, appears of particular importance.

Within this favorable environment, beyond the continuing strength of oil prices, three features are particularly striking:

- *The U.S. current account deficit has continued to rise, matched by large surpluses in oil exporters, China and Japan, a number of small industrial countries, and other parts of emerging Asia.* That said, partly reflecting favorable short-run interest rate differentials, as well as high net savings in corporates, oil exporters, and much of Asia, financing has not been a problem; indeed, the U.S. dollar appreciated somewhat in trade-weighted terms during 2005, with depreciations against many emerging market currencies offset by appreciations against the euro and yen (Figure 1.6). Despite the record current account deficit, initial estimates suggest that the U.S. net investment position deteriorated only moderately as—for the fourth year in succession—the United States benefited from favorable valuation changes. In contrast to previous years, these stemmed not from U.S. dollar depreciation, but rather the relatively low rate of price increase of U.S. equities relative to the rest of the world.
- *Inflationary pressures remain surprisingly modest.* Global headline inflation has picked up in response to higher oil prices, but core inflation has been little affected (Figure 1.7) and inflationary expectations remain well grounded. This has raised questions as to whether low inflation reflects deflationary

Figure 1.4. Developments in Mature Financial Markets

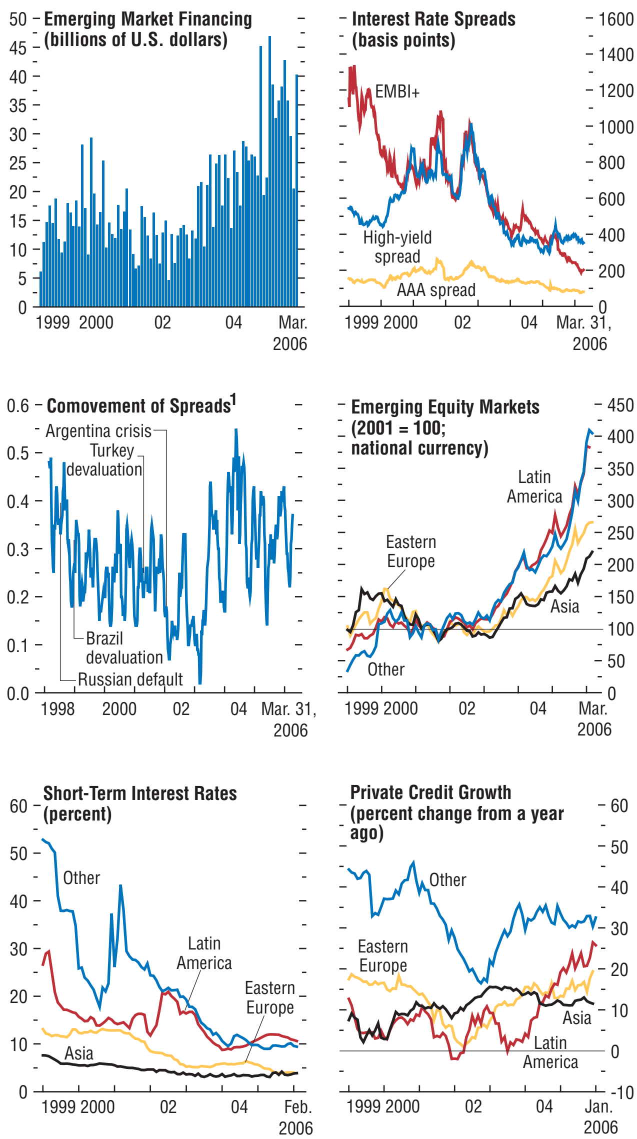
While short-term interest rates have generally risen, long-run interest rates have increased more modestly, resulting in a marked flattening of the yield curve.



Sources: Bloomberg Financial Markets, LP; OECD; national authorities; and IMF staff calculations.
[1]Ten-year government bond minus three-month treasury bill rate.

Figure 1.5. Emerging Market Financial Conditions

Emerging market spreads—and borrowing costs—remain unusually low, accompanied by buoyant capital inflows. In some regions, rapid credit growth and soaring equity markets pose potential risks.



Sources: Bloomberg Financial Markets, LP; Capital Data; and IMF staff calculations.
[1]Average of 30-day rolling cross-correlation of emerging market debt spreads.

pressures from other sources, notably globalization—the theme of this issue of the *World Economic Outlook*—or whether there is a danger that the inflationary impact has simply been postponed. The analysis in Chapter III, "How Has Globalization Affected Inflation?" concludes that while globalization has reduced the sensitivity of inflation to domestic capacity constraints, the direct impact of globalization on inflation has generally been quite small, except in several periods of excess global capacity when import prices suddenly plunged. In the current environment of strong global growth and diminishing excess capacity, the restraining effect of declining import prices has faded. Indeed, a cyclical upturn in import prices could contribute to stronger inflation pressures going forward, which monetary policymakers will need to remain vigilant against.

- *Emerging markets and corporations remain—highly unusually—large net savers, contributing to low long-term interest rates.* In the emerging markets, as discussed in the last *World Economic Outlook*, this primarily reflects a combination of low investment and—increasingly—buoyant oil revenues. Chapter IV of this *World Economic Outlook*, "Awash With Cash: Why Are Corporate Savings So High?," finds that record Group of Seven (G-7) corporate surpluses reflect a combination of lower tax and interest payments and low nominal investment; surprisingly, underlying profitability has barely changed. This surplus has been partly used to buy back equities, restructure debt, and build up liquid assets. While it is commonly argued that this mainly reflects a reaction to the high debt and excess investment in the late 1990s, Chapter IV argues that the underlying reasons are considerably more diverse. With some of these clearly temporary in nature, the current situation is unlikely to be sustained, suggesting that changing corporate behavior will start to put upward pressure on interest rates going forward.

Against this background, global GDP growth is projected at 4.9 percent in 2006, 0.6 percentage point higher than expected last September,

Table 1.2. Emerging Market and Developing Countries: Net Capital Flows[1]
(Billions of U.S. dollars)

	1995–97	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total											
Private capital flows, net[2]	204.8	66.2	80.8	74.3	75.6	97.3	160.4	230.6	254.0	178.8	153.8
Private direct investment, net	120.3	159.0	177.6	167.5	180.3	149.5	157.5	184.3	212.3	220.6	217.5
Private portfolio flows, net	71.0	42.9	72.7	17.6	–70.6	–78.6	–3.7	34.5	38.5	–4.7	–3.2
Other private capital flows, net	13.5	–135.7	–169.5	–110.8	–34.1	26.5	6.6	11.8	3.2	–37.1	–60.5
Official flows, net	6.8	52.3	26.4	–46.0	–0.1	9.0	–61.5	–81.5	–138.6	–161.3	–163.6
Change in reserves[3]	–103.9	–29.5	–101.3	–128.3	–128.1	–194.7	–351.6	–515.4	–580.2	–584.2	–562.3
Memorandum											
Current account[4]	–88.3	–49.6	42.9	128.6	90.5	138.5	229.4	310.5	511.2	576.5	569.8
Africa											
Private capital flows, net[2]	4.1	7.6	9.0	—	5.7	4.9	4.6	13.0	30.4	16.6	21.1
Private direct investment, net	4.3	6.3	8.6	7.6	23.0	13.3	14.9	15.1	23.2	21.5	21.3
Private portfolio flows, net	4.8	4.3	9.1	–1.8	–7.6	–0.9	0.1	5.5	4.5	5.3	5.4
Other private capital flows, net	–4.9	–3.0	–8.7	–5.8	–9.6	–7.5	–10.4	–7.7	2.7	–10.2	–5.6
Official flows, net	0.3	5.3	3.8	2.7	–0.5	4.3	3.7	1.8	–6.6	3.2	4.2
Change in reserves[3]	–6.3	3.6	–0.4	–12.8	–9.8	–5.7	–11.4	–33.0	–42.1	–46.3	–54.7
Central and eastern Europe											
Private capital flows, net[2]	27.1	27.2	37.0	39.7	11.6	53.5	52.3	71.0	108.2	94.7	84.4
Private direct investment, net	11.7	19.3	22.8	24.2	24.2	25.6	16.6	34.0	41.3	41.3	39.7
Private portfolio flows, net	4.5	–1.3	5.7	3.2	0.5	1.8	6.1	27.4	28.8	27.2	25.0
Other private capital flows, net	10.9	9.1	8.6	12.3	–13.1	26.1	29.5	9.7	38.1	26.2	19.7
Official flows, net	0.3	1.0	–2.6	1.8	5.9	–7.7	–5.3	–6.8	–8.5	–2.7	–2.6
Change in reserves[3]	–15.6	–9.3	–11.9	–6.6	–4.4	–20.3	–12.4	–14.3	–41.0	–25.5	–12.7
Commonwealth of Independent States[5]											
Private capital flows, net[2]	14.4	–1.5	–13.1	–27.3	6.3	16.1	16.7	8.0	24.9	–13.7	–21.3
Private direct investment, net	4.6	5.6	4.7	2.3	5.0	5.2	5.4	13.7	5.2	2.8	3.5
Private portfolio flows, net	16.9	7.8	–0.9	–10.0	–1.2	0.4	–0.5	5.7	1.0	–5.1	–5.3
Other private capital flows, net	–7.1	–14.9	–16.9	–19.7	2.4	10.6	11.8	–11.4	18.7	–11.4	–19.6
Official flows, net	–1.1	1.7	–2.1	–6.3	–5.2	–10.7	–8.6	–7.7	–15.5	–3.7	–4.6
Change in reserves[3]	–1.3	12.7	–6.2	–20.4	–12.9	–16.2	–31.7	–56.0	–75.2	–88.0	–76.8
Emerging Asia[6]											
Private capital flows, net[2,7]	90.1	–53.8	3.1	6.5	19.6	20.8	63.5	120.3	53.8	55.2	51.6
Private direct investment, net	54.0	56.8	71.6	59.0	51.6	50.7	67.9	60.0	71.8	76.5	78.7
Private portfolio flows, net	20.6	8.8	56.9	20.2	–51.2	–59.9	4.4	3.8	–31.1	–24.5	–27.0
Other private capital flows, net[7]	15.4	–119.4	–125.4	–72.8	19.1	30.0	–8.8	56.4	13.1	3.3	–0.1
Official flows, net	–2.3	19.6	1.8	–11.7	–11.7	4.6	–17.6	1.8	5.0	–0.2	–10.4
Change in reserves[3]	–41.7	–53.1	–88.2	–53.7	–90.2	–148.8	–226.5	–340.1	–281.9	–302.2	–306.0

easing to 4.7 percent in 2007 (Figure 1.8). Continued headwinds from high oil prices are expected to be offset by a gradual pickup in investment, as increasing capacity constraints encourage corporates to reduce their net savings; very favorable financial market conditions; and continued accommodative macroeconomic policies (Figure 1.9). Looking across key countries and regions:

- In *industrial countries*, GDP growth in the *United States* is expected to moderate to 3.4 percent in 2006, still the highest among G-7 countries. Despite the surprisingly weak growth in the fourth quarter of 2005, incoming data suggest a relatively strong start to 2006, with a more abrupt slowdown in the housing market the most significant risk (see Box 1.2, p. 22). In *Japan*, activity picked up strongly in the fourth quarter while deflationary pressures continue to ease; risks are to the upside, especially if private consumption gains momentum in response to improving labor market conditions. Despite slowing fourth quarter growth, the expansion in the *euro area* also seems to be gaining some traction, although—with consumption remaining weak—it remains vulnerable to domestic and external shocks.

Table 1.2 *(concluded)*

	1995–97	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Middle East[8]											
Private capital flows, net[2]	4.0	15.6	0.2	5.5	9.2	4.1	7.9	12.2	11.4	–8.7	–10.1
Private direct investment, net	5.0	9.5	4.1	4.7	9.6	9.8	17.6	13.3	19.6	24.5	23.6
Private portfolio flows, net	–2.8	–2.3	0.7	3.3	–3.5	–5.1	–5.4	6.0	7.6	–11.5	–6.1
Other private capital flows, net	1.8	8.4	–4.6	–2.6	3.1	–0.6	–4.3	–7.1	–15.8	–21.7	–27.6
Official flows, net	4.3	10.5	19.0	–27.4	–14.9	—	–39.7	–63.6	–87.9	–148.8	–148.8
Change in reserves[3]	–13.9	8.3	–2.5	–32.1	–12.5	–1.4	–34.1	–47.7	–108.4	–72.9	–77.4
Western Hemisphere											
Private capital flows, net[2]	65.2	71.2	44.7	49.9	23.1	–2.1	15.5	6.0	25.2	34.6	28.1
Private direct investment, net	40.6	61.5	65.9	69.6	66.8	45.0	35.1	48.1	51.2	54.0	50.6
Private portfolio flows, net	27.2	25.6	1.3	2.6	–7.6	–14.9	–8.4	–13.9	27.6	3.9	4.8
Other private capital flows, net	–2.6	–15.9	–22.5	–22.3	–36.1	–32.2	–11.2	–28.1	–53.6	–23.4	–27.3
Official flows, net	5.2	14.2	6.4	–5.2	26.3	18.5	6.1	–7.1	–25.2	–9.2	–1.5
Change in reserves[3]	–25.2	8.4	7.9	–2.8	1.9	–2.2	–35.5	–24.3	–31.6	–49.2	–34.7
Memorandum											
Fuel exporters											
Private capital flows, net[2]	5.8	9.7	–23.2	–42.9	–1.3	10.7	12.9	5.4	4.9	–52.8	–60.6
Nonfuel exporters											
Private capital flows, net[2]	199.0	56.5	104.0	117.1	76.9	86.7	147.5	225.2	249.1	231.6	214.4

[1]Net capital flows comprise net direct investment, net portfolio investment, and other long- and short-term net investment flows, including official and private borrowing. In this table, Hong Kong SAR, Israel, Korea, Singapore, and Taiwan Province of China are included.
[2]Because of data limitations, "other private capital flows, net" may include some official flows.
[3]A minus sign indicates an increase.
[4]The sum of the current account balance, net private capital flows, net official flows, and the change in reserves equals, with the opposite sign, the sum of the capital account and errors and omissions. For regional current account balances, see Table 25 of the Statistical Appendix.
[5]Historical data have been revised, reflecting cumulative data revisions for Russia and the resolution of a number of data interpretation issues.
[6]Consists of developing Asia and the newly industrialized Asian economies.
[7]Excluding the effects of the recapitalization of two large commercial banks in China with foreign reserves of the Bank of China (US$45 billion), net private capital flows to emerging Asia in 2003 were US$108.5 billion while other private capital flows net to the region amounted to US$36.2 billion.
[8]Includes Israel.

- Activity in *emerging market and developing countries* remains very strong, with forecasts revised upwards in most countries and regions. In *emerging Asia*, GDP growth in both China and India has continued to surprise on the upside, driven by strong domestic demand and—in China—a rapidly rising current account surplus. Along with the recovery in information technology (IT), this has supported an acceleration in activity in the rest of the region, although investment growth has yet to pick up substantially. In *Latin America*, notwithstanding the slower pace of growth in larger economies, GDP growth remains solid, aided by booming commodity prices. While this has aided a notable reduction in debt ratios, political uncertainty remains a concern, and many countries remain vulnerable to an abrupt deterioration in the external environment. In the *Middle East* and *Commonwealth of Independent States*, rising oil prices continue to boost fiscal and external current accounts, with spending behavior generally more cautious than in past episodes of rising prices (see Chapter II, Box 2.1, "How Rapidly Are Oil Exporters Spending Their Revenue Gains?"). Inflationary pressures—while generally manageable—need to be carefully watched, and in some cases sharply rising asset prices pose risks. Elsewhere, GDP growth in *Emerging Europe* has proved resilient to higher oil prices, but high current account deficits and rapid credit growth in many countries remain central vulnerabilities.
- In the *poorest countries,* GDP growth in sub-Saharan Africa is estimated at 5.5 percent in 2005, rising to 5.8 percent in 2006—the highest in over three decades. Within this, the pickup owes much to surging growth in oil-producing countries as new capacity comes on

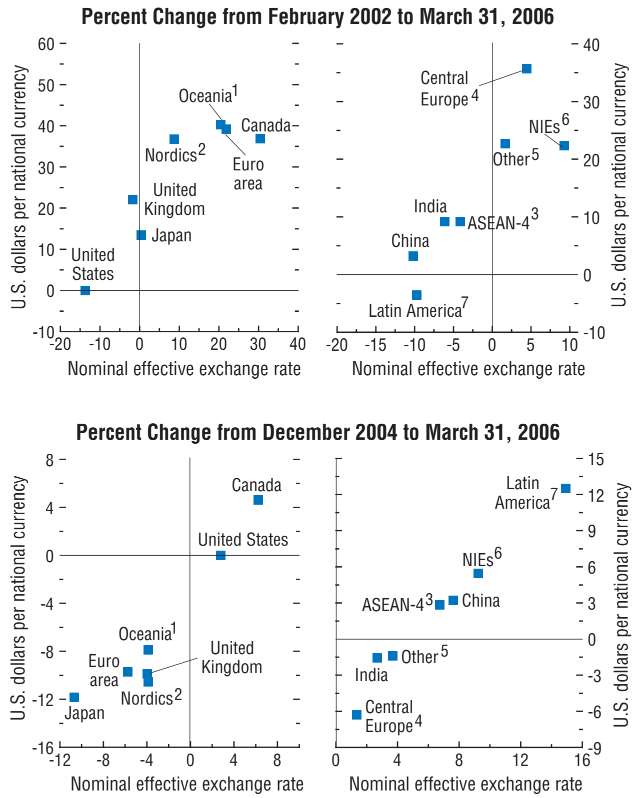
stream. Perhaps surprisingly, GDP growth in oil importers has slowed only modestly, reflecting both improved macroeconomic and structural policies and the offset from higher nonfuel commodity prices—particularly in metals producers—but also more limited energy price pass-through in 2005, as well as rising external aid. Notwithstanding the tendency for past IMF GDP growth forecasts for Africa to be overoptimistic (see Box 1.3, p. 24, on the accuracy of WEO forecasts), the upward trend in growth is encouraging, although achievement of the Millennium Development Goals remains far off. Donors now need to fully deliver on commitments for higher aid and debt relief, including ensuring that additional resources are indeed additional, and not offset by reductions in other forms of assistance; African countries must continue to strengthen policies and institutions to ensure that those resources—as well as those coming from higher oil and other commodities—are well used.

Looking forward, notwithstanding the greater-than-expected momentum in the global economy, a number of uncertainties remain. On the upside, corporates could run down their surpluses more rapidly than presently expected, either through higher investment or increased wages or dividends, although the impact would be partly offset by higher long-run interest rates. It is also possible that growth in some emerging market countries could continue to exceed expectations (although, particularly in China, this would also increase the risk of a more abrupt slowdown later on). But, overall, the balance of risks remains slanted to the downside, the more so as time progresses (Figure 1.1 and Box 1.3). There are four primary concerns, two of which are uncertainties related to the current conjuncture and two of which are of lower probability but potentially high-cost:

- *High and volatile oil prices.* To date, the impact of higher oil prices on the global economy has been more moderate than generally expected, in part because inflationary expectations have remained well anchored,

Figure 1.6. Global Exchange Rate Developments

The U.S. dollar appreciated moderately over the last year, with appreciations in emerging market currencies—especially Latin America and parts of emerging Asia—offset by depreciations of the yen and European currencies.

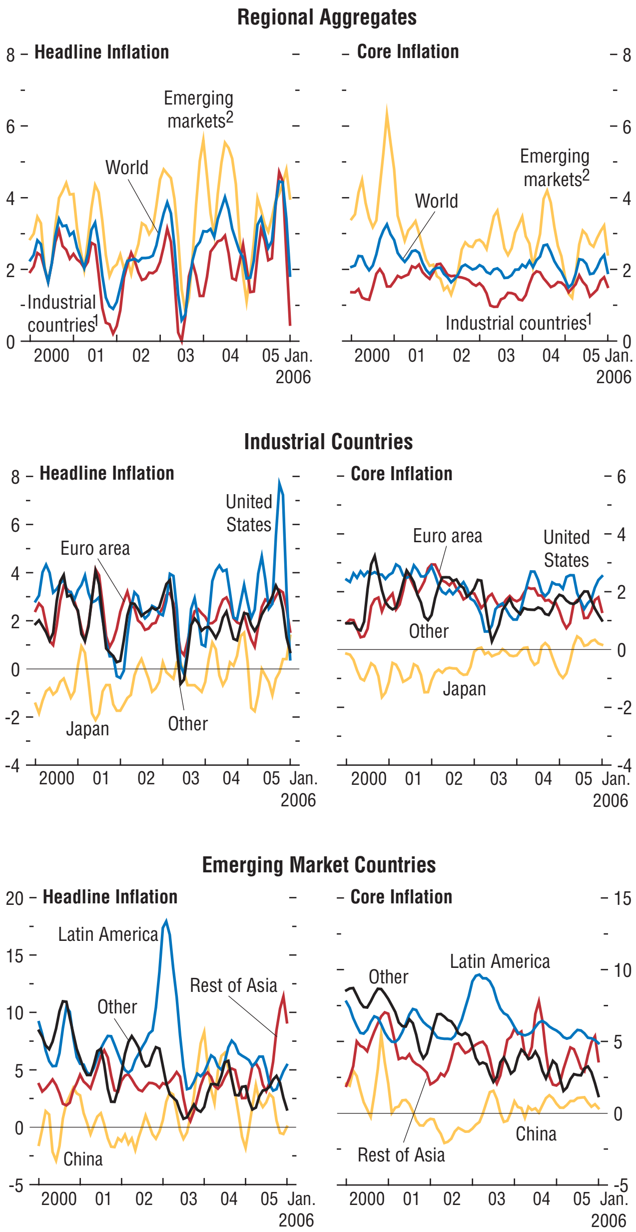


Sources: Bloomberg Financial Markets, LP; and IMF staff calculations.
[1] Australia and New Zealand.
[2] Denmark, Norway, and Sweden.
[3] Indonesia, Malaysia, the Philippines, and Thailand.
[4] Czech Republic, Hungary, and Poland.
[5] Russia, South Africa, and Turkey.
[6] Hong Kong SAR, Korea, Singapore, and Taiwan Province of China.
[7] Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.

Figure 1.7. Global Inflation

(Annualized percent change of three-month moving average over previous three-month average)

While headline inflation has increased with higher oil prices, core inflation has changed little.



Sources: Haver Analytics; and IMF staff calculations.

[1]Australia, Canada, Denmark, euro area, Japan, New Zealand, Norway, Sweden, the United Kingdom, and the United States.

[2]Brazil, Bulgaria, Chile, China, Estonia, India, Indonesia, Hong Kong SAR, Hungary, Korea, Malaysia, Mexico, Poland, Singapore, South Africa, Taiwan Province of China, and Thailand.

and the shock has been driven by strong global demand.[4] Looking forward, however, there are three reasons for concern. First, the full effects of the recent shock may not yet have been felt, especially if producers and consumers are still treating it as temporary, rather than largely permanent in nature. Second, with excess capacity still very low, the market remains vulnerable to shocks—indeed, with the recent increase in geopolitical uncertainties in the Middle East, options market data suggest risks are slanted to the upside, with a 15 percent probability of oil prices spiking above $80 per barrel by mid-2006. Third, with prices increasingly driven by supply-side concerns, the adverse impact is likely to be greater than in the recent past, especially if feed-through to core inflation increased. This would be of particular concern for oil-importing developing countries, which would not in these circumstances benefit from an offsetting rise in nonfuel commodity prices. This underscores the need for progress in improving the medium-term supply-demand balance in oil markets, including through eliminating obstacles to upstream and downstream investment; ensuring full pass-through to domestic oil prices accompanied by a suitable safety net for the poorest; strengthening conservation efforts; and last—but not least—improving oil market data. Such measures would also help reduce price volatility in the short term, by making markets less vulnerable to shocks.

- *A tightening in financial market conditions.* Current benign financial market conditions are partly due to strengthening fundamentals, but also reflect more temporary factors, including very easy monetary conditions and, related to that, the continuing search for yield. Over the coming two years, global short-term interest rates will rise further,

[4]See the September 2004 *World Economic Outlook*, pp. 64–65 for a detailed discussion.

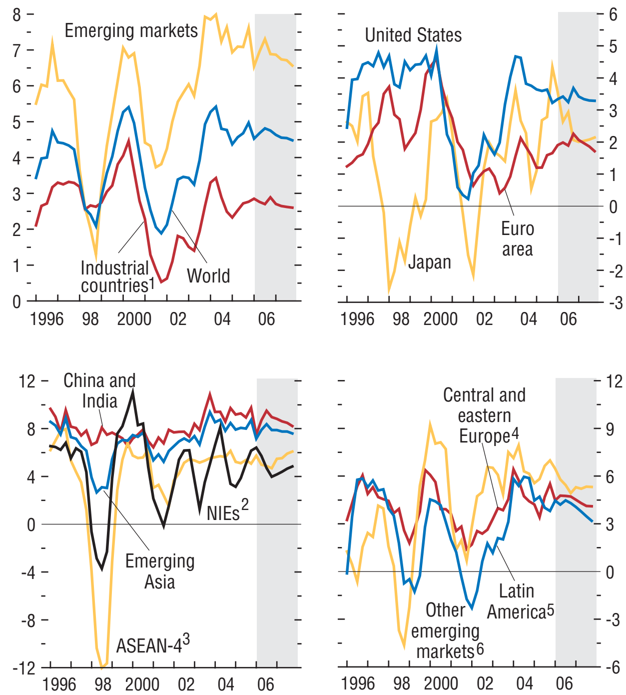
accompanied by significant changes in short-run interest differentials, as the tightening cycle in the United States reaches completion while those in the euro area—and, recently, Japan—become more advanced (see relevant country sections below); long-run interest rates are likely to rise further; and volatility and risk premiums may pick up. If the implications of the transition to more normal financial conditions are fully anticipated, its impact is likely to be moderate; if not, the effect could be considerably greater. As discussed in the April 2006 *Global Financial Stability Report*, financial institutions and markets seem relatively well placed to manage these changes, especially given the marked strengthening in their balance sheets in recent years; emerging market countries have also taken advantage of current conditions to improve debt structures, although some remain vulnerable to a deterioration in financing conditions. The greatest risks appear to lie in the household sector, particularly in countries where housing markets are elevated, especially since recent house price slowdowns have led to a noticeable slowing in private consumption and residential investment.

- *Rising global imbalances*. With the U.S. current account deficit being financed with little difficulty, and exchange rate movements relatively benign, there may be a temptation to put this issue on the back burner. But the fundamental arithmetic—that the U.S. current account deficit must ultimately fall substantially to stabilize its net investment position, while surpluses in other countries must fall—has not changed; and—as discussed in Chapter II, "Oil Prices and Global Imbalances"—higher oil prices are complicating the adjustment process. Looking forward, as described in detail in Box 1.4, p. 28, adjustment in the imbalances will in all circumstances require both a significant rebalancing of demand across countries, and a further substantial depreciation of the U.S. dollar and appreciations in surplus countries, notably in parts of Asia and oil producers; the issue is when and

Figure 1.8. Global Outlook

(Real GDP; percent change from four quarters earlier)

Following some slowing in the first half of 2005, global growth is expected to stabilize around 4¾ percent in 2006–07.



Sources: Haver Analytics; and IMF staff estimates.

[1]Australia, Canada, Denmark, euro area, Japan, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States.

[2]Hong Kong SAR, Korea, Singapore, and Taiwan Province of China.

[3]Indonesia, Malaysia, the Philippines, and Thailand.

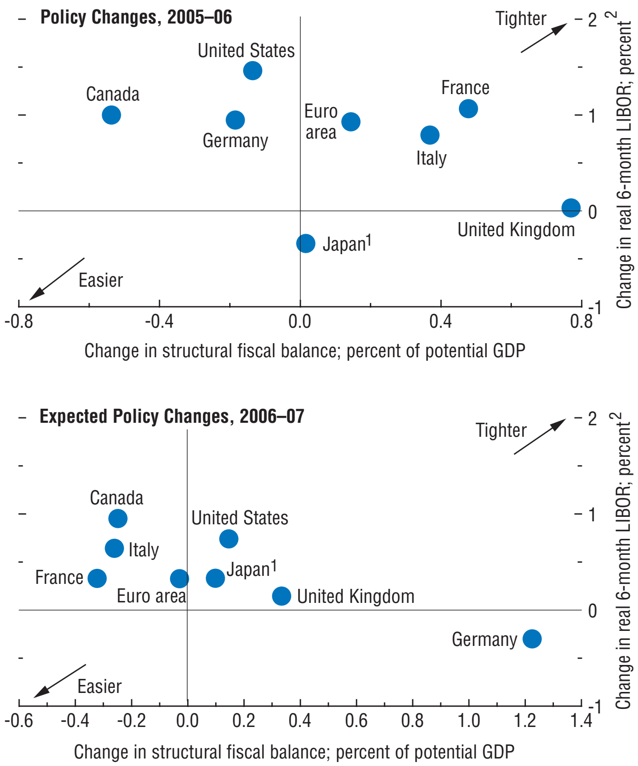
[4]Czech Republic, Estonia, Hungary, Latvia, and Poland.

[5]Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.

[6]Israel, Russia, South Africa, and Turkey.

Figure 1.9. Fiscal and Monetary Policies in the Major Advanced Economies

Real short-term interest rates are generally expected to rise in 2006–07, but—outside Germany and the United Kingdom—underlying fiscal positions show little improvement.



Source: IMF staff estimates.
[1]For Japan, excludes social security.
[2]Three-month rate for euro area countries.

how those adjustments occur.[5] While an important part of the adjustment will need to take place in the private sector, a purely market-driven adjustment will succeed only if foreigners are willing to increase their net holdings of U.S. assets substantially in the face of substantial capital losses from future dollar depreciation—which do not appear to be priced into yields on U.S. dollar assets at present—and if protectionist pressures can be held in check. If not, as illustrated in Figure 1.10, there is a risk of a much more abrupt and disorderly adjustment, accompanied by substantial exchange rate overshooting, a large increase in interest rates, and a sharp slowdown in growth worldwide.

- *An avian flu pandemic.* While both the probability and potential risks are impossible to assess with any certainty, a worse-case scenario could have extremely high human and economic costs, particularly in developing countries (see Appendix 1.2 on the avian flu pandemic). This underscores the importance of moving ahead with necessary public health precautions and providing the necessary assistance to developing countries to do so; measures to ensure that essential economic infrastructure—particularly payments systems—can continue to operate should also be a priority. In particular, all major financial institutions need to have a contingency plan that addresses the consequences of the loss of key personnel.

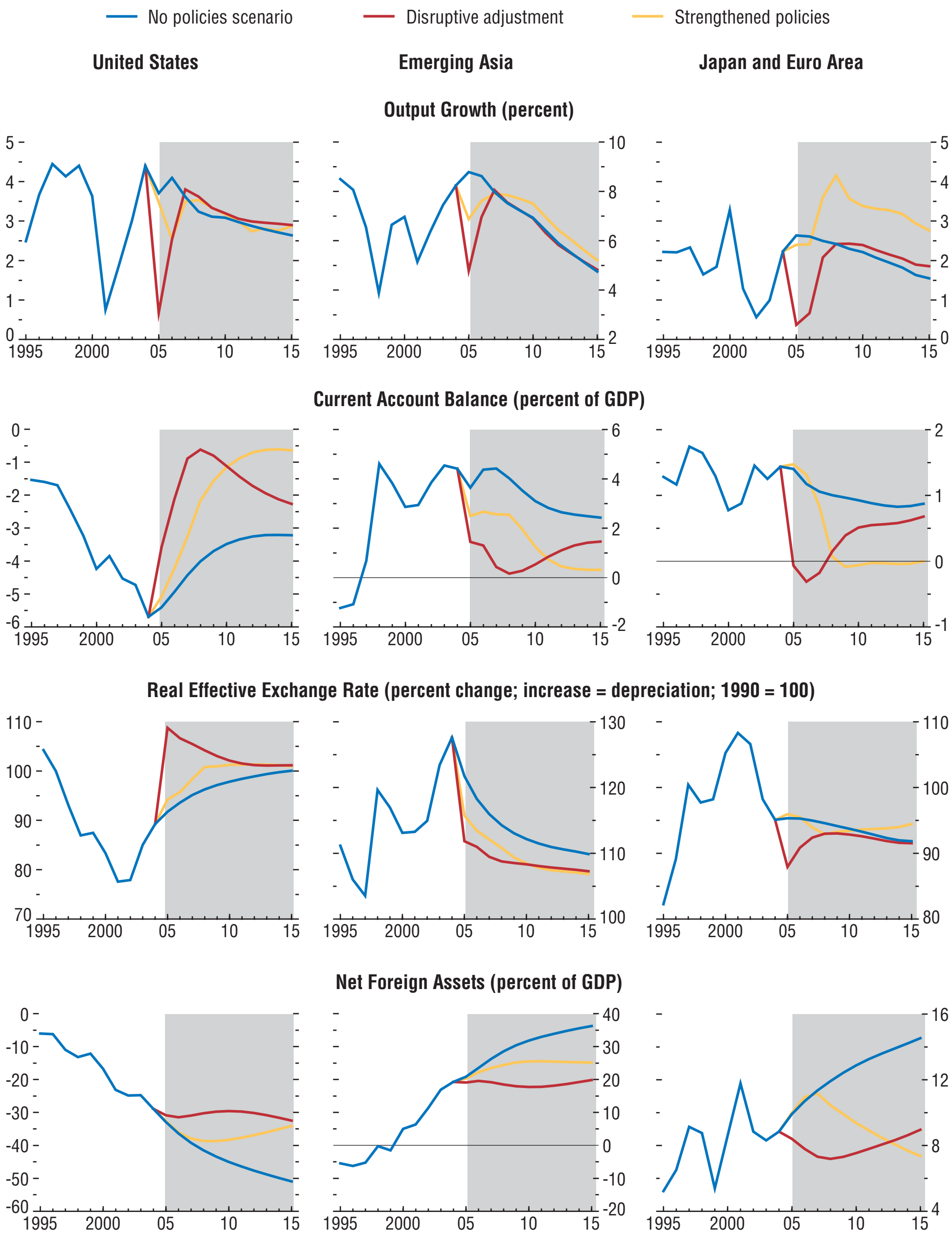
Looking forward, policymakers face three main challenges:

- *Making more rapid progress in addressing global imbalances.* As the *World Economic Outlook* has argued for some time, a coordinated package of policies across major regions—including measures to reduce the budget deficit and spur private savings in the United States; structural and other reforms to boost domes-

[5]See "How Will Global Imbalances Adjust?" Appendix 1.2, *World Economic Outlook*, September 2005, for a detailed discussion.

Figure 1.10. How Will Global Imbalances Adjust?[1]

In the absence of policy adjustment, an orderly adjustment may take place, but only if investors are willing to hold substantially higher levels of U.S. assets (despite large capital losses) and if protectionist pressures are avoided. If these conditions are not met, there is a clear risk of a disruptive adjustment and a global recession. However, strengthened policies—along the lines described in the text—would sharply reduce imbalances, with a modest short-term slowdown offset by stronger medium-term growth.



Source: IMF staff estimates.
[1]See Appendix 1.2, September 2005 *World Economic Outlook* for a detailed discussion of these projections. Since the no policies baseline includes significant short-term real appreciation in Asia through higher inflation, it may overestimate the adjustment in current accounts in the initial period.

tic demand in surplus countries; and greater exchange rate flexibility in China and some other countries to allow necessary appreciations to take place—could significantly reduce risks (see Box 1.4 for a detailed description). To date, however, only modest progress has been made in implementing these policies. As shown in the "strengthened policies" scenario in Figure 1.10, such a package would lead to a significantly earlier adjustment in imbalances, correspondingly reducing the risk of a more abrupt adjustment; while GDP growth would slow somewhat in the short term, over the medium term it would be both stronger and better balanced. Given the strong global conjuncture, and that these policies are in the national as well as the international interest, the cost of such insurance against a disorderly adjustment appears relatively modest.

- *Ensuring sustainable medium-term fiscal positions*, not least among many major industrial countries where—outside of Canada and Japan—underlying fiscal positions have improved only modestly since 2003 and—except in Germany and the United Kingdom—IMF staff projections suggest little further improvement over the next two years (Table 1.3). This is of particular concern since, despite some progress in Europe and Japan, pension and health systems across the globe remain unsustainable, with the difficulties associated with implementing even modest reforms being well illustrated by recent experience in the United States. A failure to accelerate progress will increasingly limit the scope for a fiscal response to future shocks, put upward pressures on long-run interest rates, and—over the longer term—pose risks to macroeconomic stability.
- *Putting in place the preconditions to take advantage of globalization and support global growth in the future.* At the multilateral level, the most important issues are to resist protectionist pressures—which have been on the increase in a number of countries—and ensure an ambitious outcome to the Doha Round. While the World Trade Organization (WTO) Ministerial Meetings in Hong Kong SAR made some progress (Box 1.5, p. 32), wide differences in country positions remain; given the limited flexibility so far displayed, the risks that the very tight negotiating schedule will not be met are high. An unambitious outcome—or failure—of the Doha Round would have major costs both for the global economy and the multilateral trading system. The challenge at the national level is to advance the structural reform agenda, which in some areas appears to be in retreat—for instance on cross-border takeovers. While the priorities vary across countries, as described below, common themes included the need for greater labor market flexibility in the face of rapid technological change and global competition; improvements to the business climate and increased competition in emerging markets; and the strengthening of financial systems.

With the global economy set for its fourth consecutive year of 4 percent plus GDP growth, the current conjuncture is the strongest for many years. Current policymakers can take considerable credit for this outcome; past policymakers can perhaps take even more. The global economy would not have been so resilient to recent shocks without the strengthening of monetary frameworks since the 1980s, which helped anchor inflationary expectations, and the improvements in fiscal positions in the 1990s, which allowed room for policy easing in 2001–02; nor would global growth and trade be as strong as they are without the successful completion of the Uruguay Round in 1994. But behind today's rather favorable short-term conjuncture lie major risks and challenges that have yet to be fully addressed. From an economic viewpoint, there is unlikely to be a more favorable environment in which to tackle them; if progress cannot be made now, it will surely be even more difficult later on. In those circumstances, the risks of adverse shocks will rise, and the scope to react to them will decline, making the prospects of achieving the sustained medium-term global growth envisaged in the *World Economic Outlook* baseline increasingly remote. From that perspective, 2006 may

Table 1.3. Major Advanced Economies: General Government Fiscal Balances and Debt[1]
(Percent of GDP)

	1990–99	2000	2001	2002	2003	2004	2005	2006	2007	2011
Major advanced economies										
Actual balance	–3.4	–0.4	–1.9	–4.1	–4.9	–4.4	–3.9	–3.9	–3.7	–2.7
Output gap[2]	0.3	2.1	0.6	–0.8	–1.5	–1.0	–0.9	–0.7	–0.6	—
Structural balance[2]	–3.4	–1.4	–2.1	–3.8	–4.2	–4.0	–3.6	–3.6	–3.4	–2.7
United States										
Actual balance	–3.0	1.3	–0.7	–4.0	–5.0	–4.7	–4.1	–4.3	–4.0	–2.8
Output gap[2]	0.6	3.5	0.9	–0.9	–1.5	–0.8	–0.6	–0.5	–0.4	—
Structural balance[2]	–3.3	0.1	–1.1	–3.7	–4.4	–4.4	–3.9	–4.0	–3.9	–2.8
Net debt	53.7	39.4	38.3	41.0	43.8	45.3	46.0	47.7	49.3	52.4
Gross debt	69.5	57.1	56.6	58.9	61.8	62.5	62.9	64.2	65.9	69.1
Euro area										
Actual balance	. . .	–1.0	–1.9	–2.6	–3.0	–2.7	–2.3	–2.3	–2.1	–1.5
Output gap[2]	. . .	1.9	1.5	0.3	–1.1	–1.0	–1.5	–1.4	–1.3	—
Structural balance[2]	. . .	–1.6	–2.3	–2.6	–2.5	–2.2	–1.8	–1.7	–1.5	–1.5
Net debt	. . .	57.6	57.4	57.4	59.1	59.8	60.7	60.5	60.1	57.4
Gross debt	. . .	69.9	68.6	68.5	69.8	70.2	71.2	70.8	70.1	66.7
Germany[3]										
Actual balance	–2.6	1.3	–2.8	–3.7	–4.0	–3.7	–3.3	–3.3	–2.4	–2.0
Output gap[2]	1.2	1.7	1.5	0.2	–1.3	–1.0	–1.5	–1.5	–1.9	—
Structural balance[2,4]	–2.5	–1.2	–2.7	–3.2	–3.0	–3.2	–2.6	–2.8	–1.6	–2.0
Net debt	40.5	51.5	52.1	54.3	57.7	59.9	62.4	64.1	64.4	64.1
Gross debt	50.7	58.7	57.9	59.6	62.8	64.5	67.5	69.0	68.7	67.9
France										
Actual balance	–3.8	–1.5	–1.5	–3.1	–4.2	–3.7	–2.9	–2.9	–3.0	–1.4
Output gap[2]	–1.3	1.2	1.0	—	–1.4	–1.4	–2.0	–1.8	–1.6	—
Structural balance[2,4]	–2.8	–2.1	–2.1	–3.1	–3.4	–2.7	–2.1	–1.6	–1.9	–1.4
Net debt	39.7	47.0	48.2	48.5	53.0	55.3	57.7	57.3	57.3	54.2
Gross debt	48.9	56.6	56.1	58.1	62.7	65.0	67.3	67.0	67.0	63.8
Italy										
Actual balance	–7.6	–0.8	–3.1	–2.7	–3.4	–3.4	–4.1	–4.0	–4.3	–3.9
Output gap[2]	0.2	2.1	1.9	0.4	–0.8	–1.1	–2.2	–2.2	–2.0	—
Structural balance[2,4]	–7.5	–2.8	–3.9	–3.4	–2.9	–3.2	–3.3	–3.1	–3.3	–3.9
Net debt	108.5	105.6	103.0	100.4	100.4	100.2	102.5	103.0	103.8	105.4
Gross debt	114.7	111.3	108.2	105.4	104.0	103.9	106.3	106.9	107.6	109.4
Japan										
Actual balance	–2.9	–7.7	–6.4	–8.2	–8.1	–6.6	–5.8	–5.7	–5.4	–4.2
Excluding social security	–4.9	–8.2	–6.5	–7.9	–8.2	–6.9	–5.7	–5.5	–5.3	–4.4
Output gap[2]	—	–1.0	–1.6	–3.0	–2.8	–2.1	–1.1	—	0.3	0.1
Structural balance[2]	–2.9	–7.2	–5.6	–6.9	–7.0	–5.8	–5.4	–5.6	–5.5	–4.2
Excluding social security	–4.9	–8.0	–6.1	–7.2	–7.6	–6.5	–5.5	–5.5	–5.4	–4.4
Net debt	27.6	60.6	65.7	72.8	77.2	82.9	87.6	90.9	94.1	101.2
Gross debt	92.9	142.2	151.6	161.2	167.1	172.1	175.5	176.2	177.2	175.2
United Kingdom										
Actual balance	–3.7	1.5	0.9	–1.5	–3.2	–3.2	–3.6	–3.1	–2.8	–2.0
Output gap[2]	–0.7	1.1	0.7	—	–0.1	0.5	–0.3	–0.3	–0.1	—
Structural balance[2]	–3.3	1.3	0.3	–1.8	–3.2	–3.4	–3.7	–3.0	–2.6	–2.0
Net debt	32.9	34.2	32.7	32.7	34.6	36.5	38.5	39.4	40.4	41.6
Gross debt	38.4	41.6	38.4	37.9	39.4	41.2	43.3	44.1	45.1	46.0
Canada										
Actual balance	–4.5	2.9	0.7	–0.1	—	0.7	1.7	1.3	1.1	0.6
Output gap[2]	–0.6	1.9	0.3	0.3	–0.5	–0.4	–0.3	–0.1	—	—
Structural balance[2]	–4.0	2.0	0.4	–0.2	0.3	0.9	1.9	1.3	1.1	0.6
Net debt	80.5	65.3	60.2	57.9	51.4	46.8	41.9	38.2	35.4	27.0
Gross debt	112.7	101.5	100.3	97.4	91.9	87.9	85.0	78.8	74.2	59.1

Note: The methodology and specific assumptions for each country are discussed in Box A1 in the Statistical Appendix.
[1]Debt data refer to end of year. Debt data are not always comparable across countries. For example, the Canadian data include the unfunded component of government employee pension liabilities, which amounted to nearly 18 percent of GDP in 2001.
[2]Percent of potential GDP.
[3]Beginning in 1995, the debt and debt-service obligations of the Treuhandanstalt (and of various other agencies) were taken over by general government. This debt is equivalent to 8 percent of GDP, and the associated debt service, to 1/2 to 1 percent of GDP.
[4]Excludes one-off receipts from the sale of mobile telephone licenses (the equivalent of 2.5 percent of GDP in 2000 for Germany, 0.1 percent of GDP in 2001 and 2002 for France, and 1.2 percent of GDP in 2000 for Italy). Also excludes one-off receipts from sizable asset transactions, in particular 0.5 percent of GDP for France in 2005.

Table 1.4. Advanced Economies: Real GDP, Consumer Prices, and Unemployment
(Annual percent change and percent of labor force)

	Real GDP				Consumer Prices				Unemployment			
	2004	2005	2006	2007	2004	2005	2006	2007	2004	2005	2006	2007
Advanced economies	**3.3**	**2.7**	**3.0**	**2.8**	**2.0**	**2.3**	**2.3**	**2.1**	**6.3**	**6.0**	**5.8**	**5.8**
United States	4.2	3.5	3.4	3.3	2.7	3.4	3.2	2.5	5.5	5.1	4.9	5.1
Euro area[1]	2.1	1.3	2.0	1.9	2.1	2.2	2.1	2.2	8.9	8.6	8.3	8.1
Germany	1.6	0.9	1.3	1.0	1.8	1.9	1.8	2.5	9.2	9.1	8.7	8.8
France	2.1	1.4	2.0	2.1	2.3	1.9	1.7	1.8	9.5	9.6	9.6	9.1
Italy	0.9	0.1	1.2	1.4	2.3	2.3	2.5	2.1	8.3	8.1	7.8	7.6
Spain	3.1	3.4	3.3	3.2	3.1	3.4	3.4	3.1	11.0	9.2	8.6	8.5
Netherlands	1.7	1.1	2.5	2.4	1.4	1.5	1.5	1.6	4.6	4.9	4.5	4.3
Belgium	2.4	1.5	2.1	2.4	1.9	2.5	2.4	1.8	8.4	8.4	8.3	8.2
Austria	2.4	1.9	2.2	2.1	2.0	2.1	1.8	1.7	4.8	5.2	4.8	4.5
Finland	3.6	2.1	3.5	2.7	0.1	0.9	1.1	1.3	8.8	8.4	7.9	7.8
Greece	4.7	3.7	3.3	3.2	3.0	3.5	3.3	3.0	10.5	9.9	9.5	9.5
Portugal	1.1	0.3	0.8	1.5	2.5	2.1	2.1	2.1	6.7	7.6	7.7	7.6
Ireland	4.5	4.7	5.0	5.2	2.3	2.2	2.3	2.5	4.5	4.3	4.1	4.0
Luxembourg	4.5	4.3	4.0	3.8	2.2	2.5	2.3	2.2	3.9	4.2	4.5	4.7
Japan	2.3	2.7	2.8	2.1	—	–0.3	0.3	0.6	4.7	4.4	4.1	4.0
United Kingdom[1]	3.1	1.8	2.5	2.7	1.3	2.1	1.9	1.9	4.8	4.8	4.9	4.8
Canada	2.9	2.9	3.1	3.0	1.8	2.2	1.8	2.0	7.2	6.8	6.6	6.6
Korea	4.6	4.0	5.5	4.5	3.6	2.7	2.5	3.0	3.7	3.7	3.5	3.3
Australia	3.6	2.5	2.9	3.2	2.3	2.7	2.8	2.7	5.5	5.1	5.2	5.2
Taiwan Province of China	6.1	4.1	4.5	4.5	1.6	2.3	1.8	1.5	4.4	4.1	4.0	3.9
Sweden	3.7	2.7	3.5	2.4	1.1	0.8	1.5	1.8	5.5	5.6	4.5	4.2
Switzerland	2.1	1.8	2.2	1.7	0.8	1.2	1.0	1.2	3.5	3.4	3.3	3.3
Hong Kong SAR	8.6	7.3	5.5	4.5	–0.4	1.1	1.8	2.1	6.9	5.7	4.5	4.5
Denmark	1.9	3.4	2.7	2.3	1.2	1.8	1.8	2.0	6.4	5.7	5.1	5.3
Norway	3.1	2.3	2.2	2.6	0.4	1.6	2.1	2.3	4.5	4.6	4.1	4.0
Israel	4.4	5.2	4.2	4.2	–0.4	1.3	2.4	2.0	10.3	9.0	8.5	8.2
Singapore	8.7	6.4	5.5	4.5	1.7	0.5	2.0	1.9	3.4	3.0	2.9	2.9
New Zealand[2]	4.4	2.2	0.9	2.1	2.3	3.0	3.1	2.8	3.9	3.7	4.1	4.6
Cyprus	3.9	3.7	4.0	4.0	2.3	2.6	2.0	2.0	3.6	3.3	3.0	3.0
Iceland	8.2	5.5	5.5	2.3	3.2	4.0	4.0	3.5	3.1	2.1	1.9	2.0
Memorandum												
Major advanced economies	3.1	2.6	2.8	2.6	2.0	2.3	2.3	2.1	6.3	6.0	5.9	5.8
Newly industrialized Asian economies	5.8	4.6	5.2	4.5	2.4	2.2	2.2	2.3	4.2	4.0	3.7	3.5

[1]Based on Eurostat's harmonized index of consumer prices.
[2]Consumer prices excluding interest rate components.

prove a watershed year, both in terms of the outlook for the global economy itself, and the legacy that today's policymakers pass to their successors.

United States and Canada: Robust Growth Set to Continue, but the U.S. Housing Market Is a Key Uncertainty

The U.S. economy slowed sharply in the fourth quarter of 2005, growing at its slowest rate since early 2003. Private consumption was weak—largely due to a sharp drop in auto sales as buyer incentive programs ended and gasoline prices surged in the aftermath of Hurricane Katrina—corporate fixed investment was subdued, and net exports exerted a substantial drag on growth. Monthly indicators, however, suggest that this weakness was concentrated early in the quarter and that the economy has subsequently bounced back. In particular, industrial production has strengthened, capital goods orders are firm, nonfarm payrolls increased by an average of 220,000 a month during November–March, and consumer confidence has rebounded from its post-Katrina slump.

Consequently, real GDP growth is expected to rebound in the first quarter of 2006 and to average 3.4 percent for the year as a whole (Table 1.4). Strong corporate profits and comfortable financing conditions imply a positive outlook for business investment. Further, a pickup in growth in trading partners should mean that the external sector is less of a drag on growth, while in the near term there is likely to be higher government spending associated with rebuilding in the aftermath of Hurricane Katrina. Consumption growth, however, is expected to slow this year—by about ¾ percentage point—as a cooling housing market and elevated energy prices more than offset any acceleration in disposable incomes from employment and wage growth. With corporate profits expanding robustly and balance sheets in good shape, business investment and employment growth could be stronger than expected, but overall risks to the outlook are slanted to the downside. Specifically, the large current account deficit—6.4 percent of GDP last year (Table 1.5)—makes the United States vulnerable to a swing in investor sentiment that could put downward pressure on the dollar and see a spike in long-run interest rates. Even more importantly, against a background of low household saving and high energy prices, a weaker housing market could trigger a more abrupt withdrawal of consumer demand than anticipated.

Indeed, the future course of the housing market is a key uncertainty for the U.S. economy. House prices have grown strongly in recent years, providing a boost to economic activity through their effect on consumption, residential investment, and employment. But house prices are now looking more richly valued—see Box 1.2—and as affordability has declined, buyers have increasingly resorted to interest-only and negative amortization loans to gain access to the market. These nontraditional mortgage products accounted for over 40 percent of mortgage loans for purchase during 2005 (Figure 1.11).[6] And there are now indications that the housing market is cooling—mortgage applications have declined, the supply of homes on the market is rising, and confidence among homebuilders has slipped.

Through the impact on wealth accumulation, a slowdown in real house price appreciation from last year's pace of around 10 percent (year-on-year) to zero would usually be expected to reduce consumption growth by 0.5–1 percentage point after one year. In present circumstances,

[6]Data from LoanPerformance MBS/ABS database.

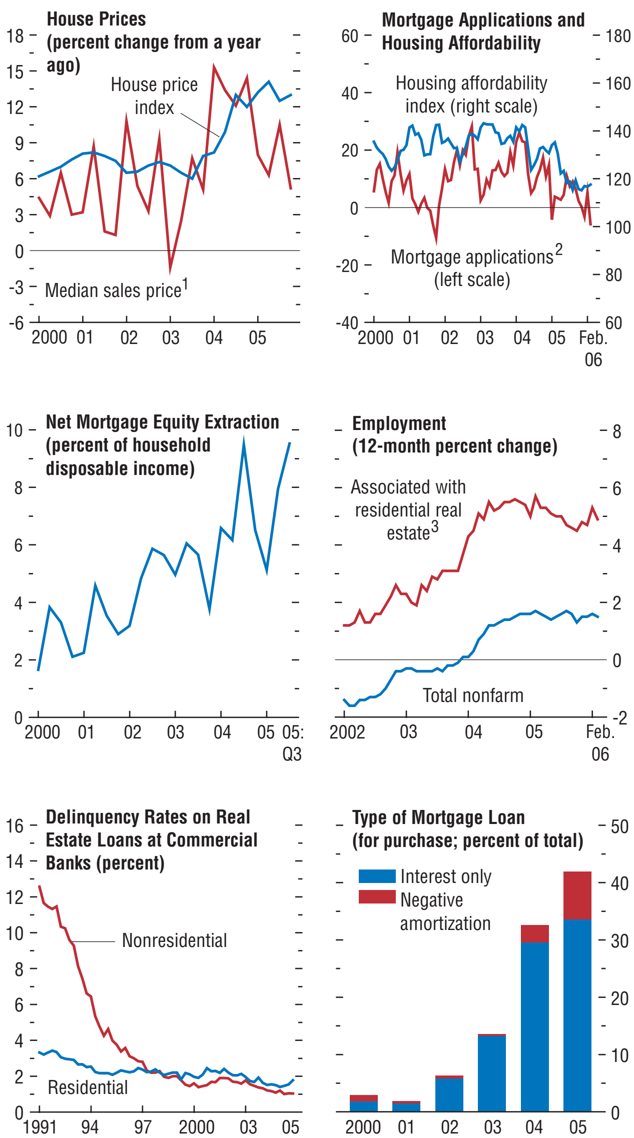
Table 1.5. Advanced Economies: Current Account Positions
(Percent of GDP)

	2004	2005	2006	2007
Advanced economies	**–0.9**	**–1.5**	**–1.7**	**–1.7**
United States	–5.7	–6.4	–6.5	–6.5
Euro area[1]	0.8	—	–0.2	—
Germany	3.7	4.1	3.6	4.3
France	–0.4	–1.3	–1.9	–2.1
Italy	–0.9	–1.5	–1.1	–0.7
Spain	–5.3	–7.6	–8.1	–8.5
Netherlands	8.9	6.4	6.9	7.9
Belgium	3.3	4.5	4.8	4.8
Austria	0.2	0.7	0.9	0.9
Finland	5.0	2.4	2.8	2.7
Greece	–6.3	–7.9	–7.9	–7.9
Portugal	–7.3	–9.2	–9.5	–9.4
Ireland	–0.8	–1.9	–2.9	–3.3
Luxembourg	11.1	7.9	7.3	7.3
Japan	3.8	3.6	3.2	2.9
United Kingdom	–2.0	–2.6	–2.7	–2.8
Canada	2.2	2.2	3.1	2.9
Korea	4.1	2.1	1.8	1.7
Australia	–6.3	–6.0	–5.6	–5.5
Taiwan Province of China	5.7	4.7	5.4	5.5
Sweden	6.8	6.1	5.1	4.5
Switzerland	14.6	13.8	13.7	13.1
Hong Kong SAR	9.6	10.7	10.1	10.1
Denmark	2.1	2.4	2.4	2.6
Norway	13.6	16.8	18.6	19.9
Israel	1.6	1.9	1.0	2.1
Singapore	24.5	28.5	26.7	26.3
New Zealand	–6.6	–8.8	–8.9	–7.6
Cyprus	–5.7	–5.1	–5.6	–4.6
Iceland	–9.4	–16.6	–13.8	–8.6
Memorandum				
Major advanced economies	–1.7	–2.3	–2.5	–2.5
Euro area[2]	0.6	–0.3	—	0.2
Newly industrialized Asian economies	7.0	6.0	5.7	5.6

[1]Calculated as the sum of the balances of individual euro area countries.
[2]Corrected for reporting discrepancies in intra-area transactions.

Figure 1.11. United States: The Housing Market and Growth

The strong housing market has supported growth and employment in the United States in recent years. There are increasing signs, however, that housing activity is slowing, and a key question is how the economy would react to a period of slower house price appreciation.



Sources: Haver Analytics; CEIC Non-Asia Database; Greenspan and Kennedy (2005); LoanPerformance MBS/ABS database (Period: 204, December 2005); and IMF staff calculations.

[1]Median sales price for new single family homes.

[2]For the purchase of homes. Index: March 16, 1990 = 100, percent change from a year earlier.

[3]The sum of employment in the following sectors: residential building construction, residential specialty trade contractor, furniture and home, furnishing stores, building material and garden supply stores, and real estate.

however, the wealth effect could be larger. The withdrawal of equity from the housing market—which amounted to 7.5 percent of household disposable income in the first three quarters of 2005—has provided a convenient way of borrowing, which has helped boost consumption in recent years. If house price appreciation were to slow sharply, equity withdrawal would likely fall. Further, real estate and related sectors have been important sources of job creation, and a slowing housing market could adversely affect employment in these sectors.[7] These factors could induce a more severe slowdown in consumption and overall GDP growth (see Box 1.2).

Inflationary pressures have remained muted, helped by ongoing productivity gains and by strong competitive pressures—including from overseas—that are limiting the ability of producers to pass on cost increases. Consequently, while headline CPI inflation jumped as gasoline prices soared—reaching a peak of around 4.5 percent in September, although it has eased in recent months—there has been little pass-through into core inflation, which is running around 2 percent. Nevertheless, with rising resource utilization, the Federal Reserve has continued to tighten monetary policy in recent months. Looking forward, the financial markets now expect one or two more 25-basis-point rate hikes in the coming months before the Fed ends this tightening cycle. With spare capacity in the economy nearly exhausted, however, inflationary pressures could strengthen more than anticipated, necessitating a stronger-than-expected monetary policy response. In particular, a tightening labor market—the unemployment rate has declined to 4.7 percent and initial claims for unemployment benefits have fallen in recent months—may lead to upward pressures on wages, and, with productivity growth easing, unit labor costs.

[7]Default rates on residential mortgage loans have been low historically. Together with securitization of the mortgage market, this suggests that the impact of a slowing housing market on the financial sector is likely to be limited (see the April 2006 *Global Financial Stability Report*).

Despite the substantial increase in short-term interest rates during this tightening cycle, long-term yields have risen only modestly, and the yield curve has at times been slightly inverted in recent months. In the past, an inverted yield curve has been a reliable leading indicator of a slowdown in the U.S. economy (predicting all but one of the postwar recessions). Nevertheless, with real short-term interest rates still low, the correlation between consumption growth and the yield curve having largely disappeared since the 1990s, and structural factors, including pension fund asset reallocation and demand from oil exporters boosting desired holdings of long-dated U.S. securities, it appears unlikely that the current shape of the yield curve is portending an imminent slowing of growth (see the April 2006 *Global Financial Stability Report*).

Turning to fiscal policy, the federal budget deficit improved markedly in FY2005, declining by 1 percentage point of GDP to 2.6 percent of GDP, due to strong revenue growth. In particular, corporate income tax receipts surged with strong profits and the expiration of provisions that allowed additional depreciation deductions for investment. The deficit, however, is expected to widen in FY2006 to around 3 percent of GDP as revenue growth slows and the costs of rebuilding in the Gulf coast area, ongoing military operations in Iraq and Afghanistan, and the introduction of the recent new prescription drug benefit scheme boost expenditures. Over the medium term, the U.S. administration's plan to cut the budget deficit in half by FY2009 is unambitious. It is also fraught with risks, given the reliance on an unprecedented compression of discretionary nondefense spending, ongoing pressure for Alternative Minimum Tax (AMT) relief, and the U.S. administration's push to extend the tax cuts of 2001 and 2003 beyond 2010. As discussed in the September 2005 *World Economic Outlook*, a bolder fiscal adjustment effort is needed with the aim of achieving broad budget balance (excluding social security) in the medium term. This more ambitious fiscal goal would put the budget in a stronger position to respond to unexpected future developments and absorb upcoming pressures from population aging, as well as contribute to the resolution of global current account imbalances.

In Canada, the economy continues to perform strongly, benefiting from the improvement in the terms of trade caused by high energy and other commodity prices. Private consumption is growing strongly, supported by rising employment and asset prices, while healthy corporate profits have underpinned a pickup in business investment. Growth is projected at 3.1 percent this year, with most of the risks to the outlook stemming from possible external developments—in particular, the Canadian economy is vulnerable to any slowdown in the United States, an abrupt depreciation of the U.S. dollar, or a worsening of the terms of trade caused by weaker global commodity prices. Inflation remains well contained but, with the output gap closing, further interest rate increases will likely be needed in the coming months. The fiscal outlook remains favorable. The new government has some fiscal room to maneuver in achieving its objective of lowering the tax burden and slowing spending growth, while maintaining fiscal surpluses and keeping government debt on a firm downward path. As in most other industrial countries, however, rising health care costs present a long-term challenge to fiscal sustainability, and reforms to the public health system will be needed to contain costs.

Western Europe: Is the Expansion Finally Gaining Traction?

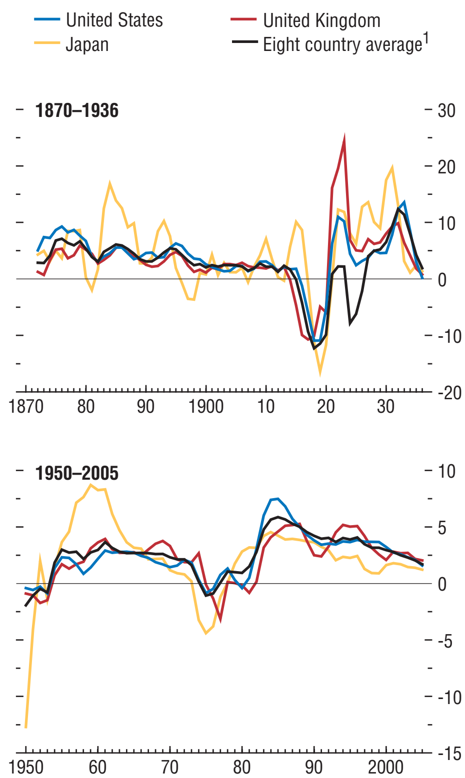
The recovery in Europe appears to be strengthening, notwithstanding some slowdown in growth during the final quarter of 2005. Underscoring the vulnerability of activity to external factors, notably oil prices and world demand, growth slowed during the fourth quarter due to falling household consumption and weaker net exports. Importantly, however, investment appears to have remained resilient. Also, recent high-frequency indicators—for example, the German Ifo index which is at its highest level since early 1991—continue to point to healthy

Box 1.1. Long-Term Interest Rates from a Historical Perspective

By the standards of the last two decades of the twentieth century, long-term interest rates, whether measured in real or nominal terms, are currently very low. The British gilts market is a case in point: in January–March of 2006, the rate on ultra-long indexed gilts averaged about 70 basis points. But real long-term rates on unindexed government bonds are also low in the United States and Europe. In the same period, the interest rate on 10-year treasuries, deflated by the expected rate of inflation 10 years ahead, was about 2 percent.

When viewed from a historical perspective, however, the recent behavior of real government bond rates does not appear so unusual. Consider the behavior of rates in the period from 1870 to the start of the World War I. From 1870–95, nominal long-term rates, which were trending downward, averaged 3½ percent (see the figure) for the average of a group of eight countries (Australia, Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States).[1] However, because the early part of this period witnessed marked deflation, which bondholders would not likely have foreseen, realized ex post real rates of return averaged 4½ percent, above what might be inferred to be their expected rate. Average real rates declined to 2.2 percent in 1895–1914, a period of prosperity and rising prices that ended with the outbreak of war. The variance of real long-term rates also declined in this period. A somewhat similar pattern is evident in the 20 years between the wars, with average realized real rates comparatively low during the 1920s, and higher during the Depression. In both the 1920s and the 1930s, however, variance was high, which reflected the well known economic instability of the period.

Real Long-Term Interest Rates
(Three-year moving averages)



Source: IMF staff calculations.
[1]Includes Australia, Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

During most of the period since 1945, real long-term interest rates have been comparatively low, although real rates have fluctuated substantially in some subperiods. During the Bretton Woods era, from 1946 to 1971, real global long-term rates averaged 2½ per-

Note: The principal authors of this box are Luis Catão and Sandy Mackenzie.

[1]This figure was computed by deflating the nominal long bond rate by the current rate of inflation in each country and obtaining a global rate as a GDP-weighted average of the real rates thus measured in the eight countries in the sample. The median of the annual global real rates over the entire 1870–95 period is reported. Deflating the nominal rate by the 10-year-ahead inflation rate, rather than by current inflation, yields essentially the same estimate of the average real interest rate for this period.

cent.[2] In the case of treasuries, after a period of comparative stability from 1956 to 1973 when the real rate averaged about 2 percent, the real rate dropped precipitously to well below zero because of the unexpected inflationary impact of the first oil shock. During the disinflation of the 1980s, the opposite occurred. During the 1990s, the average rate of inflation and its variance declined, and real rates trended down. A similar if less pronounced pattern was evident in other markets during these decades.

In general, when inflation has been both low and stable, real long-term interest rates will tend to be low and stable as well. Conversely, when inflation is high and volatile, real interest rates will be volatile, and the premium investors demand for holding fixed-interest securities will rise.

Theoretically speaking, long-run interest rates are expected to be no lower than the trend growth rate of an economy. However, the historical experience clearly shows that this general rule can be broken. In about half of the years since the 1870s (excluding the war years), the growth rate exceeded the rate of interest for the eight-country average. Moreover, the rate of growth has exceeded the rate of interest for as many as 20 years at a stretch. As discussed in previous issues of the *World Economic Outlook*, the outlook for long-run interest rates depends critically on economic fundamentals—notably, the extent to which the desired level of savings continues to exceed desired investment, as well as on such factors as the impact of regulatory change and aging on the demand of financial institutions for long-term assets—but other developments such as commodity price shocks, especially oil price shocks, also play a role (for econometric evidence on this point, see Catão and Mackenzie, 2006).

Should low real long-term interest rates persist, the relative positions of borrowers and lenders may be significantly affected. Governments will find it easier to attain or maintain financial stability, because the primary surplus they need to target to maintain a given debt-to-GDP ratio will decline. Lower rates of interest can also reduce the incentive to undertake needed but politically difficult fiscal consolidation. Investors, however, may need to revisit their assumptions regarding target rates of return on their portfolios. In particular, households, which in many countries are shouldering more of the risks associated with saving for retirement, may have to retire later, or increase the savings they planned to make during their working lives.

[2]This measure is obtained as explained in footnote 1. For alternative measures using estimates of inflationary expectations, but telling essentially the same story, see Catão and Mackenzie (2006).

activity, unlike during previous episodes of stalling growth; while some uncertainties remain, the fourth-quarter slowdown is projected to prove temporary.

Looking forward, the expansion will continue to depend on strong global demand, with an increasing contribution from business investment, supported by last year's depreciation of the euro and the continuation of supportive financing conditions. Household consumption—which is particularly weak in Germany—is expected to remain more subdued until labor market conditions improve and the effect of oil prices on real disposable incomes tails off; the proposed increase in the value added tax (VAT) rate in Germany, scheduled for January 2007, is however expected to boost consumption spending in late 2006 at the expense of spending in early 2007. Against this backdrop, overall growth in the euro area is expected to strengthen to potential, or about 2 percent, in 2006, compared to 1.3 percent last year. Nevertheless, there are a number of downside risks, including an appreciation of the euro against the backdrop of large global imbalances or a renewed spike in oil prices. Further, elevated house prices in Spain

Box 1.2. The Impact of Recent Housing Market Adjustments in Industrial Countries

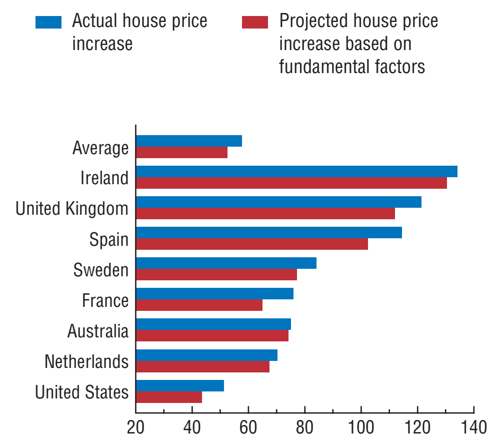
House prices in many industrial countries have been increasing at unprecedented rates in recent years, providing a boost to economic growth. An analysis in the September 2004 *World Economic Outlook*, however, found that this increase in house prices had significantly exceeded the amount justified by fundamentals—such as population and income growth and interest rates—in a number of countries, raising the prospect that house prices would need to adjust in the period ahead. Further, the analysis also found that the correlation of house prices across countries was surprisingly high—particularly given that housing is a nontraded asset—raising the possibility that such a weakening in prices could be synchronized across countries, magnifying the impact on global growth.

Over the past year, house price growth has slowed in many countries, consistent with the historical cross-country synchronization in these prices. In Australia and the United Kingdom, house price inflation has declined from 20 percent a year in late 2003 (middle of 2004 for the United Kingdom) to zero to 5 percent currently, while in Ireland prices slowed through mid-2005, but appear to have accelerated more recently. In France, Spain, and the United States, house price appreciation has also slowed to some degree, although it remains in double digits on a year-on-year basis. In the Netherlands, the downturn in the housing market started much earlier—in 2000—than in other industrial countries, and price appreciation has remained subdued in recent years. The slowing in price appreciation in Australia, Ireland, and the United Kingdom has brought house prices in these countries closer to current estimates of fundamental value, although the United Kingdom still appears quite richly valued (first figure). On the other hand, house prices in the United States and Spain appear to have moved further away from estimated fundamentals over the past year.

Note: The main authors of this box are Tim Callen and Marco Terrones.

Assessing the Global House Price Boom

(1997–2005; cumulative percent change; constant prices)



Sources: Haver Analytics; IMF, *International Financial Statistics;* national authorities; and IMF staff calculations.

There are now growing signs that housing activity in the United States has peaked. A key question for both the United States and the global economy is to what extent slowing house price appreciation will affect growth going forward. There are several channels through which house price movements affect aggregate demand and output. First, house prices affect households' net wealth and capacity to borrow and spend. Bayoumi and Edison (2003), for example, find that a dollar increase in housing wealth in industrial countries raises consumption by around 5 cents, with the impact being larger in countries with market-based financial systems (such as Australia, the Netherlands, the United Kingdom, and the United States) than in those with bank-based financial systems (such as France and Spain). As discussed in the main text, this would suggest that a 10 percentage point slowing in real house price appreciation would reduce consumption growth in the United States by some ½–1 percentage point in the first year. Second, house prices alter the incentives for residential construction, although this relationship has been hard to pin down empirically. Lastly, strong housing markets generate employment in the real estate and related sectors, boosting incomes and consumption. Combining these effects and allowing for the cross-country comovement of house prices, estimates for the United States by Otrok and Terrones (forthcoming) suggest that a 10 percent slowing in the rate of real house price appreciation could slow real GDP growth by as much as 2 percentage points after one year in that country. The recent experiences in the Netherlands, Australia, and the United Kingdom also suggest that a sharp slowing in the pace of house price appreciation could put a significant dent in the growth of private consumption, residential investment, and real GDP in the United States (see the second figure).

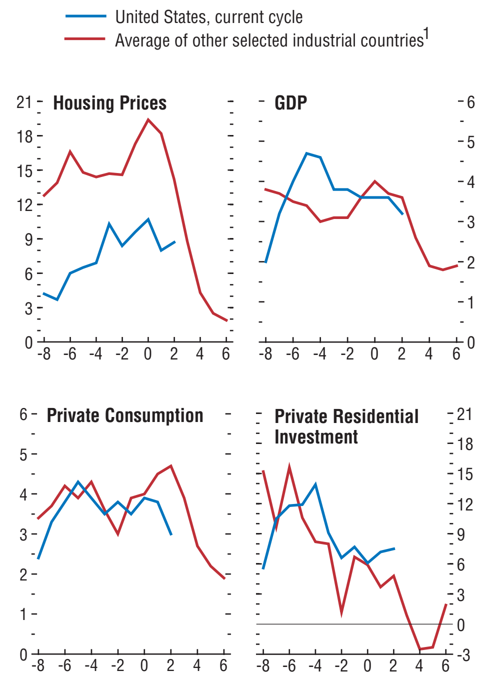
A more abrupt adjustment in house prices would of course have more serious consequences for growth. The April 2003 *World Economic Outlook* found that 40 percent of house price booms ended in busts, and that these "busts"—defined as a peak-to-trough decline in real house prices that falls into the top quartile of all such price declines—are associated with a substantial slowing in real GDP growth (for the average "bust" episode, real GDP growth was 3 percent before the "bust," but modestly negative two years after).[1] Nearly all such "bust" episodes were preceded by a significant monetary policy tightening (generally short-term interest rates increased by 400 to 500 basis points). A key question for housing markets going forward, therefore, is the extent to which interest rates increase in the period ahead.

A slowing U.S housing market would have important implications for the world economy given that the U.S. economy has been a key engine of global growth in recent years. Should

[1]The analysis in the September 2005 *World Economic Outlook* suggested that at least 18 states, accounting for more than 40 percent of U.S. GDP, are currently experiencing housing booms.

The Recent Slowdown in Housing Prices

(Percent change from a year earlier, constant prices; x-axis in quarters where zero denotes the quarter in which housing price growth reached its highest level)



Sources: Haver Analytics; Bank for International Settlements; national authorities; and IMF staff calculations.
[1]Simple average of Australia's, the Netherlands', and the United Kingdom's recent booms and subsequent slowdowns.

U.S. growth and imports slow, trading partners—particularly significant exporters of consumption goods to the United States—would be adversely affected (over the past 25 years, the correlation between output growth in the United States and the rest of the world has been 0.5). Through its likely impact on household saving and residential investment, a slowing in the rate of house price appreciation in the United States would, however, contribute to a needed rebalancing of global growth and a reduction in existing current account imbalances.

Box 1.3. How Accurate Are the Forecasts in the *World Economic Outlook?*

A recent report commissioned by the IMF's Research Department evaluated the accuracy of the forecasts published in the *World Economic Outlook* (WEO), and made a number of recommendations for improving forecasting at the IMF (see Timmermann, 2006). The report—written by Allan Timmermann of the University of California, San Diego—is the fourth in a series of such evaluations (following Artis, 1997; Barrionuevo, 1993; and Artis, 1988).[1] This box discusses the findings of the report and the steps that are being taken to implement the report's recommendations.

Assessing the WEO Forecasts

As a first step, the report looked at the forecasting performance for five key variables—real GDP growth, inflation, the current account balance, and import and export volume growth—for 178 countries in seven economic regions (Africa, central and eastern Europe, the Commonwealth of Independent States (CIS) and Mongolia, Developing Asia, Middle East, Western Hemisphere, and Advanced Economies) since 1990. The analysis considered current-year and next-year forecasts published in the April and September issues of the *World Economic Outlook* (e.g., the April and September 2005 issues of the WEO have projections for 2005—current year—and 2006—next year). Overall, the report found that the *World Economic Outlook* forecasts for variables in many countries meet the basic forecasting quality standards in some, if not all, dimensions.[2] The report, however, also raised important issues that are discussed below on a variable-by-variable basis.

- *Real GDP growth.* WEO forecasts for real GDP growth display a tendency for systematic overprediction. Looking at the G-7 countries, WEO forecasts systematically and significantly overpredicted economic growth for the European and Japanese economies during 1991–2003. In contrast, U.S. growth was underpredicted after 1990, although the bias was not statistically significant. In Africa, central and eastern Europe, the CIS, and the Middle East, growth in individual countries is, on average, overpredicted by more than 1 percentage point in both current- and next-year forecasts. That said, more than four-fifths of these biases are not statistically significant, which largely reflects the high volatility in the underlying growth series. For IMF program countries, growth was, on average, overestimated by about 0.9 percentage point in April current-year forecasts and by 1½ percentage points in April next-year forecasts, often significantly so.
- *Inflation.* The report found a bias toward underprediction of inflation, with these biases significant in the next-year forecasts in the case of many African, central and eastern European, and Western Hemisphere countries. The bias tends to be smaller in the current-year forecasts.
- *External current account balances.* Fewer problems were found in the forecasts for current account balances, except that in some cases the April next-year forecast errors were significantly biased or serially correlated.

As well as assessing the performance of the WEO projections against standard benchmarks of forecast performance, the report also compared them to the Consensus Forecasts, a widely used source that compiles the forecasts of economists working in the private sector. The analysis covered the G-7 economies, seven Latin American economies, and nine Asian economies. Overall, the performance of the WEO forecasts was similar to the Consensus Forecasts—for example, the current year WEO forecasts of GDP growth in the G-7 economies were generally less biased than the Consensus Forecasts,

Note: The main authors of this box are Nicoletta Batini, Tim Callen, and Thomas Helbling.

[1] Other studies of the *World Economic Outlook* forecasts include Batchelor (2001), Beach, Schavey, and Isidro (1999), and U.S. GAO (2003).

[2] These dimensions are that the forecast should be unbiased and serially uncorrelated, that no current information should be able to predict future forecast errors, and that the variance of forecast errors should decline as more information becomes available.

but the bias in the next-year forecasts was stronger in the WEO than in the Consensus.

Recommendations

The report made a number of recommendations to improve the WEO forecasting process. These included: (1) WEO growth forecasts for some countries could be improved if more attention were paid to important international linkages, particularly with the United States; (2) the accuracy of the forecasts should be assessed on an ongoing basis by instituting a set of real-time forecasting performance indicators; (3) IMF forecasters should more carefully consider the historical forecast "biases" when making their forecasts; and (4) the forecast process should be broadened to more explicitly consider the risks around the key central projections. Internally, the IMF has begun taking steps to implement the first three recommendations. The rest of this box discusses the fourth recommendation—forecast risks—and how these can be incorporated in the WEO process.

The increased use of policy targets for key macroeconomic variables—especially inflation—that are not fully under the control of policymakers and advances in econometric methodology have led to a more intense scrutiny of forecast uncertainty in recent years. For example, the Bank of England uses "fan charts" to illustrate the bank's view about the uncertainty around its central forecast path for inflation. Similarly, the Congressional Budget Office in the United States has started using fan charts to illustrate the uncertainty in its projection of the budget deficit. These fan charts are diagrams that represent forecasts of the probability distributions of variables of interest. The aim of such charts is to depict in a practical way the uncertainty that exists about future economic outcomes.

The fan chart in Figure 1.1 shows the IMF staff's assessment of the range of uncertainty around the central WEO projection for global real GDP growth in 2006–07. Specifically, it shows the 90 percent probability interval for growth outcomes in 2006–07. Past forecast performance and judgment about the current balance of risks,[3] as discussed in the main text, provide the inputs for the construction of the fan chart. In addition to uncertainty about the future course of oil prices, the U.S. housing market, corporate investment, and the future resilience of emerging market growth, two low probability, but high cost, events—an avian flu pandemic and the disorderly unwinding of current account balances—are also considered. The fan chart builds on the two-piece normal distribution used by the Bank of England in its inflation forecast. This distribution, unlike the standard normal distribution widely used in forecasting, allows for asymmetric probabilities below and above the central forecast.[4] In the case of the balance of risk being tilted to the downside—which is the view of IMF staff at this juncture—the expected probability of outcomes being below the central forecast exceeds 50 percent. As shown in Figure 1.1, the downside risks are expected to increase somewhat over time, in part reflecting the gradually increasing probability of a disorderly adjustment in global imbalances in the absence of policy action.

[3]Recent current-year and next-year forecast errors provide important information about the extent of forecast uncertainty.

[4]See Britton, Fisher, and Whitley (1998); and Wallis (2004).

and Ireland could pose downside risks to consumption in a rising interest rate environment.

While higher energy prices have kept headline inflation above 2 percent, core inflation in the euro area has remained subdued, reflecting sluggish wages and domestic demand. Underlying inflation is expected to remain contained going forward, although higher energy and administrative prices and the expected VAT increase in Germany are likely to keep headline inflation more elevated. Prompted by the persistence of headline inflation above 2 percent and perceived upside risks, the European Central Bank (ECB) raised its policy rate by 25 basis points in both December and March, and the market expects further moves over the course of the year. Nevertheless, with underlying inflationary pressures contained and domestic demand still fragile, there appears to be no need to rush to normalize rates.

Turning to fiscal policy, little progress was made in reducing the area-wide budget deficit last year, as policies, particularly in the larger countries, remained insufficiently ambitious. While a number of countries made efforts to meet their commitments under the rules of the Stability and Growth Pact (SGP), the fiscal deficit rose sharply in Italy and Portugal during 2005 and also—while meeting the SGP criteria—in Austria and Luxembourg. The euro area deficit of 2.3 percent of GDP in 2005 is expected to be maintained in 2006 as fiscal consolidation, as projected by IMF staff based on current policy plans, is again expected to fall short of the SGP requirements, particularly in the larger economies. Concrete plans announced by the German government are expected to bring the deficit below 3 percent in 2007, and the recent announcement of a 1 percent cut in real government expenditures in 2007 in France is welcome, although the measures to achieve this still need to be specified. In general, more ambitious fiscal consolidation of about ½ percent of GDP per year on average will be needed to attain balance by the end of the decade in line with the SGP and to meet upcoming demographic challenges.

Despite greater near-term optimism, Europe faces the fundamental issue of how to raise its low potential growth rate of output and increase employment in line with the Lisbon Agenda. As past issues of the *World Economic Outlook* have detailed, there is wide agreement that this requires fundamental reforms, particularly of labor markets. Achieving a public consensus for implementing reforms has, however, proven more difficult, as recent events in France underscore. As the Single Market reaches increasingly sensitive areas, resistance to reform has increased, reflected in the watering down of the Services Directive and in government opposition to foreign takeovers in a number of countries (including France, Luxembourg, Poland, and Spain). More generally, there has been increasing debate about the nature of European social models, and the appropriate trade-offs between economic and social outcomes. In contrast to what is commonly perceived, European social systems display more diversity than uniformity, with differences within Europe often greater than those with other advanced economies (Figure 1.12). The Anglo-Saxon model has delivered the best outcome for productivity growth, while the Nordic and Continental models have been the most effective in reducing income inequality and poverty. The Mediterranean model appears to have performed less well than the others in reducing inequality and providing incentives for labor market participation. One key challenge for policymakers is to draw lessons from the examples of success within Europe in balancing the need for labor market flexibility with effective social safety nets, for example. While the appropriate approach in individual countries will vary, a combination of low employment protection, generous but short-duration unemployment benefits, and active labor market policies have in some cases been effective. Greater education levels also appear to reduce the probability of poverty by promoting higher levels of human capital, suggesting that this may be a more effective use of fiscal resources than redistributive policies alone.

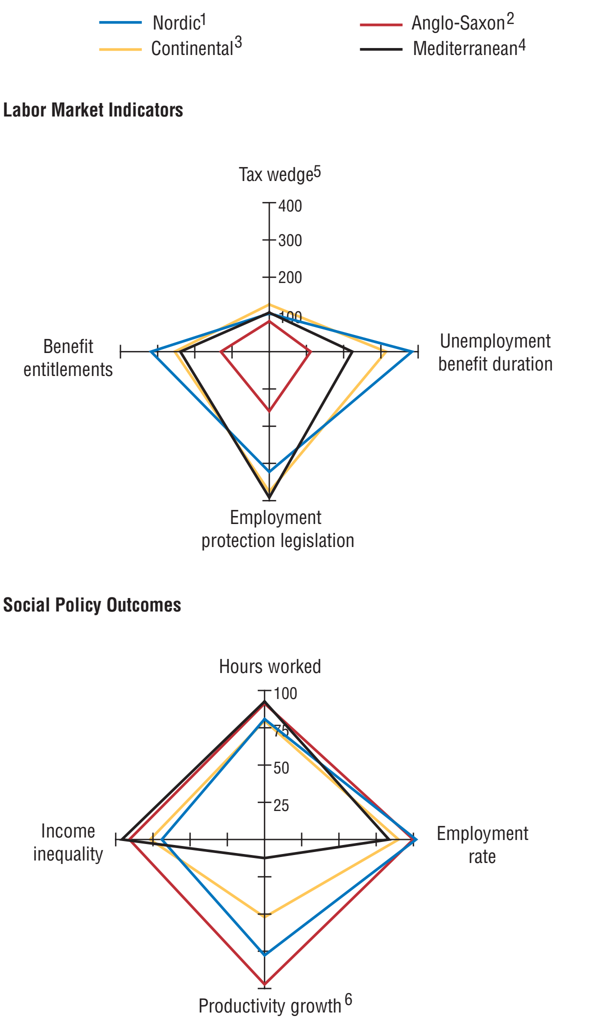
Turning to other countries, growth in the United Kingdom slowed to 1.8 percent in 2005, driven by a slowdown in consumption in response to the cooling of the housing market, earlier monetary policy tightening, and higher energy prices, while business investment and export growth have remained steady. Looking forward, as the factors that dampened activity in 2005 wane, growth is expected to pick up to 2.5 percent in 2006 and 2.7 percent in 2007. The main risks to the outlook are—on the upside—favorable supply effects from immigrants joining the workforce and—on the downside—a renewed weakening of house price growth. With no signs of second-round effects from energy prices and a projected closing of the output gap, CPI inflation is expected to remain at about 2 percent. The Bank of England's response to the simultaneous slowing of aggregate demand and the rise in energy prices in 2005 was appropriate, including the ¼ percentage point cut in interest rates in August. Looking forward, monetary policy will need to focus on averting second-round effects of higher energy prices and ensuring that the recovery of demand is sustained. On the fiscal front, expenditure restraint and the announced rise in energy company taxes are expected to help support the stabilization of public debt at about 40 percent of GDP, but this depends on specifying concrete measures to contain spending after 2008. Greater consolidation efforts would be required to meet the authorities' more ambitious fiscal projections over the medium term. Reforms of the pension system will be needed to address the inadequate level of private saving for retirement; the Pensions Commission's recommendations are a key first step in developing a consensus on the extent of the problem and the required policy measures.

Economic performance in the Nordic countries has remained robust, fueled by domestic demand, although the pace of growth has moderated in Norway and Sweden. With inflation edging up, monetary conditions have begun to be tightened in both Norway and Sweden, and in Norway the government needs to continue its policy of resisting pressures for excessive increases in government spending following the surge in oil revenues. In Iceland, financial market concerns over the resolution of large macroeconomic imbalances built up during a three-year economic boom have led to downward pressure on the exchange rate and widening credit spreads for banks. In Switzerland, growth is expected to improve in 2006 in line with demand from the euro area. Monetary policy has been appropriately expansionary and the move toward a more neutral stance should be gradual. Credible medium-term fiscal adjust-

Figure 1.12. Western Europe: Social Policy Indicators and Outcomes

(U.S. average = 100)

Social policy models within Europe exhibit significant variations in design and in their impact on economic efficiency and equity. The examples of success within Europe can help guide reform of the models in line with the Lisbon Agenda.



Sources: Eurostat, ESSPROS; Haver Analytics; Klenow and Rodriguez-Clare (2004); OECD, *Economic Outlook;* OECD, *Employment Outlook 2005;* and IMF staff calculations.
[1]Denmark, Finland, the Netherlands, and Sweden.
[2]Ireland and the United Kingdom.
[3]Austria, Belgium, France, Germany, and Luxembourg.
[4]Greece, Italy, Spain, and Portugal.
[5]Income tax plus employee and employer contributions less cash benefits (as a percent of labor costs) in a two-earner family with two children, one at 100 percent average earnings, and the other at 33 percent.
[6]Total factor productivity growth.

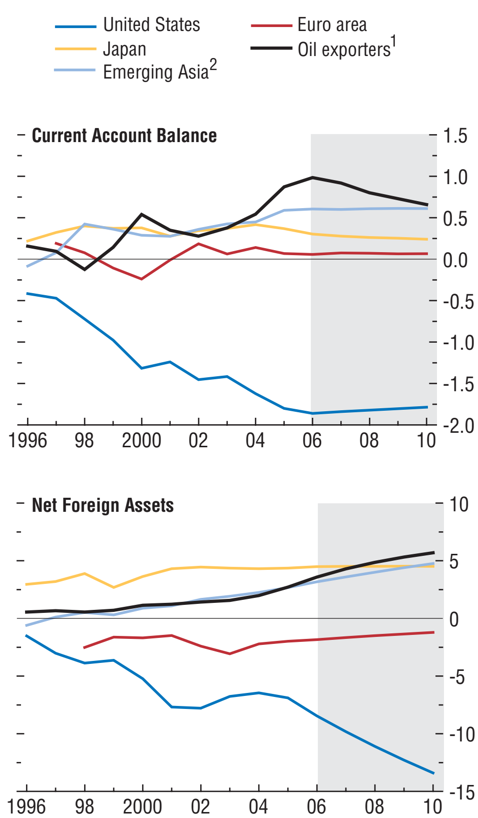
Box 1.4. How Much Progress Has Been Made in Addressing Global Imbalances?

This box updates the analysis of global imbalances and policy actions designed to facilitate their resolution presented in the September 2005 *World Economic Outlook*. Since then there has been no significant shift in the trend of external imbalances: the U.S. current account deficit is estimated to have reached the record level of 6.4 percent of GDP in 2005, and—at current exchange rates—is projected to remain at record levels in subsequent years (see the first figure). Capital flows to the United States remain strong, with an increase in purchases of U.S. bonds by the private sector offsetting a decline in official flows. As has been the case for the past four years, the deterioration of the U.S. net external position in 2005 has once again been contained by sizable net capital gains on its external portfolio despite the real appreciation of the dollar, thanks to the stronger performance of non-U.S. stock markets relative to the U.S. market.

As a matter of simple arithmetic, the global imbalances remain on an unsustainable trend over the long run, as—unless returns on U.S.-issued financial instruments continue to substantially underperform those issued in other countries, thus generating large further capital gains for the United States—they would lead to an ever-accumulating stock of emerging Asian and oil exporters' assets and U.S. external liabilities.[1] Therefore, the issue is not whether but how and when they adjust. As described in Appendix 1.2 of the September 2005 *World Economic Outlook*, the current configuration of external imbalances arises from a combination of shocks and economic trends across several countries and regions, with both the public and private sector contributing. It is possible that

Current Account Balances and Net Foreign Assets

(Percent of world GDP)



Sources: Lane and Milesi-Ferretti (2006); and IMF staff estimates.

[1]Algeria, Angola, Azerbaijan, Bahrain, Republic of Congo, Ecuador, Equatorial Guinea, Gabon, I.R. of Iran, Kuwait, Libya, Nigeria, Norway, Oman, Qatar, Russia, Saudi Arabia, Syrian Arab Republic, Turkmenistan, United Arab Emirates, Venezuela, and the Republic of Yemen.

[2]China, Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan Province of China, and Thailand.

Note: The author of this box is Gian Maria Milesi-Ferretti.

[1]Hausmann and Sturzenegger (2006) have recently argued that since U.S. net investment income is still positive and changed little over the past 25 years, the "effective" net external position of the United States must also have changed little, and as of end-2004 the U.S. must still have been a net creditor. The main flaw in this argument is the assumption that all investments should earn the same rate of return (even though the risk characteristics of the U.S. asset and liability portfolio are very different). Allowing for this, there is no reason why net investment income cannot be positive even when a country is a net debtor (see "Why Is the U.S. International Income Account Still in the Black, and Will this Last?" Box 1.2, *World Economic Outlook*, September 2005).

there will be an orderly private-sector led adjustment in imbalances even without policy action, with U.S. private savings rising gradually as interest rates increase and the housing market slows, accompanied by substantial real exchange rate adjustment, including through rising inflation in Asia (see Figure 1.10). This benign scenario assumes that foreigners will continue to purchase U.S. assets (with no significant interest rate premium, notwithstanding the risk of large capital losses) and that protectionist pressures can be avoided. If this does not happen, the figure also illustrates the implications of a much more abrupt and disorderly adjustment, characterized by a substantial overshooting of exchange rates; a large increase in interest rates; and a sharp contraction of global activity.

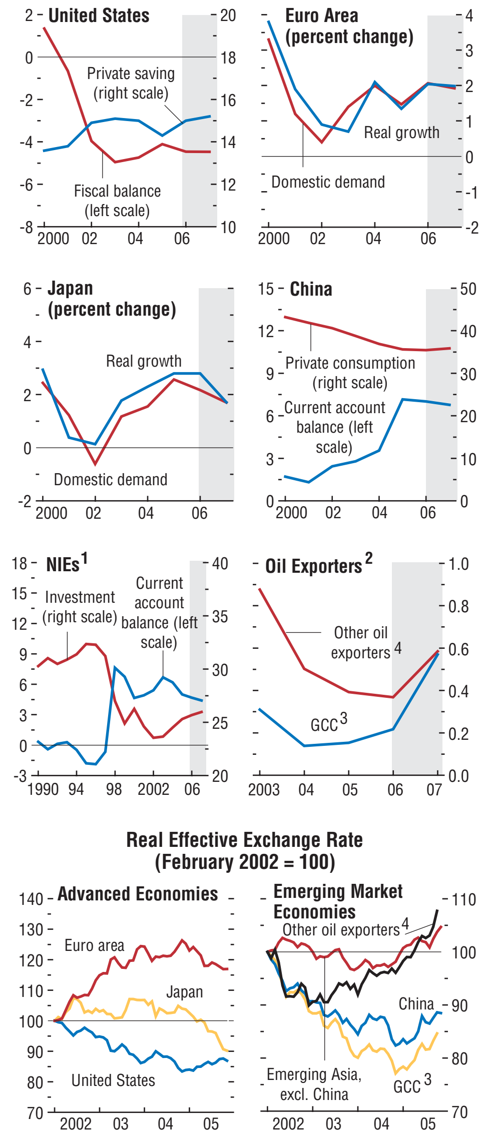
The question then becomes how public policy can best assist an orderly rebalancing. The *World Economic Outlook* has long argued that the key actions in this regard include measures to increase savings in the United States; exchange rate appreciation in the context of greater exchange rate flexibility, along with measures to boost domestic demand in emerging Asia; structural reform to boost domestic demand and growth in the euro area and Japan; and measures to increase demand in oil exporters (see Box 1.6 in the September 2005 *World Economic Outlook* for a detailed description of these policies). As shown in the "strengthened policies" scenario in Figure 1.10, this would essentially bring forward adjustment, but in an orderly way. Net external positions would be stabilized earlier, thus reducing the risk of abrupt and disruptive adjustment, and world growth would be more balanced. In addition, the proposed policies are advisable on domestic policy considerations, being in each country's and region's best interest.

Over the last year, how much progress has been made in implementing these policies?

- *In the United States, there are modest signs of an improvement in savings* (see the second figure), with the general government deficit falling to 4.1 percent in 2005. However, IMF staff projections suggest little improvement thereafter,

Global Imbalances: Macroeconomic Indicators

(Percent of GDP, unless otherwise indicated)



Source: IMF staff estimates.
[1]Newly industrialized Asian economies (NIEs) refers to Hong Kong SAR, Korea, Singapore, and Taiwan Province of China.
[2]Marginal propensity to import out of oil revenues (See Chapter II, Box 2.1 for details).
[3]Cooperation Council of the Arab States of the Gulf (GCC): Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates.
[4]See footnote 1 in previous figure excluding GCC countries.

Box 1.4 ***(concluded)***

with the deficit remaining above 4 percent of GDP in 2006–07 and close to 3 percent of GDP over the medium term, substantially higher than the broad balance envisaged in the adjustment scenario. Recent budget proposals envisage only modest fiscal improvements and are based on an ambitious compression in nondefense discretionary spending. A more determined fiscal retrenchment, which would help prepare for the inevitable aging-related increases in spending, is likely to require revenue-enhancing measures, such as eliminating tax exemptions; raising energy taxes; or introducing a federal VAT or sales tax. The private savings rate would remain relatively stable, as a higher household savings ratio—partly reflecting a slowdown in the housing market—would be offset by a fall in the (currently very high) savings rate of firms.

- *In Asia, exchange rate adjustment remains limited, although there are some signs of a strengthening in domestic demand.* More specifically:

  On exchange rates, China's July 2005 exchange rate reform was a welcome step, and the authorities have taken further measures to liberalize and develop the foreign exchange market, including an increase in the number of financial institutions licensed to participate in the interbank foreign exchange market (including foreign banks), and the introduction of over-the-counter (OTC) trading of spot foreign exchange with 13 banks designated as market makers. However, the renminbi continues to move closely with the U.S. dollar, and the additional flexibility the reform permits needs to be used more aggressively to allow the renminbi to respond to market pressures and appreciate. Elsewhere in Asia, current account surpluses have declined in some countries, under the weight of higher oil prices, while currencies have generally appreciated, most notably in Korea and Thailand. Nevertheless, surpluses remain large in a number of countries, suggesting that further exchange rate appreciation would be required over the medium term.

  On the demand side, priorities differ across countries. In China, where investment is already high, the key is to strengthen private consumption. IMF staff projections suggest a stabilization but very little increase in the share of private consumption to GDP over the next two years, despite measures to boost rural incomes. Allowing for higher consumption over the medium term will require a number of structural reforms, including strengthening the financial sector, requiring state-owned enterprises to pay dividends to the state, rebalancing public expenditure toward higher spending on health and education, and reforming the pension system. Elsewhere in Asia, there are some signs of a pickup in investment since 2003, as corporate restructuring has advanced, bankruptcy rates have fallen, and debt levels have declined below pre-crisis levels in many countries. Nevertheless, further reforms are necessary to improve the investment climate, including financial sector reforms that deepen capital markets and thereby broaden the sources of corporate financing.

- *In Japan, where the expansion is now well grounded, the current account surplus has begun to narrow against the backdrop of strengthening domestic demand, and is set to decline further from its current high level over the medium term.* With fiscal policy needing to tighten significantly, boosting productivity in the nontradable sector is key. Further reforms can be pursued to improve labor market flexibility, as well as to enhance competition—especially in retail, agriculture, and other domestically oriented sectors. Such steps can promote more robust domestic demand that, along with population aging, will work to narrow the external imbalance over the medium term. Over time an appreciation of the yen is likely to make a contribution as well.
- *In the euro area, the key contribution—in some ways similar to Japan—is through measures to boost growth and domestic demand.* While there are signs that the recovery—primarily in investment—is becoming better grounded, further progress is needed on structural

reforms at the national and European level. In recent months, the EU Services Directive has been approved by the European parliament, but in a much weaker form. In Germany, the recent package—while containing welcome measures in other areas—was relatively weak on product market reform and further labor market deregulation. For the area as a whole, past structural reform efforts have increased wage flexibility and strengthened employment resiliency, but have not delivered sufficient job creation, productivity, and output growth. Thus, comprehensive strategies to foster product market and financial sector competition, as well as a better integration of labor, product, and financial market reforms remain key priorities.

- *In oil exporters, adjustment is—understandably given the size of additional revenues relative to domestic economies—relatively gradual.*

  In oil exporters, scope remains for boosting expenditures in areas where social returns are high (education and health; infrastructure; private sector employment; and strengthened social protection schemes). To date, oil-exporting countries have, on average, spent 30–40 percent of their additional oil revenues on imports, with relatively significant variation across countries—see Box 2.1 for details.

  Exchange rates have appreciated noticeably in real terms in a number of oil exporters and more modestly in Cooperation Council of the Arab States of the Gulf (GCC) countries, whose exchange rates remain tied to the dollar in the runup to GCC monetary union. In these latter countries, real effective appreciation can only take place through inflation as spending adjusts.

Finally, it is important to stress that adjustment will require both a rebalancing of demand and exchange rate adjustment, with currency depreciation in several deficit countries and currency appreciation in several surplus countries—there is not a choice between one or the other. The longer adjustment is delayed, the larger these exchange rate adjustments will ultimately need to be, and the greater the risk of overshooting. Policymakers and private sector decision makers need to recognize that—although the timing is difficult to predict—exchange rate adjustment will eventually take place and to ensure that national economies, financial institutions, and corporations are as resilient to it as possible.

ment will need to be undertaken to contain the expansion in public spending and the rising tax burden. Raising productivity and labor utilization remain important challenges, and structural policies need to focus on competition in product markets and reform of the electricity and agricultural sectors.

Japan and Other Industrial Countries in Asia: Managing Three Major Transitions in Japan

Despite an inevitable slowdown from the 5 percent GDP growth rate in the first half of 2005, Japan's expansion remains solidly on track. With incoming data generally exceeding expectations, GDP growth for 2005 is now estimated at 2.7 percent, some 0.7 percent higher than projected last September. While export growth has been supported by strong demand in the United States and China and a depreciation of the yen, the expansion is increasingly being driven by final domestic demand, underpinned by rising employment, buoyant corporate profits, and a turnaround in bank credit growth (now positive, excluding write-offs). Partly reflecting this improved outlook, the Nikkei has risen by some 40 percent since mid-2005, by far the most rapid among the G-7 countries.

Looking forward, GDP growth in 2006 is projected at 2.8 percent, again driven by solid domestic demand. At this point, the risks are to the upside, especially if private consumption gains momentum in response to rising employ-

Box 1.5. The Doha Round After the Hong Kong SAR Meetings

The World Trade Organization (WTO) Ministerial Conference, held in Hong Kong SAR during December 13–18, 2005, was the second such conference since the Doha Round of multilateral trade negotiations was launched in the Qatari capital in 2001. In contrast to the failed Cancún Ministerial Conference in September 2003, the Hong Kong SAR meeting largely met its objectives—though these were disappointingly modest—and succeeded in instilling the Doha Round with some renewed political momentum. Ministers in Hong Kong SAR focused heavily on agriculture and development—the two most politically sensitive issues under discussion—largely leaving aside negotiations on nonagricultural market access (NAMA), services and rules.

In agriculture, the most tangible outcome of the Hong Kong SAR Ministerial Conference was an agreement to end all forms of export subsidies in agriculture by 2013, with an accelerated end date of 2006 for cotton. This was a welcome achievement, given the highly distortionary nature of export subsidies in OECD countries. Only marginal progress was achieved in the other dimensions of the agriculture negotiations, namely the need to discipline or eliminate trade-distorting domestic support and to increase market access in agricultural products.

On development issues, ministers outlined a "package" of trade and aid for least-developed countries (LDCs) and other poor developing countries in the form of market access privileges, less stringent disciplines ("special and differential treatment"), and assistance in trade-related capacity building. In particular, industrial and developing countries that declared themselves in a position to do so, agreed to provide duty- and quota-free market access for at least 97 percent of export items originating from LDCs by 2008. However, the 3 percent exception will allow highly protected products of significant export interest to LDCs to be exempted.

Although the Doha Round was dubbed the Doha Development Agenda (DDA), the "development dimension" of the Round has remained controversial. In Hong Kong SAR, there was a tendency to equate "development" with "policy space"—that is, the right to exemptions from global commitments and disciplines. Yet this understanding is at odds with the experience of successful development, which suggests that active trade integration offers the best hopes for spurring economic growth. Weak commitments may also reduce developing country leverage in achieving desired outcomes in their own areas of interest.

The conference set specific deadlines for intermediate steps in the negotiations, but made no headway on several central issues, and much uncertainty remains as to whether an ambitious outcome can be reached. Work subsequent to the Davos World Economic Forum has seen a serious engagement at the technical level and a cooling of the political rhetoric that had been encumbering the negotiations. The key parameters for liberalizing agriculture and nonagricultural trade are to be agreed by April 30, 2006, and final draft schedules of commitments in services are to be submitted by October 31, 2006. The aim is to conclude the Round by the end of 2006.

These timelines appear very ambitious in view of the remaining differences and the pace of the negotiations so far, but they may help focus decision makers' attention on the Round. A successful outcome to the negotiations is needed to strengthen the multilateral trading system and provide impetus to global economic growth.

Note: The author of this box is Jean-Pierre Chauffour.

ment and labor income. Most encouragingly, with underlying deflationary pressures easing, there is an increasing prospect of an end to eight consecutive years of declining prices. Core CPI inflation—which includes oil prices and, therefore, results in some upward bias at present—has turned positive for four consecutive months, and unit labor costs are picking up as labor market conditions tighten. Correspondingly, CPI inflation is projected to turn slightly positive in 2006, although—given the margins of error—it is still too early to conclude that deflation is conclusively defeated.[8]

In the period ahead, the Japanese economy faces three key transitions.

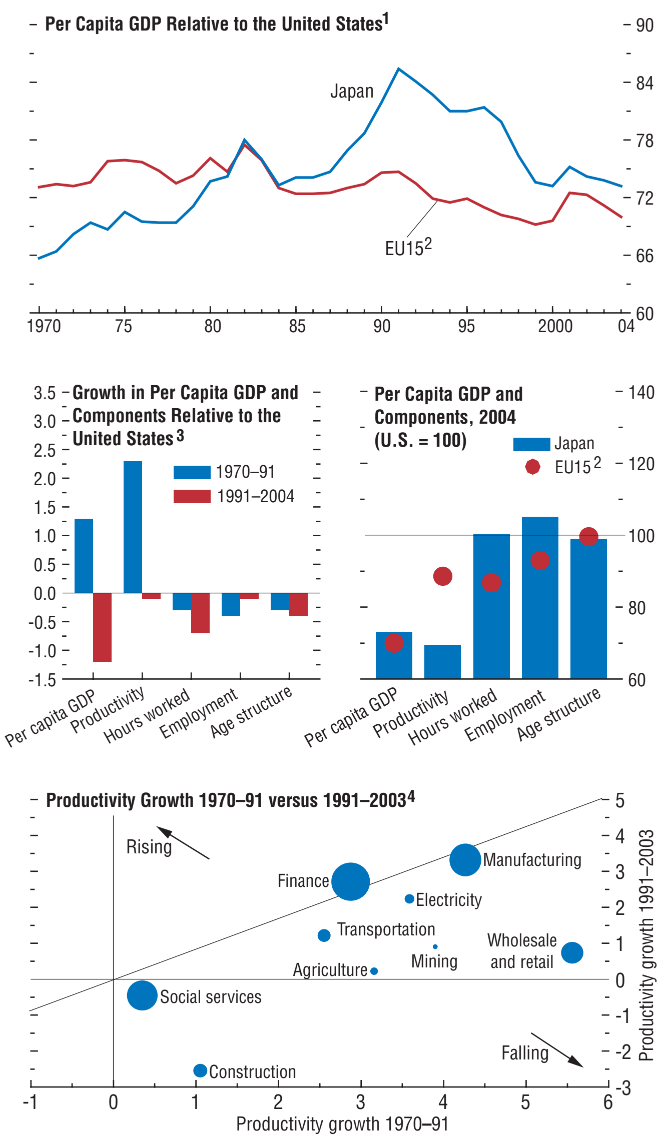
- *The shift to a new monetary framework.* In early March, the Bank of Japan ended the quantitative easing policy, and reverted to targeting the overnight call rate. Given the uncertainties noted above, and the large costs of a deflationary relapse, the monetary policy stance is appropriately expected to be kept highly accommodative for the time being; the timing of interest rate increases will depend on the extent that incoming data confirm that deflation is decisively beaten and inflationary expectations are solidly established. The Bank of Japan also announced a new monetary framework, including clarification of its view that medium-term price stability entails inflation in the range of 0–2 percent, and greater transparency about the current view on monetary policy in its semi-annual report.
- *The restoration of budget sustainability*, in an environment of growing pressures from the rapidly aging population. Over the past two years, the general government deficit has been reduced from 8.1 percent of GDP to 5.8 percent of GDP in 2005, somewhat faster than earlier thought, although only modest further progress is expected in 2006. Further substantial adjustment will be needed in the future—indeed, IMF staff projections suggest that the primary balance excluding social security will need to improve by some 6 percent of GDP over the next 10 years even to stabilize net debt at 105 percent of GDP. The strengthening economy provides an opportunity to make more rapid progress; in this regard, the authorities' projection that the objective of primary balance excluding social security could be achieved in FY2011, one year earlier than expected, is encouraging. It will be important to lay out a more detailed plan to achieve this target, through further curtailing expenditures, including limiting growth in health care costs; broadening the tax base, including by reducing exemptions; and over time raising the consumption tax rate, which is low by international standards.
- *Reviving productivity growth.* After a period of very rapid convergence in the 1970s and 1980s, Japan's per capita income fell sharply relative to the United States during the 1990s, and has since stabilized at broadly the European level (Figure 1.13). Given already high labor utilization rates and deteriorating demographics, further convergence toward U.S. per capita income levels will depend critically on raising productivity, which is well below both U.S. and European levels, particularly in the services sector. This underscores the need to complete the remaining agenda for financial and corporate sector restructuring (specifically regarding regional banks and some inefficient domestic sectors), and to press ahead with measures to improve labor market flexibility, downsize government financial institutions, enhance domestic competition and reduce regulation and trade restrictions, including in agriculture.

To a considerable extent, policies in these areas—particularly fiscal adjustment and productivity growth—are linked. In particular, higher productivity would help directly to improve fiscal sustainability (underscoring the importance of designing tax and expenditure measures to minimize adverse effects on growth). In addition, sustained higher productivity growth in Japan would have important benefits from a multilateral perspective. With the rise of China, the East Asian region has become relatively less reliant on Japan, but linkages still remain important; a 1 percentage point increase in productivity growth could increase GDP growth in the rest of the region by ¼ percent in the short run. More

[8]Based on the IMF staff's past forecasting history, there would still be a one-third chance of a further decline in the CPI in 2006.

Figure 1.13. Japan: Reversing the Relative Decline in Per Capita GDP Growth

After a rapid increase in the 1970s and 1980s, Japan's per capita income has since fallen sharply relative to the United States. With labor inputs already high, a reversal of this trend will require measures to raise productivity, which is low by international standards.



Sources: OECD, *Economic Outlook;* and IMF staff calculations.

[1]Ratio of per capita GDP in 2000 purchasing-power-parity (PPP) dollars in Europe and Japan to the United States.

[2]Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

[3]Employment ratio defined as employed persons as a percent of population of working age.

[4]Value added per person. Size of bubble represents the share of sector in 1991–2003.

generally, higher productivity growth could—through its impact on domestic demand—contribute to reducing global imbalances, especially if it is concentrated in the non-tradeables sector (where, as shown in Figure 1.13, it has weakened noticeably in recent years).

In Australia and New Zealand, real GDP growth slowed in 2005. Private consumption growth weakened in Australia in the face of the slowing housing market and high gasoline prices. Exchange rate appreciation hurt net exports in both countries, particularly in New Zealand. Growth is expected to pick up to 2.9 percent in Australia this year as investment strengthens further in response to capacity constraints and high commodity prices. In New Zealand, by contrast, growth is expected to moderate to 0.9 percent, given that domestic demand has begun to slow and there are signs that the housing market is cooling. The current account deficit remains high in both countries, although it has deteriorated more substantially in New Zealand—reaching 8.8 percent of GDP—and the exchange rate has depreciated substantially in recent months. While headline CPI inflation has risen in both countries, a wait-and-see approach to further monetary tightening is appropriate given the slowdown in activity and the associated decline in inflation risks. Both countries continue to demonstrate enviable records of fiscal prudence, with budgets remaining in surplus and public debt ratios on a firm downward track. In Australia, recent reforms to the industrial relations system and changes to the tax and benefit systems will improve work incentives, and should set the stage for continued strong employment growth.

Emerging Asia: Strong Growth Expected to Continue

Growth in emerging Asia eased slightly to 8.2 percent in 2005 (Table 1.6). This slowdown, however, was concentrated in the early part of the year, and growth accelerated in the second half as exports were boosted by a pickup in corporate investment in industrial countries, which

Table 1.6. Selected Asian Economies: Real GDP, Consumer Prices, and Current Account Balance
(Annual percent change unless otherwise noted)

	Real GDP				Consumer Prices[1]				Current Account Balance[2]			
	2004	2005	2006	2007	2004	2005	2006	2007	2004	2005	2006	2007
Emerging Asia[3]	**8.4**	**8.2**	**7.9**	**7.6**	**4.0**	**3.5**	**3.8**	**3.4**	**3.9**	**4.5**	**4.1**	**4.0**
China	10.1	9.9	9.5	9.0	3.9	1.8	2.0	2.2	3.6	7.1	6.9	6.7
South Asia[4]	**7.7**	**7.9**	**7.1**	**6.9**	**4.3**	**5.0**	**5.3**	**5.2**	**0.1**	**–2.3**	**–3.0**	**–3.0**
India	8.1	8.3	7.3	7.0	3.8	4.2	4.8	4.9	0.2	–2.5	–3.1	–3.1
Pakistan	7.1	7.0	6.4	6.3	7.4	9.1	8.4	6.9	0.2	–2.4	–3.2	–3.0
Bangladesh	5.9	5.8	6.0	6.3	6.1	7.0	6.1	5.6	–0.3	–0.9	–1.0	–1.1
ASEAN-4	**5.8**	**5.2**	**5.1**	**5.7**	**4.6**	**7.5**	**8.8**	**4.6**	**4.4**	**3.3**	**2.8**	**2.5**
Indonesia	5.1	5.6	5.0	6.0	6.1	10.5	14.2	6.6	1.2	1.1	0.4	—
Thailand	6.2	4.4	5.0	5.4	2.8	4.5	3.6	2.2	4.2	–2.3	–2.0	–2.1
Philippines	6.0	5.1	5.0	5.6	6.0	7.6	7.4	4.7	2.7	3.0	2.1	1.6
Malaysia	7.1	5.3	5.5	5.8	1.4	3.0	3.1	2.7	12.6	15.6	14.9	14.7
Newly industrialized Asian economies	**5.8**	**4.6**	**5.2**	**4.5**	**2.4**	**2.2**	**2.2**	**2.3**	**7.0**	**6.0**	**5.7**	**5.6**
Korea	4.6	4.0	5.5	4.5	3.6	2.7	2.5	3.0	4.1	2.1	1.8	1.7
Taiwan Province of China	6.1	4.1	4.5	4.5	1.6	2.3	1.8	1.5	5.7	4.7	5.4	5.5
Hong Kong SAR	8.6	7.3	5.5	4.5	–0.4	1.1	1.8	2.1	9.6	10.7	10.1	10.1
Singapore	8.7	6.4	5.5	4.5	1.7	0.5	2.0	1.9	24.5	28.5	26.7	26.3

[1]In accordance with standard practice in the *World Economic Outlook*, movements in consumer prices are indicated as annual averages rather than as December/December changes, as is the practice in some countries.
[2]Percent of GDP.
[3]Consists of developing Asia, the newly industrialized Asian economies, and Mongolia.
[4]The country composition of this regional group is set out in Table F in the Statistical Appendix.

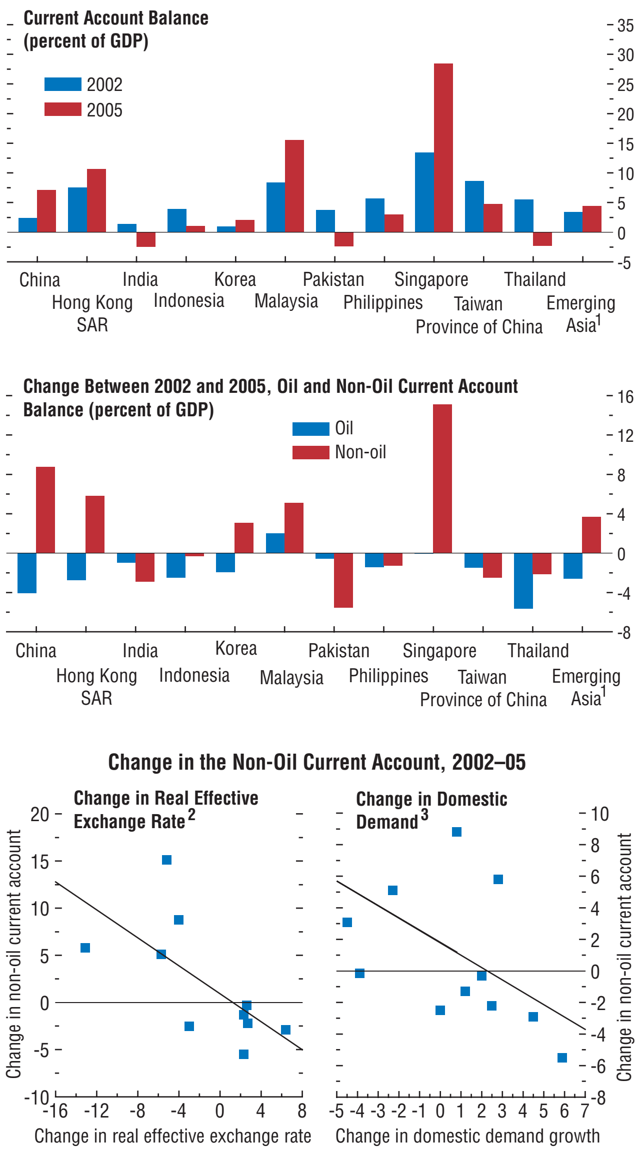
offset a weakening in domestic investment. With global economic conditions expected to remain favorable—the ongoing domestic demand recovery in Japan is particularly helpful—this growth momentum is expected to continue in 2006, and real GDP in the region is projected to expand by 7.9 percent (a full percentage point higher than in the September 2005 *World Economic Outlook*, largely due to upward revisions in China and India, see below). The risks to the outlook are broadly balanced. On the upside, a stronger-than-expected rebound in corporate investment in industrial countries and recent equity and property price increases could underpin stronger growth. On the downside, avian flu is a significant, if difficult to quantify, risk (see Appendix 1.2). Other risks stem from a renewed rise in oil prices, an increase in protectionist sentiment in advanced economies, and the possible need for further monetary tightening if inflationary pressures do not abate.

Headline CPI inflation has risen over the past year in most countries, largely due to higher energy prices, although core inflation has also picked up sharply in Indonesia, the Philippines, and to a lesser extent in Thailand. Asset prices have continued to rise strongly, with equity markets posting record highs and property prices continuing to surge. Against this background, many central banks have moved to raise interest rates, although real rates remain low and short-term interest rate differentials have generally moved in favor of the U.S. dollar over the past year, one factor behind the moderation of non-FDI capital inflows into the region. Looking forward, monetary policy may need to be tightened further in countries where inflationary pressures have yet to retreat (India, Malaysia, and Thailand). On fiscal policy, the favorable outlook provides an opportunity for countries with high public debt (particularly India, Indonesia, Pakistan, and the Philippines) to take steps to put their public finances on a sustainable medium-term footing.

The current account surplus in emerging Asia has shown surprising resilience to the sharp hike in oil prices. Despite a deterioration in the oil balance of 2½ percent of GDP, the overall cur-

Figure 1.14. Emerging Asia: Understanding Recent Developments in the Current Account

Despite the rise in oil prices, the current account surplus in emerging Asia remains large. A redistribution of these surpluses, however, has taken place, with those countries where the real exchange rate has depreciated and/or domestic demand growth has weakened generally seeing an increasing surplus and others a deteriorating current account position.



Source: IMF staff calculations.
[1]Consists of developing Asia, the newly industrialized Asian economies, and Mongolia.
[2]Fitted line excludes Korea.
[3]Fitted line excludes Singapore. For China, real GDP growth is used because of a large discrepancy between overall growth and the expenditure side components in the national account statistics.

rent account surplus in 2005, at 4.5 percent of GDP, was higher than in 2002 (Figure 1.14). A redistribution of surpluses within the region, however, has taken place. The surplus in China has risen substantially since 2002 and is estimated at 7.1 percent of GDP in 2005—and now accounts for two-thirds of the regional surplus, compared to around one-quarter in 2002—while surpluses have also risen in Malaysia, Hong Kong SAR, Singapore (and to a lesser extent Korea). On the other hand, the current account has weakened in other countries, moving into deficit in India, Pakistan, and Thailand in 2005. These disparate movements are due to the non-oil balance, which has generally declined in countries where domestic demand growth has accelerated and/or where the real effective exchange rate has appreciated.

Looking forward, with emerging Asia remaining central to the current constellation of global imbalances, the region will need to play a central and proactive role in managing the risks associated with these imbalances. This will require achieving a better balance between externally and domestically led growth in countries with current account surpluses. Reforms to domestic financial systems will need to be at the center of efforts to boost domestic demand. Exchange rate appreciation will also be necessary.[9] While a number of regional exchange rates have appreciated over the past year (notably the Korean won, Indian rupee, and Thai baht), there has been little change in exchange rate behavior in either China or Malaysia despite the reforms introduced last July (although the real effective exchange rate has appreciated given the upward movement of the dollar). In turn, this is likely constraining other countries from allowing greater upward exchange rate movement given regional interdependencies and concerns about competitiveness losses.

[9]Simulations of the IMF's Global Economic Model (GEM) suggest that more flexible exchange rates in emerging Asia that allowed for real appreciation would contribute to a reduction in global imbalances (Appendix 1.2, September 2005 *World Economic Outlook*).

Box 1.6. China's GDP Revision: What Does It Mean for China and the Global Economy?

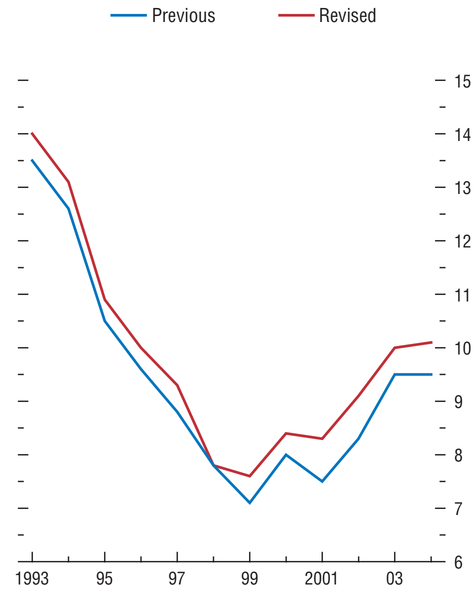
China recently revised its production-side GDP estimates, showing higher nominal and real GDP growth rates over 1993–2004. This revision is based on the data collected from a recent economic census, which showed much larger output from the services sector than previously estimated; nominal GDP in 2004 is now about 16.8 percent higher than before. The highlights of the revision are:

- The services sector's share of GDP rose 5 percentage points on average and reached around 41 percent of GDP in 2004, largely offset by a lower share of GDP of the manufacturing sector. The rise in the share reflected better statistical recording of private businesses, especially in new areas such as computer and Internet services, and logistics support to the manufacturing and construction sectors. It should be noted that the economic census only covered 2004, and the historical data were backfilled by applying a statistical method that assumes a smooth path of the increase in services. Thus, the revision does not provide any information regarding when the newly uncovered activities emerged and expanded.
- As a result of the revision, the annual average real growth during 1993–2004 climbed to close to 10 percent, about ½ percentage point higher than before (see the figure). Annual growth rates of GDP deflators are also higher in the revised data, reflecting both the upward revision of services deflator and the larger share of services in GDP.

The 2005 nominal GDP under the new methodology has recently been released. It makes China the fourth-largest economy in the world in U.S. dollar terms, and the second-largest in PPP adjusted terms. Nevertheless, China's per capita income (US$7,204, PPP adjusted) remains very low. The revision has also added about 0.1 percentage point to global GDP growth estimates in recent years.

Note: The main author of this box is Li Cui.

China's Real Production-Based GDP Growth



Sources: National Bureau of Statistics of China; and IMF staff calculations.

The nominal expenditure side GDP was also revised for 2004, bringing the expenditure side estimate for this year very close to its revised pro-

China: GDP and Components

	2004	
	Previous	Revised
GDP: Production based (RMB bln)	13,688	15,988
GDP: Expenditure based (RMB bln)	14,239	16,028
	Percent of GDP[1]	
Consumption	53	54
Private	41	40
Public	12	14
Investment	44	43
Net exports	3	3
Statistical discrepancies	0	0
Current account surplus	4.0	3.5

Sources: National Bureau of Statistics of China; and IMF staff calculations.
[1]Ratios based on expenditure side GDP data.

Box 1.6 *(concluded)*

duction-side counterpart. The new data imply shares of consumption and investment in GDP very similar to those prior to the revision, belying the speculation that the upward revision of the services sector would lead to a significantly higher share of consumption in GDP. In fact, private consumption as a share of GDP declined, while the share of government consumption rose, which could reflect better reclassification of government spending between consumption and capital goods. While a fully revised historical series from the expenditure side has not yet been published, the basic assessment of China's economic situation remains unchanged.

Turning to individual countries, real GDP growth in China remains very strong—and recent data revisions indicate that it has been even stronger in recent years than previously thought (see Box 1.6)—with investment growth running at a high rate and the contribution of net exports increasing significantly. The pace of expansion is projected to slow modestly this year to 9.5 percent, from 9.9 percent in 2005, as the contribution from external demand falls and the government is assumed to act to slow investment growth (which is particularly needed in sectors facing the prospect of future overcapacity). The risks to this projection in the near term are on the upside given that without further tightening measures the ample liquidity in the banking system could underpin a rebound in lending and investment. Inflation pressures, however, remain limited due to continuing downward pressures on prices in some sectors due to excess capacity. The external position has continued to strengthen, and foreign exchange reserves increased by over $200 billion in 2005. Given the current favorable environment, the authorities have an ideal opportunity to utilize fully the flexibility available following the exchange rate reform last July which should lead to an appreciation of the renminbi. Greater exchange rate flexibility would allow monetary policy to be geared toward the needs of the domestic economy, and would aid in the development of the foreign exchange market. Exchange rate appreciation would also bolster households' purchasing power, which together with reforms to the pension, health, and education systems, and the financial sector, would boost consumption.

After a weak start to 2005, growth in the Newly Industrialized Economies (NIEs) has rebounded as exports have benefited from a stronger global IT sector (and demand for pharmaceuticals and oil rigs in Singapore). Looking forward, growth is expected to be supported by the favorable global outlook. With inflation pressures contained and public debt low, macroeconomic policies—outside of Singapore—can remain accommodative until the recovery is fully established. Turning to the ASEAN-4 countries, the Thai economy has rebounded from the tsunami-related contraction in early 2005, while growth in the Philippines is being supported by surging remittance inflows. Generally robust growth, however, has fallen slightly short of expectations in Malaysia and Indonesia, the latter due to high interest rates, the adverse confidence effects of financial market volatility last summer, and increases in domestic fuel prices. Policy priorities include containing inflation (all four countries), reducing public debt (Indonesia, the Philippines), and greater exchange rate flexibility (Malaysia).

In India, growth remains rapid, with strong momentum in the manufacturing and services sectors, and projections have been revised up for both 2006 and 2007. Exports have continued to grow robustly, but the current account has moved into deficit as strong domestic demand and high oil prices resulted in a surge in imports. Inflationary pressures have picked up, prompting the Reserve Bank of India to tighten

Table 1.7. Selected Western Hemisphere Countries: Real GDP, Consumer Prices, and Current Account Balance
(Annual percent change unless otherwise noted)

	Real GDP				Consumer Prices[1]				Current Account Balance[2]			
	2004	2005	2006	2007	2004	2005	2006	2007	2004	2005	2006	2007
Western Hemisphere	**5.6**	**4.3**	**4.3**	**3.6**	**6.5**	**6.3**	**5.8**	**5.6**	**0.9**	**1.2**	**0.8**	**0.2**
Mercosur[3]	**6.0**	**4.2**	**4.5**	**3.8**	**5.6**	**7.1**	**6.6**	**6.6**	**1.9**	**1.5**	**0.9**	**0.1**
Argentina	9.0	9.2	7.3	4.0	4.4	9.6	12.9	15.0	2.2	1.8	1.2	0.5
Brazil	4.9	2.3	3.5	3.5	6.6	6.9	4.9	4.4	1.9	1.8	1.0	0.2
Chile	6.1	6.3	5.5	5.2	1.1	3.1	3.8	3.0	1.5	–0.4	0.5	–1.2
Uruguay	12.3	6.0	4.0	3.5	7.6	5.9	5.5	4.9	–0.7	–2.4	–5.8	–2.5
Andean region	**7.8**	**6.3**	**4.8**	**3.8**	**8.4**	**6.4**	**5.7**	**6.5**	**4.1**	**6.5**	**5.1**	**4.2**
Colombia	4.8	5.1	4.5	4.0	5.9	5.0	4.7	4.2	–1.0	–1.7	–1.6	–2.7
Ecuador	6.9	3.3	3.0	2.2	2.7	2.4	3.4	3.0	–1.1	–0.9	0.2	0.4
Peru	4.8	6.7	5.0	4.5	3.7	1.6	2.7	2.2	—	1.3	1.4	0.3
Venezuela	17.9	9.3	6.0	3.0	21.7	15.9	11.7	17.3	12.5	19.1	14.1	13.4
Mexico, Central America, and Caribbean	**4.0**	**3.4**	**3.7**	**3.3**	**7.1**	**4.9**	**4.5**	**3.6**	**–1.4**	**–1.2**	**–1.1**	**–1.2**
Mexico	4.2	3.0	3.5	3.1	4.7	4.0	3.5	3.0	–1.1	–0.7	–0.6	–0.8
Central America[3]	3.9	3.8	3.9	3.8	7.4	8.6	7.4	5.8	–5.7	–4.9	–4.9	–4.8
The Caribbean[3]	2.3	5.9	5.3	4.5	27.2	6.9	8.3	5.8	1.3	–1.1	–1.0	–1.4

[1]In accordance with standard practice in the *World Economic Outlook,* movements in consumer prices are indicated as annual averages rather than as December/December changes, as is the practice in some countries. The December/December changes in the CPI for 2004, 2005, 2006, and 2007 are, respectively, for Brazil (7.6, 5.7, 4.5, and 4.5); Mexico (5.2, 3.3, 3.1, and 3.0); Peru (3.5, 1.5, 2.5, and 2.5) and Uruguay (7.6, 6.5, 5.5, and 4.5).
[2]Percent of GDP.
[3]The country composition of this regional group is set out in Table F in the Statistical Appendix.

monetary policy. Nevertheless, with monetary conditions still accommodative and credit expanding strongly, further interest rate increases will likely be needed. After three years of fiscal consolidation, the general government deficit remained broadly unchanged in FY2005/06. The draft budget for FY2006/07 aims to resume fiscal consolidation on the back of modest base broadening (primarily of the services tax) and the tight control of current expenditures, and it is important that this objective is achieved. The full pass-through of higher international energy prices into domestic prices (with adequate compensation mechanisms for the poor) is needed to curb the rising quasi-fiscal costs of petroleum subsidies and encourage improvements in energy efficiency. As the government recognizes, the reform agenda also needs to be accelerated in other areas, including infrastructure development, the power sector, and the liberalization of labor laws, while the decision to draw up a roadmap for moving to full capital account convertibility is welcome. In Bangladesh and Pakistan, growth has remained robust despite headwinds from higher oil prices, devastating natural disasters, and the elimination of international textile trade quotas. In both countries, inflation has picked up, and a further tightening of monetary conditions is needed, supported by continued prudent fiscal policies. Regarding structural policies, priorities include energy sector reforms in Pakistan, and bank restructuring, trade reforms, and the full pass-through of higher oil prices into domestic fuel prices in Bangladesh.

Latin America: Improving the Business Climate Key to Raising Long-Term Growth

Robust economic expansion continued in Latin America in 2005 with overall growth of 4.3 percent (Table 1.7). Within this, many countries benefited from the strong global demand for commodities—in particular, fuels and metals (Chile and the Andean region) and agriculture

(Argentina and Uruguay). In contrast, growth slowed in Brazil, owing to weak domestic demand—investment in particular—and in Mexico as a result of the weaker performance of the agricultural and manufacturing sectors. Buoyant exports, sustained by improvements in the terms of trade, underpinned a third consecutive year of current account surpluses for the region and, combined with higher private capital inflows, resulted in substantial reserve accumulation. Correspondingly, regional exchange rates appreciated markedly, although taking account of their weak levels in 2001–02, competitiveness remains generally adequate. Reflecting their stronger external positions, Brazil and Argentina have repaid all outstanding IMF obligations ($15.5 billion and $9.6 billion, respectively).

Turning to 2006, regional growth is projected at 4.3 percent, some 0.5 percentage points stronger than projected in the last *World Economic Outlook*, mainly on account of higher than previously anticipated growth in Argentina and Venezuela. Recent interest rate cuts in some countries should support domestic demand going forward, although external demand will remain important. There are, however, a few notable downside risks to the outlook. A softening in global demand for the region's primary and manufacturing exports could weaken the contribution to growth from the external sector in many countries, while a deterioration in the global financial environment also poses risks given the still high level of public debt in the region. The region as a whole also faces a busy electoral schedule, underscoring the importance of maintaining sound economic policies and defending the hard-earned credibility among domestic and foreign investors during political transitions.

A major achievement in the region has been the decline in public debt on account of impressive fiscal discipline and the recent strong growth performance. Nevertheless, in many countries public debt still remains above the 25–50 percent of GDP range identified as safe in the September 2003 *World Economic Outlook* (Figure 1.15). Indeed, in the case of Latin America, the current structure of debt—including the presence of interest indexation, short average maturity, or foreign exchange exposure—argues for debt ratios closer to the lower end of this range. Sustaining recent efforts to maintain the downward trajectory of debt is a key challenge facing policymakers. Continued expenditure restraint and tax reforms are essential to the improvement of public finances over the medium term. However, lasting reductions in public debt also require high and stable rates of economic growth that are much less dependent on the global commodity cycle. This, in turn, requires structural reforms to raise investment levels closer to emerging market averages. In this context, improving the business climate—which lags other regions along many dimensions, including as a destination for foreign investment—is a key priority. While the reform agenda varies by country, some common factors that would support higher private sector investment are a well-developed financial system for channeling savings toward productive investment; reforms to strengthen property rights; reforms of the judiciary and speedy enforcement of contractual obligations; and greater transparency and stability in rules and regulations governing private investment.

An important challenge for the region will be to achieve an appropriately balanced response to the likelihood of further upward pressures on exchange rates if the global environment remains supportive of continued strong external performance by Latin America. In this context, further tightening of fiscal policies would help to provide scope for monetary easing that could help diminish incentives for capital inflows, while maintaining the commitment to entrenching the gains against inflation and a flexible approach to exchange rates. Favorable external conditions also offer opportunities for strengthening public debt management to reduce longstanding balance sheet vulnerabilities. In this connection a number of country authorities are moving to increase reliance on domestic local currency issues, while implementing external debt buyback programs (e.g. Brazil, Colombia, Mexico, Peru). Lastly, structural reforms that boost productivity growth would also help maintain external competitiveness in the face of currency appreciation.

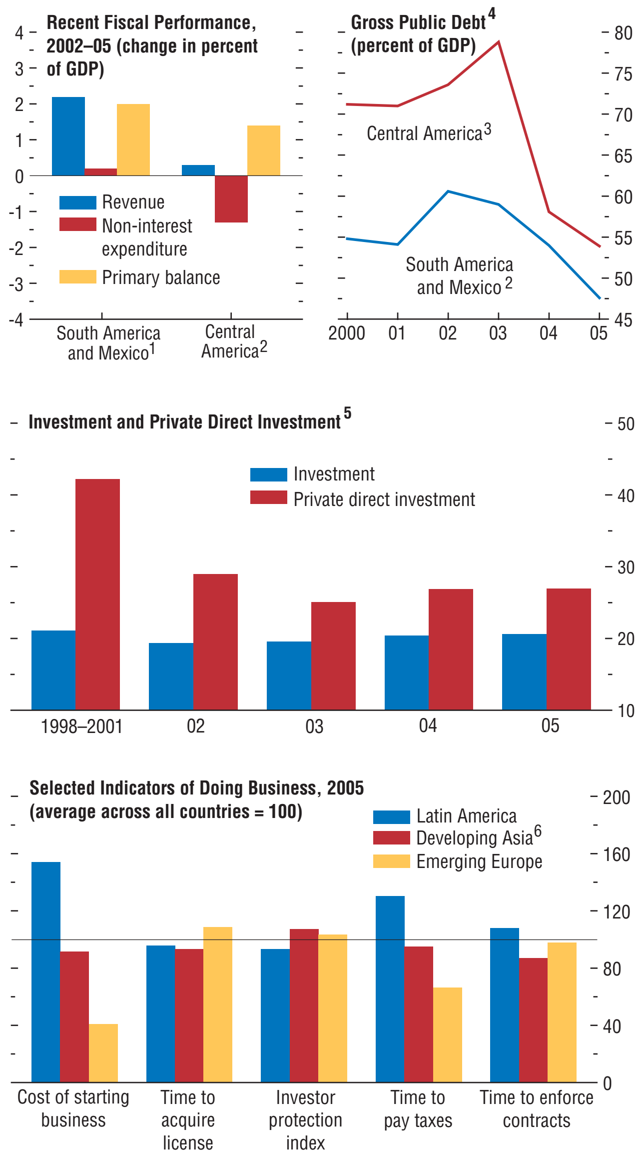
Turning to developments in individual countries, Argentina's economic expansion remains strong and broad-based, bolstered by buoyant domestic demand and robust export growth. Looking ahead, however, with capacity constraints likely to become increasingly evident, and inflation beginning to erode competitiveness, growth is expected to moderate. Fiscal policy in 2005 performed better than budgeted, as strong revenue growth offset a significant increase in government spending. Going forward, a combination of larger-than-budgeted fiscal surpluses, higher interest rates, and greater exchange rate flexibility will be needed to manage domestic demand pressures and contain accelerating inflation, projected to average around 13 percent this year. The authorities will need to introduce reforms in the utility sector, including the liberalization of prices, and raise investment in infrastructure, to avoid the emergence of supply bottlenecks and pave the way for higher medium-term growth. In Uruguay, growth remains robust against the backdrop of subdued inflationary pressures and buoyant exports. While the economy's short-term public debt vulnerabilities have declined, continued fiscal discipline will be necessary to ensure debt sustainability, complemented with reforms of the pension and financial systems.

In Brazil, activity slowed sharply last year. Domestic demand has been subdued, due primarily to inventory adjustments and some softening in investment following the earlier tightening of monetary policy, although private consumption has remained robust, underpinned by rising employment and real incomes. There are recent signs of a pickup in activity, such as in retail sales and industrial production, and growth is expected to strengthen in 2006, as lower interest rates spur a recovery in investment. With inflationary pressures moderating further and inflation expectations well

Figure 1.15. Latin America: Public Debt Ratios and Investment

(Purchasing-power-parity weighted averages unless noted otherwise)

Public debt ratios have benefited from disciplined fiscal policies and recent high growth. Sustaining recent progress will require increasing private sector investment to support stable long-term growth.



Sources: World Bank, *Doing Business Database;* and IMF staff calculations.

[1]Consists of Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.

[2]Consists of Costa Rica, El Salvador, Honduras, Nicaragua, and Panama.

[3]Excluding Argentina.

[4]Simple average.

[5]Latin America's gross capital formation in percent of GDP and private direct investment as a share of total emerging market and developing countries.

[6]Consists of China, India, Malaysia, Papua New Guinea, the Philippines, Sri Lanka, Thailand, and Vietnam.

grounded, there is room to continue the gradual reduction of policy interest rates initiated in September 2005. Reflecting a strong revenue effort, the consolidated primary surplus reached 4.8 percent of GDP in 2005, well above the 4.25 percent target. To continue the progress made in reducing public debt, it will be important to resist pressures for fiscal easing to sustain high primary surpluses, and to raise medium-term growth through reform efforts, including by improving the quality of fiscal policy and the business climate. In Chile, economic activity has remained robust and—despite some slowdown in the third quarter of 2005—is expected to remain buoyant going forward, supported by higher disposable incomes and solid consumer confidence. Efforts to boost underlying productivity will be essential to reduce the economy's dependence on copper prices. In this regard, greater labor market flexibility and increased investment in research and development would support greater expansion of the manufacturing sector.

Real GDP in the Andean region expanded by 6.3 percent in 2005, with activity strengthening in Colombia and Peru—as rising domestic demand broadened the recovery beyond exports—and growth in Venezuela remaining strong as high oil prices underpinned increased government spending. In Colombia and Peru, strong macroeconomic policies have supported low inflation, although monetary policy needs to remain vigilant to emerging capacity constraints (Colombia) and the possible effect of recent currency depreciation (Peru). In Venezuela, macroeconomic policies need to be tightened substantially to rein in double-digit inflation, while liberalizing the economy and improving the business climate will be important to boost private investment. Growth in Ecuador slowed as oil output stagnated, while a strong expansion in public spending and bank credit contributed to rising inflationary pressures in the second half of the year. Activity in Bolivia has benefited from favorable energy prices, but maintaining macroeconomic stability and deepening structural reforms are the key challenges for the new administration in order to strengthen growth prospects.

In Mexico, growth slowed to 3 percent in 2005 due to weakness in the agricultural sector and to the slowdown in global manufacturing in the first half of the year. Looking ahead, the strength of the global manufacturing cycle and the continuing recovery of domestic investment are expected to underpin somewhat stronger growth of 3.5 percent in 2006. The decline in inflation over the past year, with core inflation having converged to the 3 percent target, has allowed an unwinding of earlier monetary tightening. Although the higher energy revenues of the last three years have led to some fiscal consolidation, the fiscal windfall from higher world prices of oil has been dampened by the long-standing policy of smoothing the domestic price of gasoline. Looking ahead, the recently approved fiscal responsibility law calls for an ongoing balanced budget and establishes a rule for allocating unbudgeted oil revenues. It will be important also to diversify the revenue base to reduce reliance on high oil prices, while ensuring that fiscal policymaking focuses on medium-term objectives. In the face of longer-term challenges from globalization, particularly given the importance of the manufacturing sector, enhancing the competitiveness of the economy through reforms in the energy and telecommunication sectors, the labor market, and the regulatory and business environment remains a priority.

Growth in Central American economies remained around 4 percent in 2005, despite the dampening effect of high oil prices on disposable incomes. Activity was supported by elevated prices of export commodities and a continued rise in remittances. Prospects for the region going forward would be boosted by the prompt implementation of the Central American Free Trade Agreement (CAFTA), which has been delayed beyond the original January 1 target. In the Caribbean, growth is expected to remain strong at 5.3 percent in 2006, supported by high tourism receipts and a construction boom ahead of the 2007 Cricket World Cup in several countries of the region. Important fiscal reforms—in

Table 1.8. Emerging Europe: Real GDP, Consumer Prices, and Current Account Balance
(Annual percent change unless otherwise noted)

	Real GDP				Consumer Prices[1]				Current Account Balance[2]			
	2004	2005	2006	2007	2004	2005	2006	2007	2004	2005	2006	2007
Emerging Europe	**6.6**	**5.4**	**5.3**	**4.8**	**6.2**	**4.9**	**4.2**	**3.4**	**–5.7**	**–5.2**	**–5.4**	**–5.3**
Turkey	8.9	7.4	6.0	5.0	8.6	8.2	6.5	4.4	–5.2	–6.3	–6.5	–6.1
Excluding Turkey	5.7	4.5	5.0	4.7	5.3	3.5	3.2	3.0	–6.0	–4.7	–4.9	–4.9
Baltics	**7.6**	**8.7**	**7.5**	**6.5**	**3.1**	**4.1**	**4.2**	**3.6**	**–10.4**	**–9.7**	**–9.8**	**–9.3**
Estonia	7.8	9.8	7.9	7.1	3.0	4.1	3.6	3.2	–12.7	–10.5	–10.1	–9.6
Latvia	8.5	10.2	9.0	7.0	6.3	6.7	6.4	5.5	–12.9	–12.5	–12.8	–12.0
Lithuania	7.0	7.3	6.5	6.0	1.2	2.6	3.2	2.7	–7.7	–7.5	–7.5	–7.3
Central Europe	**5.0**	**4.1**	**4.6**	**4.3**	**4.3**	**2.4**	**2.0**	**2.5**	**–5.2**	**–3.2**	**–3.6**	**–3.7**
Czech Republic	4.7	6.0	5.5	4.5	2.8	1.8	2.8	3.0	–6.0	–2.1	–2.3	–2.3
Hungary	4.6	4.1	4.4	4.2	6.7	3.5	2.0	2.7	–8.8	–7.9	–8.2	–7.5
Poland	5.3	3.2	4.2	3.8	3.5	2.1	1.3	2.3	–4.1	–1.6	–2.5	–3.1
Slovak Republic	5.5	6.0	6.3	6.7	7.5	2.8	3.6	2.5	–3.5	–7.2	–6.4	–5.5
Slovenia	4.2	3.9	4.0	4.0	3.6	2.5	2.4	2.4	–2.1	–0.9	–0.3	0.1
Southern and south-eastern Europe	**6.9**	**4.3**	**5.0**	**5.4**	**8.7**	**7.0**	**6.8**	**4.2**	**–7.3**	**–8.5**	**–8.0**	**–7.8**
Bulgaria	5.7	5.5	5.6	5.8	6.1	5.0	7.2	4.1	–5.8	–11.8	–10.2	–9.1
Croatia	3.8	4.1	4.1	4.5	2.1	3.3	3.2	2.5	–5.6	–6.0	–5.9	–5.9
Malta	1.0	1.0	1.3	1.5	2.7	3.1	2.8	2.4	–10.4	–6.7	–6.5	–6.3
Romania	8.4	4.1	5.2	5.6	11.9	9.0	7.9	4.8	–8.4	–8.7	–8.3	–8.1

[1]In accordance with standard practice in the *World Economic Outlook*, movements in consumer prices are indicated as annual averages rather than as December/December changes, as is the practice in some countries.
[2]Percent of GDP.

particular, the introduction of the VAT—are under way in many countries. These moves will serve to strengthen fiscal balances over the medium term. However, decisive steps need to be taken to reduce the very high public debt ratios and adapt to the erosion of EU trade preferences in bananas and sugar.

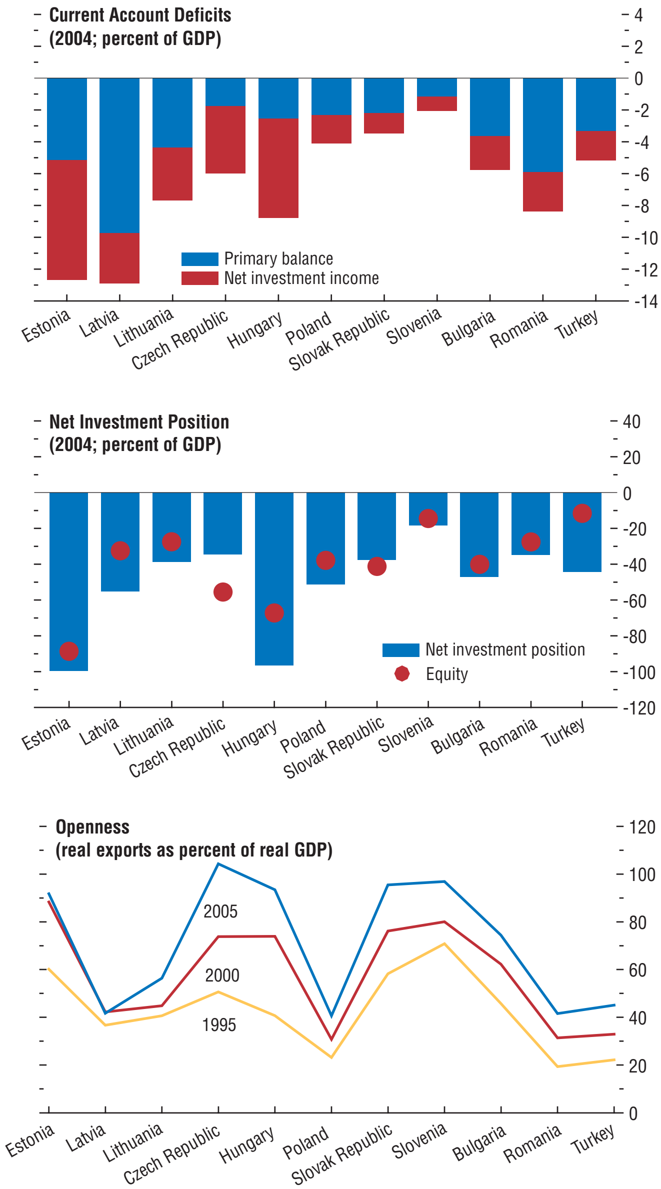
Emerging Europe: Addressing Rising Current Account Deficits

In emerging Europe, regional GDP growth has moderated to 5.4 percent from the exceptional level in 2004 (Table 1.8), and is projected to remain close to this level in 2006, underpinned by generally strong domestic demand and—despite appreciating exchange rates—solid export growth, buoyed by continued solid import growth in trading partners. Headline inflation remains generally moderate, with higher oil prices offset in many cases by rising currencies, although overheating pressures are a concern in parts of southern Europe and the Baltics. Looking forward, the key risks to the outlook remain the strength of the recovery in euro area domestic demand; the large regional current account deficits; and rapid credit growth—especially for real estate lending—in a number of countries in the region, much of which is denominated in foreign currencies.

The regional current account deficit fell modestly to 5.2 percent of GDP in 2005, and is projected to remain at broadly that level in 2006 and 2007. Within that, developments differ widely across the region. In southeastern Europe, external deficits have increased—particularly in Bulgaria and to a lesser extent Turkey—driven by varying combinations of soaring private domestic demand and credit growth, higher oil prices, and buoyant capital inflows often accompanied by appreciating exchange rates. Elsewhere—particularly in the Czech Republic and Poland—deficits have been on a declining trend, although they remain high in the Baltics, Hungary, and, more recently, the Slovak Republic. On the financing side, the share of debt financing (particularly short-term) has been gradually rising—it is expected to finance

Figure 1.16. Emerging Europe: Current Account Deficits Remain High

Over the medium term, current account deficits will need to be significantly reduced—in general primary balances will need to turn positive—to stabilize net investment positions. The corresponding real exchange rate adjustment will be less the more open the economy, and the more investment has been directed to the tradeables sector.



Source: IMF staff calculations.

about half of the regional current account deficit in 2006—and is particularly significant in Turkey, Hungary, and the Baltics.

As discussed in previous issues of the *World Economic Outlook*, the nature of and risks associated with these deficits vary widely. In central Europe, external deficits are closely associated with fiscal imbalances; in the Baltics and southeastern Europe they primarily reflect private sector behavior. Correspondingly, the risks and remedy in central Europe are relatively clear; in the Baltics and southeastern Europe, both are more complex, although—especially given the increasing resort to debt financing—there is an increasing case for policies to lean against the wind to reduce potential risks. Over the medium term, as a matter of arithmetic, current accounts in most countries will need to adjust substantially to stabilize net investment positions (Figure 1.16). That adjustment is likely to be smoother—and involve less real exchange rate adjustment—the more open the economy, the more past inflows have been invested in the tradables sector, and the more flexible domestic markets. Managing this adjustment will be of particular importance in those countries that have or plan shortly to move to fixed exchange rate regimes, including to avoid potential deflationary pressures.

In Poland, GDP growth slowed to 3.2 percent in 2005, noticeably below potential, reflecting flagging domestic demand in the aftermath of the 2004 EU accession boom, weak labor market conditions, and higher oil prices. Looking forward, GDP growth is expected to pick up to 4.2 percent in 2006, with consumption growth boosted by higher pension payments. Much depends, however, on external developments—notably in German growth—and the strength of investment in light of the complicated post-election political situation. With inflation projected to remain at or below the 2.5 percent target in 2006 and 2007, policy interest rates have been steadily reduced since early 2005. A key challenge remains to reduce the large general government deficit—which, barring adjustment measures, is likely to settle at about 5 percent of

GDP over the medium term—to stabilize public debt below 50 percent of GDP. With unemployment at 18 percent, and the investment-to-GDP ratio the lowest in the region, measures to improve the functioning of the labor market and to strengthen the investment climate are also priorities.

In Hungary, GDP growth remains close to potential, underpinned by strengthening exports, the recovery in Western Europe, and investment related to motorway construction. Despite higher oil prices, inflationary expectations remain under control and core inflation is at an historic low; after steady reductions in the policy rate through much of 2005, the easing cycle ended in October and rates remain relatively high in real terms. The very large external current account and fiscal deficits—both around 7½ percent of GDP in 2005—are significant risks; moreover, given recent tax cuts and continued high public expenditure commitments, little improvement in either is in prospect for 2006. While the situation is complicated by upcoming elections, signs of weakening market sentiment underscore the need for decisive fiscal consolidation. Substantial foreign exchange borrowing by households is also a risk, increasing vulnerability to a further depreciation of the forint. Slovenia continues to enjoy solid growth and a stable macroeconomic performance; with inflation falling back to 2.5 percent, it now meets all Maastricht requirements, and is well placed to adopt the euro in January 2007 as scheduled.

GDP growth in the Czech Republic rose to 6 percent in 2005, with slowing domestic demand growth offset by buoyant net export growth as past foreign-financed investment comes on stream, and is expected to moderate somewhat in 2006. The central bank has begun to reverse earlier policy easing, although with inflationary expectations securely anchored below the inflation target of 3 percent, further moves should await incoming data on the strength of the pickup in domestic demand, which remains fragile. While the general government deficit was reduced to 2.6 percent of GDP in 2005, over 2 percent of GDP below target, the draft 2006 budget more than reverses these gains, underscoring the need for additional consolidation efforts, especially given the pressures from aging, substantial outstanding public sector guarantees, and the limited scope for further privatization revenues. In the Slovak Republic, the macroeconomic outlook remains strong, although unemployment—while declining—is very high. Following the entry into ERM–2 in late 2005, a key challenge will be to reduce inflation to meet the Maastricht criterion while avoiding undue nominal currency appreciation, a task that would be facilitated by a tighter fiscal stance than currently planned.

In the Baltic countries, GDP growth has remained robust, underpinned by generally sound macroeconomic policies and wide-ranging structural reforms. However, with domestic demand fueled by rapid private credit growth, overheating concerns have risen, reflected in wide current account deficits; rapidly rising equity and real estate prices; and—to a lesser extent—upward pressures on prices, making it unlikely that any country will meet the Maastricht inflation criterion this year. While priorities among countries differ, measures to moderate credit growth are important, especially for mortgage lending (the recent tightening of prudential regulations in Estonia being a welcome step), along with strengthened financial supervision; fiscal policy—while generally very prudent—should also seek to dampen demand pressures.

In Bulgaria and Romania, domestic demand has substantially exceeded expectations, spurred by rapid credit growth, large-scale wage increases, a tax cut in January 2005 (Romania), and continued strong investment growth (Bulgaria). Correspondingly, inflationary pressures have picked up—in Romania, despite a substantial appreciation of the leu—and external current account deficits have widened sharply—in Bulgaria to 11.8 percent of GDP, one of the highest in the region. While external deficits are primarily driven by the private sector, they are an increasing source of vulnerability, underscoring the need to restrain credit growth, especially to

Table 1.9. Commonwealth of Independent States: Real GDP, Consumer Prices, and Current Account Balance

(Annual percent change unless otherwise noted)

	Real GDP				Consumer Prices[1]				Current Account Balance[2]			
	2004	2005	2006	2007	2004	2005	2006	2007	2004	2005	2006	2007
Commonwealth of Independent States	**8.4**	**6.5**	**6.0**	**6.1**	**10.3**	**12.3**	**10.4**	**9.7**	**8.1**	**9.1**	**9.6**	**8.1**
Russia	7.2	6.4	6.0	5.8	10.9	12.6	10.4	9.5	9.9	11.3	11.8	9.5
Ukraine	12.1	2.6	2.3	4.3	9.0	13.5	13.0	12.5	10.5	2.7	1.2	–2.1
Kazakhstan	9.6	9.4	8.0	8.3	6.9	7.6	7.5	7.5	1.2	1.8	2.3	2.4
Belarus	11.4	9.2	5.5	4.0	18.1	10.3	10.4	13.3	–5.3	1.2	–0.8	–2.0
Turkmenistan	17.2	9.6	6.5	6.0	5.9	10.8	7.9	5.0	0.6	2.8	1.4	1.1
Low-income CIS countries	**8.4**	**11.7**	**12.7**	**11.4**	**7.5**	**11.9**	**8.4**	**7.6**	**–7.1**	**–1.0**	**6.9**	**17.6**
Armenia	10.1	13.9	7.5	6.0	7.0	0.6	3.0	3.0	–4.6	–3.3	–3.9	–4.3
Azerbaijan	10.2	24.3	26.2	22.9	6.7	9.7	8.6	11.8	–30.0	–5.2	17.7	40.0
Georgia	6.2	7.7	6.4	5.0	5.7	8.3	5.3	4.0	–8.3	–7.4	–7.1	–5.5
Kyrgyz Republic	7.0	–0.6	5.0	5.5	4.1	4.3	5.7	4.5	–3.4	–8.1	–6.8	–5.6
Moldova	7.3	7.0	6.0	5.0	12.5	11.9	9.4	8.7	–2.7	–5.5	–5.2	–5.3
Tajikistan	10.6	6.7	8.0	6.0	7.1	7.1	7.8	5.0	–4.0	–3.4	–4.2	–4.8
Uzbekistan	7.4	7.0	7.2	5.0	8.8	21.0	11.3	6.5	10.0	10.8	9.6	9.2
Memorandum												
Net energy exporters[3]	7.6	7.1	6.7	6.5	10.4	12.3	10.1	9.2	8.6	10.3	11.0	9.6
Net energy importers[4]	11.5	4.2	3.3	4.4	10.2	12.1	11.7	11.6	4.6	1.2	–0.2	–2.5

[1]In accordance with standard practice in the *World Economic Outlook*, movements in consumer prices are indicated as annual averages rather than as December/December changes, as is the practice in some countries.

[2]Percent of GDP.

[3]Includes Azerbaijan, Kazakhstan, Russia, Turkmenistan, and Uzbekistan.

[4]Includes Armenia, Belarus, Georgia, Kyrgyz Republic, Moldova, Tajikistan, and Ukraine.

households; tighten fiscal positions; and, in Romania, increase wage restraint. Structural reforms are key to invigorate the supply side, including greater labor market flexibility, advancing privatization (Romania) and improving the business climate (Bulgaria).

Following the exceptionally rapid expansion through 2005, GDP growth in Turkey is expected to moderate to 6 percent in 2006, with the main risk facing the economy relating to the large current account deficit. In contrast to expectations, GDP growth has become increasingly reliant on domestic demand, particularly investment; the external current account has continued to deteriorate, driven mainly by higher oil prices and by surging capital inflows—in part reflecting ample global liquidity and Turkey's improving fundamentals—accompanied by a further real appreciation of the lira. While the composition of capital inflows has improved markedly—with the share of short-term inflows (including errors and omissions) nearly halving to 37 percent in 2005—Turkey remains vulnerable to changes in investor sentiment. The 2006 budget appropriately provides for a modest tightening of fiscal policy, which should allow room for gradual monetary easing and an additional buildup of reserves. Further structural reforms, including early passage of the pension law, strengthening social security collection, income tax reform, and continued improvements in bank supervision—the more so given very rapid private credit growth—remain key to sustaining the strong economic performance to date and increasing resilience to a reversal in currently benign external conditions.

Commonwealth of Independent States: A Rebalancing of Growth Is Needed to Sustain the Expansion

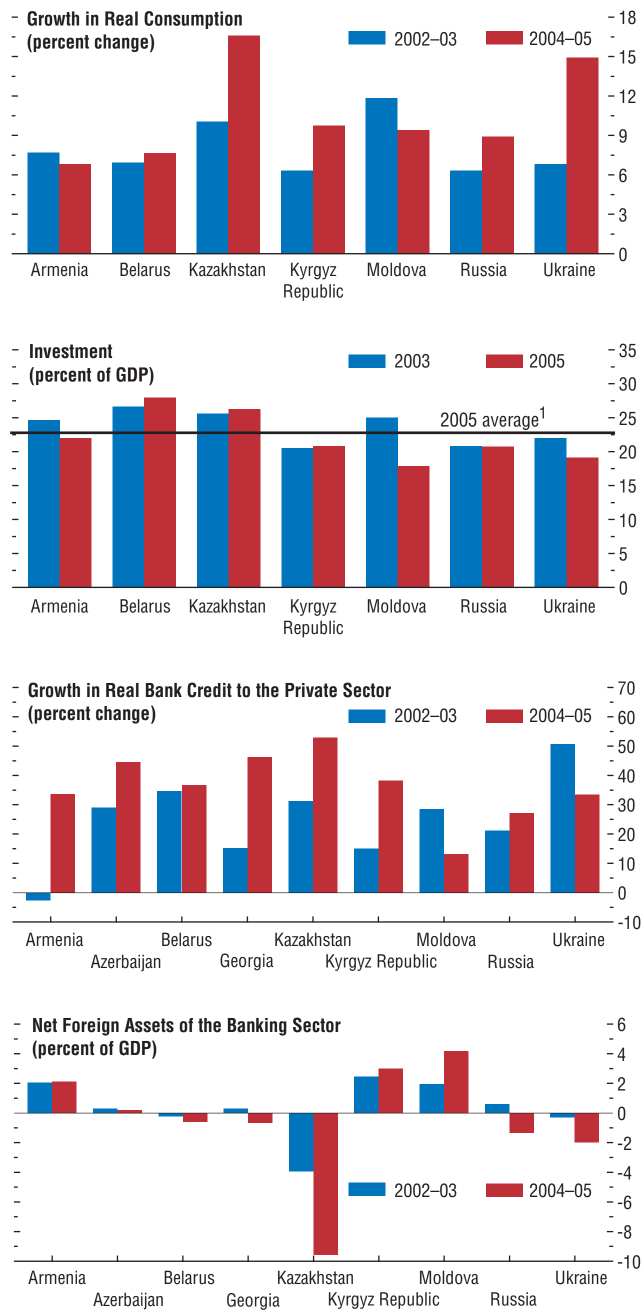
Real GDP growth slowed significantly in the Commonwealth of Independent States (CIS) during 2005, to 6.5 percent from 8.4 percent in 2004 (Table 1.9). A particularly sharp slowdown in Ukraine accounted for much of this, although the pace of expansion also moderated in other key countries in the region. Lower output growth in the energy sector (Russia, Kazakhstan), political and economic uncertainties that undermined investment (Ukraine, Kyrgyz Republic), and an increasingly negative contribution from the external sector (Ukraine, Russia) all contributed to this weaker growth.

At the same time as growth has slowed, the composition of demand has been very unbalanced, raising concerns about the sustainability of growth going forward. Investment has remained weak, averaging just under 21 percent of GDP in 2005, the lowest of any emerging market and developing country region (Figure 1.17). Consumption, on the other hand, has expanded strongly, particularly in Russia, Ukraine, and Kazakhstan, underpinned by large hikes in wages and public pensions and increased access to credit. Indeed, credit has grown extremely strongly in a number of countries in the region, and in Ukraine and Kazakhstan has increasingly been directed at households and a significant share is denominated in foreign currency. While the ongoing process of financial deepening in the region is welcome—the ratio of bank credit-to-GDP is still low in many countries—rapid credit growth poses a risk to financial stability given banks' generally weak abilities to assess borrower creditworthiness and the increasing reliance by banks in some countries on financing from abroad.

This combination of strong consumption growth and weak investment has led to increasing capacity constraints in some countries and sectors and, together with higher food and energy prices (although pass-through to domestic prices has not been complete), contributed to a sharp increase in inflationary pressures in the first half of 2005 that have moderated only slightly in recent months. The current account, however, remains in large surplus at the regional level, although there is increasing differentiation across countries. In energy exporters as a group, higher oil prices underpinned a further increase in the surplus during 2005, but in energy-importing countries the surplus declined due

Figure 1.17. Commonwealth of Independent States: Unbalanced Growth Raises Concerns About the Outlook

Consumption has grown strongly in a number of countries, supported by wage and pension increases and rapid credit growth. Investment, however, remains relatively weak, raising concerns about the sustainability of current growth rates.



Sources: IMF, *International Financial Statistics;* and IMF staff calculations.
[1]Emerging market and developing countries excluding China.

both to higher oil imports and an increase in non-oil import volumes.

Looking forward, growth is projected to slow further to 6 percent in 2006, although decisive policy actions will be needed to lock in this pace of expansion. Monetary policy will increasingly need to focus on reducing or containing inflation, with the authorities correspondingly allowing nominal exchange rates to appreciate as necessary. And while countries that are benefiting from higher oil revenues have scope to raise productive government spending, such increases will need to be carefully managed in line with cyclical considerations to ensure they are consistent with overall macroeconomic policy objectives. To encourage investment spending, a more hospitable business climate needs to be created by reducing uncertainties about government intervention in the economy and moving to strengthen the institutional structures necessary for vibrant market-based economies to flourish. Structural reforms are also needed to boost productivity in the noncommodity sectors to improve competitiveness in the face of upward pressures on exchange rates. In terms of the financial sector, progress has been made in banking reform, but it has lagged that in countries in central and eastern Europe. Regulatory and supervisory systems, in particular, need to be upgraded in line with the growing importance of the financial sector.

Turning to individual countries, after a weak start to 2005, real GDP growth in Russia has accelerated, and the economy is expected to expand by 6 percent in 2006 (0.8 percentage points higher than projected in the September 2005 *World Economic Outlook*). The expansion is being driven by private consumption, while export growth has fallen. Investment, despite a recent pickup, is relatively subdued, and concerns remain that the economy may begin to run into capacity constraints. Real wages are rising faster than productivity, imports are surging, and CPI inflation is running at over 11 percent. Against this background, fiscal policy should not be relaxed until cyclical pressures have eased, and monetary policy needs to be tightened. Without allowing for greater nominal exchange rate appreciation, it is unlikely the central bank will be able to meet its end-2006 inflation target of 8.5 percent. Turning to the financial sector, credit growth remains rapid, and it is important that prudential practices are strengthened under the new deposit insurance scheme to ensure that risks in the sector are appropriately managed.

In Ukraine, real GDP growth has slowed sharply, reflecting a less favorable external environment and political and policy uncertainties that have undermined investment. Growth is expected to slow further this year—to 2.3 percent—as continued political uncertainties and a significant hike in import prices for natural gas weigh on activity. Inflation has fallen from a peak of 15 percent in mid-2005, but remains over 10 percent, while credit growth remains strong. Reflecting uncertainties about the economic and political situation, spreads on Ukrainian external bonds have widened somewhat and the central bank conducted substantial foreign exchange interventions to maintain the official hryvina-U.S. dollar exchange rate. The authorities need to tighten monetary policy to reduce inflation, support this with fiscal restraint, and implement reforms to create a positive investment climate. In Kazakhstan, growth remains strong, underpinned by high oil prices. Inflationary pressures, however, have risen, and the central bank has raised interest rates, although further tightening is still required. WTO accession negotiations are proceeding, but progress with other structural reforms has been slow.

Growth in the low-income CIS countries remains very strong, although there are considerable differences across countries. In Azerbaijan (oil production), Armenia (remittance inflows and a good harvest), and Georgia (agricultural recovery), growth has picked up, but in the Kyrgyz Republic and Tajikistan it has slowed. The central challenge for the region remains to put in place the policies that will maintain the strong growth needed to reduce poverty going forward. To achieve this, the

Table 1.10. Selected African Countries: Real GDP, Consumer Prices, and Current Account Balance
(Annual percent change unless otherwise noted)

	Real GDP				Consumer Prices[1]				Current Account Balance[2]			
	2004	2005	2006	2007	2004	2005	2006	2007	2004	2005	2006	2007
Africa	**5.5**	**5.2**	**5.7**	**5.5**	**8.1**	**8.5**	**9.1**	**7.3**	**0.1**	**1.9**	**2.6**	**2.7**
Maghreb	**5.1**	**4.1**	**5.2**	**5.0**	**2.9**	**1.5**	**3.7**	**3.8**	**7.1**	**11.8**	**10.5**	**9.1**
Algeria	5.2	5.3	4.9	5.0	3.6	1.6	5.0	5.5	13.1	21.3	18.9	16.5
Morocco	4.2	1.8	5.4	4.4	1.5	1.0	2.0	2.0	2.2	0.9	–0.8	–0.9
Tunisia	6.0	4.2	5.8	6.0	3.6	2.0	3.0	2.0	–2.0	–1.3	–1.4	–1.1
Sub-Sahara	**5.6**	**5.5**	**5.8**	**5.7**	**9.7**	**10.6**	**10.7**	**8.3**	**–2.1**	**–1.1**	**0.3**	**0.8**
Horn of Africa[3]	**8.1**	**8.3**	**9.9**	**8.5**	**8.4**	**7.8**	**8.7**	**5.3**	**–5.8**	**–10.1**	**–7.0**	**–5.2**
Ethiopia	12.3	8.7	5.3	5.7	8.6	6.8	10.8	6.0	–5.1	–9.1	–7.5	–4.3
Sudan	5.2	8.0	13.0	10.3	8.4	8.5	7.5	5.0	–6.3	–10.7	–6.9	–5.4
Great Lakes[3]	**5.6**	**5.6**	**5.4**	**6.1**	**6.9**	**11.6**	**8.2**	**4.5**	**–2.7**	**–4.7**	**–5.1**	**–5.8**
Congo, Dem. Rep. of	6.9	6.5	7.0	7.2	4.0	21.4	9.3	6.4	–5.7	–4.8	–2.6	–2.1
Kenya	4.3	4.7	3.3	4.9	11.6	10.3	11.5	2.8	–2.5	–7.6	–4.4	–5.9
Tanzania	6.7	6.9	5.8	7.0	4.3	4.6	5.2	5.0	–1.6	–2.6	–7.6	–8.7
Uganda	5.6	5.6	6.2	6.1	5.0	8.0	6.5	4.0	–1.7	–1.2	–3.9	–4.2
Southern Africa[3]	**4.8**	**5.2**	**9.2**	**8.2**	**47.6**	**33.2**	**46.7**	**34.0**	**0.3**	**0.3**	**3.2**	**3.2**
Angola	11.1	15.7	26.0	20.2	43.6	23.0	13.0	8.3	4.2	8.2	11.3	12.0
Zimbabwe	–3.8	–6.5	–4.7	–4.1	350.0	237.8	850.4	584.2	–8.3	–11.1	1.7	–15.0
West and Central Africa[3]	**6.6**	**5.4**	**5.1**	**5.3**	**7.9**	**11.6**	**6.7**	**4.8**	**–0.4**	**4.6**	**6.7**	**7.4**
Ghana	5.8	5.8	6.0	6.0	12.6	15.1	8.8	7.1	–2.7	–6.6	–7.8	–5.3
Nigeria	6.0	6.9	6.2	5.2	15.0	17.9	9.4	6.5	4.6	12.6	14.2	15.3
CFA franc zone[3]	**7.7**	**4.1**	**3.4**	**4.8**	**0.2**	**4.2**	**2.4**	**2.3**	**–3.4**	**–1.3**	**0.1**	**0.0**
Cameroon	3.6	2.6	4.2	4.3	0.3	2.0	2.6	1.0	–3.4	–1.5	–1.6	–1.8
Côte d'Ivoire	1.8	0.5	2.4	2.6	1.5	3.9	2.8	3.0	2.7	0.7	1.9	1.9
South Africa	**4.5**	**4.9**	**4.3**	**4.1**	**1.4**	**3.4**	**4.5**	**4.9**	**–3.4**	**–4.2**	**–3.9**	**–3.6**
Memorandum												
Oil importers	4.8	4.4	4.6	4.7	7.5	8.3	10.0	8.0	–2.5	–3.7	–3.7	–3.6
Oil exporters[4]	7.2	7.0	8.2	7.5	9.7	9.1	7.2	5.8	5.8	12.0	12.7	12.3

[1]In accordance with standard practice in the *World Economic Outlook*, movements in consumer prices are indicated as annual averages rather than as December/December changes, as is the practice in some countries.
[2]Percent of GDP.
[3]The country composition of this regional group is set out in Table F in the Statistical Appendix.
[4]Includes Chad and Mauritania in this table.

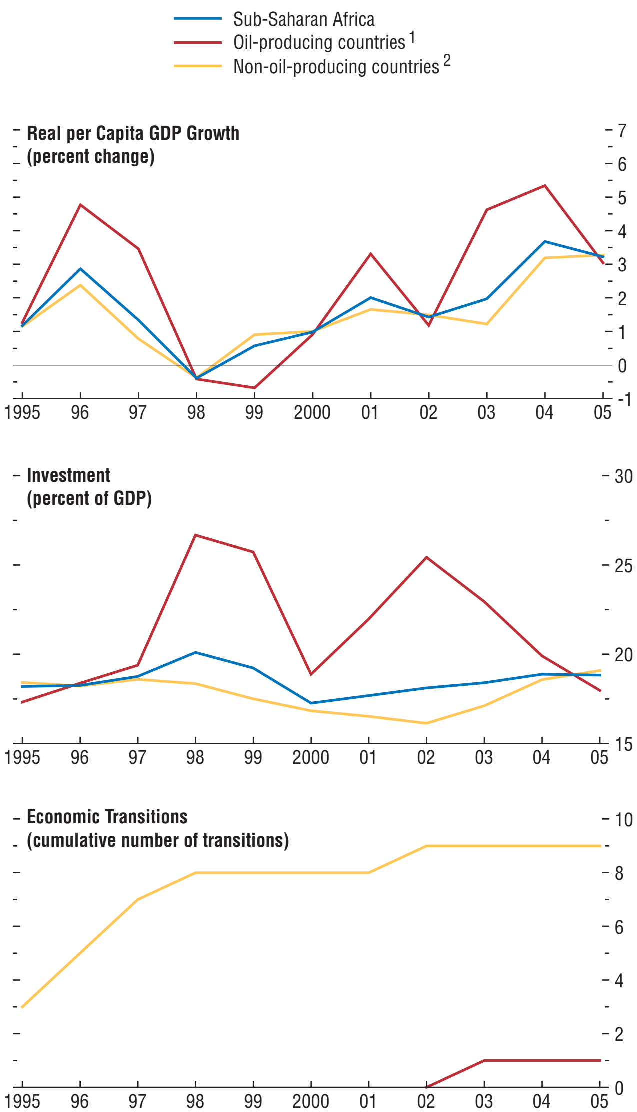
sources of growth need to be diversified, particularly by improving the business climate to encourage investment in the noncommodity sectors, liberalizing trade regimes, and reducing high external debt levels.

Africa: Sustaining the Recent Growth Acceleration

Economic activity in sub-Saharan Africa continued to expand robustly at 5.5 percent in 2005 (Table 1.10). Among oil exporters, growth picked up in Nigeria, but slowed in some other countries—particularly Chad and Equatorial Guinea—following strong increases over the previous two years. Among oil importers, higher metal prices have supported growth in countries such as South Africa and Zambia, while growth in excess of 7 percent in Ethiopia, Mozambique, and Sierra Leone reflects the continuing positive effects of earlier reforms. The moderation in food and agricultural raw material prices, however, along with weather-related food production shortfalls, affected growth in the Sahel region and parts of eastern and southern Africa, while weakness in cotton markets hurt the CFA franc countries. The removal of textile quotas has also adversely affected a number of African countries. Output continued to decline in Côte d'Ivoire, Zimbabwe, and the Seychelles.

Figure 1.18. Sub-Saharan Africa: Growth, Investment, and Economic Transitions

Economic reforms have supported greater investment and improved growth performance in recent years. Sustaining progress on structural reforms will be important to maintain higher levels of long-term growth.



Source: IMF staff calculations.

[1] Angola, Cameroon, Chad, Republic of Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Nigeria, and São Tomé and Príncipe.

[2] Benin, Botswana, Burkina Faso, Burundi, Cape Verde, Central African Republic, Comoros, Democratic Republic of Congo, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, Swaziland, Tanzania, Togo, Uganda, Zambia, and Zimbabwe.

Despite the increase in international oil prices, inflationary pressures have remained generally well contained, reflecting in part a lower degree of pass-through to domestic fuel prices in 2005 relative to previous years. This has, however, adversely affected fiscal and current account balances in a number of oil-importing countries, which was partially alleviated by external grants.

The economic outlook in sub-Saharan Africa remains positive, with growth of 5.8 percent projected this year—the highest rate in over 30 years—underpinned by high commodity prices, improved macroeconomic policies, and structural reforms in some countries. This acceleration in growth is largely due to the oil-producing countries, where capacity increases in Angola and the Republic of Congo and new production in Mauritania are expected to drive a substantial pickup in activity. Growth in non-oil producers is also expected to pick up, supported by continued, albeit slower, growth in non-oil commodity prices, a recovery in agricultural production, and stronger investment. While the outlook for the region's oil exporters is importantly tied to oil prices, for non-oil-producing countries, a softening in the global demand for non-oil commodities, higher energy prices, and weather-related factors are key risks. For the CFA franc countries, a weakening in the U.S. dollar against the euro would adversely affect competitiveness.

The strong projected expansion this year follows a period where growth in sub-Saharan Africa has clearly risen above its historical trend (Figure 1.18). Growth in both oil- and non-oil-producing countries has strengthened, the former spurred by the coming on stream of new capacity in recent years. In non-oil producers, reforms implemented in the second half of the 1990s in a number of countries have clearly started to pay dividends, with investment ratios importantly reversing their previous downward trend. Sustaining and further strengthening the recent economic performance are critical to making a lasting impact on poverty reduction. In this regard, continued fiscal discipline and low inflation are essential anchors for sustaining growth accelerations, but further improvements in economic institutions—where there have been few new transitions in recent years—will help secure stable long-term growth going forward.[10]

Lessons from the last *World Economic Outlook* suggest that the current favorable economic environment is particularly conducive to implementing necessary reforms to strengthen economic institutions. In particular, the reduction of trade restrictions and multilateral progress in trade liberalization in the Doha Round can be expected to support efforts to strengthen institutions. Under the Multilateral Debt Relief Initiative (MDRI), the IMF has granted debt relief amounting to $2.5 billion to 13 countries in Africa. Countries should take advantage of the opportunities offered by the MDRI to reorient spending to priority areas, including health and education, to raise the level of human capital and long-term growth. The New Partnership for Africa's Development (NEPAD) offers an important opportunity that needs to be fully grasped for strengthening cooperation at the regional level, with potentially large benefits from the improvement in institutional quality in the immediate neighborhood of countries. Finally, reforms to improve the business environment, including streamlining of regulations and improved governance, will help increase investment and employment.

Turning to individual countries, economic activity in South Africa was strong in 2005, driven by domestic demand and increasingly supported by exports. Consumer and investment spending have strengthened, while manufacturing growth began picking up at end-2005 in response to domestic and external demand. Looking ahead, growth is expected to moderate as output approaches potential. While higher oil prices and strong domestic demand have led to some widening in the current account deficit, inflation has remained well contained and the recent appreciation of the rand has improved the inflation outlook. Nevertheless, the continued strength of domestic demand, high money and credit growth, and developments in international oil and food prices present potential upside risks to inflation. Following persistently strong fiscal performance and prudent levels of public debt, the government is appropriately planning to increase further social spending and infrastructure investment to help address social needs and supply bottlenecks. On structural policies, the authorities are focusing on skills development, improving efficiency in state-owned enterprises, and on measures to improve competition in domestic markets. The positive impact of these initiatives on growth could be enhanced by labor market reforms.

In Nigeria, growth strengthened in 2005 due to robust expansion in both the oil- and non-oil sectors, but is expected to slow in 2006. Following insufficient sterilization of oil-related inflows and low interest rates during much of last year, monetary policy has begun to be tightened and inflation is expected to decline from last year's 18 percent. Reflecting strong oil revenues and lower capital expenditures, the overall fiscal surplus reached nearly 10 percent of GDP in 2005, although the non-oil fiscal balance continued to deteriorate. Management of oil revenues remains a key challenge for policymakers, underscoring the need for lasting institutional reforms to ensure these revenues are used prudently to pave the way for stable long-term growth. Budgetary plans that place higher priorities on identifying allocations for key reforms, poverty reducing programs and infrastructure, and explicitly identifying domestic fuel subsidies are welcome, and need to be implemented going forward. Risks to the overall outlook stem mainly from developments in international oil prices as well as from any disruptions to oil production facilities.

[10]A transition is defined as the first year of a sustained improvement in the quality of the underlying economic institutions. The quality of institutions is assessed using an overall index composed of indicators encompassing the size of government, legal structure and property rights, access to sound money, the freedom to trade internationally, and regulation of credit, labor, and business. See Chapter III of the September 2005 *World Economic Outlook* for further details.

Table 1.11. Selected Middle Eastern Countries: Real GDP, Consumer Prices, and Current Account Balance
(Annual percent change unless otherwise noted)

	Real GDP				Consumer Prices[1]				Current Account Balance[2]			
	2004	2005	2006	2007	2004	2005	2006	2007	2004	2005	2006	2007
Middle East	**5.4**	**5.9**	**5.7**	**5.4**	**8.4**	**8.4**	**8.7**	**8.5**	**12.4**	**19.1**	**20.4**	**18.1**
Oil exporters[3]	**5.7**	**6.2**	**5.8**	**5.5**	**8.2**	**8.1**	**9.8**	**9.6**	**14.4**	**22.1**	**23.6**	**21.2**
Iran, I.R. of	5.6	5.9	5.3	5.0	15.2	13.0	17.0	17.0	2.5	7.5	7.6	6.2
Saudi Arabia	5.2	6.5	6.3	6.4	0.3	0.4	1.0	1.0	20.5	28.3	28.3	23.9
Kuwait	6.2	8.5	6.2	4.7	1.3	3.9	3.5	3.0	31.1	43.3	49.9	48.7
Mashreq	**4.2**	**4.7**	**4.8**	**4.8**	**8.4**	**9.5**	**4.9**	**4.5**	**–0.8**	**–2.5**	**–3.4**	**–4.4**
Egypt	4.1	5.0	5.2	5.2	10.3	11.4	4.4	4.5	4.3	2.8	1.3	–0.4
Syrian Arab Republic	2.5	3.5	3.6	3.6	4.6	7.2	7.2	5.0	–2.0	–5.5	–7.3	–8.6
Jordan	7.7	7.2	5.0	5.0	3.4	3.5	6.9	5.8	–0.2	–17.8	–16.0	–14.4
Lebanon	6.0	1.0	3.0	3.4	3.0	0.3	2.5	2.0	–18.2	–12.7	–12.9	–12.1
Memorandum												
Israel	4.4	5.2	4.2	4.2	–0.4	1.3	2.4	2.0	1.6	1.9	1.0	2.1

[1]In accordance with standard practice in the *World Economic Outlook,* movements in consumer prices are indicated as annual averages rather than as December/December changes during the year, as is the practice in some countries.
[2]Percent of GDP.
[3]Includes Bahrain, I.R. of Iran, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates, and Yemen.

In the Maghreb region, increased oil exports and sustained activity in the services and construction sectors have underpinned strong growth in Algeria, although inflation has eased due to a drop in food prices. Public spending—largely investment—increased by some 4 percent of nonhydrocarbon GDP, but rising hydrocarbon revenues have generated very large fiscal and current account surpluses. Against the backdrop of high energy prices, the outlook for growth remains strong, although absorptive capacity may be limited in the short term. Growth above 5 percent is projected for both Morocco and Tunisia, with the expiration of textile quotas having had only a modest impact on overall growth. Both countries, however, remain vulnerable to further oil price increases and possible delayed adverse effects on the textile sectors. Policies to attract investment and diversify the manufacturing base of the economy remain key policy priorities.

Middle East: Booming Asset Prices Across the Region

Oil-exporting countries in the Middle East enjoyed a third consecutive year of substantially higher export earnings, fueling average growth of 5.9 percent in the region and a current account surplus of 19 percent of GDP (Table 1.11). While a large proportion of the increase in oil revenues has been saved in most oil-exporting countries, domestic demand growth has strengthened considerably, although inflation has remained subdued. Growth in non-oil-producing countries in the region has benefited from the expansion in oil exporters and domestic reforms in some countries. With oil production near capacity, strong but moderating growth is expected in 2006, while current account surpluses in oil exporters reach 25 percent of GDP. The main risks to the outlook are closely related to the prospects for oil prices, although rising geopolitical uncertainty and developments in asset markets (see below) pose additional risks to the region.

The current oil cycle has been accompanied by a significant rise in money and credit growth, which has contributed to surging property and equity prices, with the latter also benefiting from increased profitability of petrochemical companies (Figure 1.19). During 2005, Middle Eastern stock indices were among the best performing in the world, and regional market capitalization at nearly $1.3 trillion in early 2006 exceeded that of emerging Europe and Latin

America. Many stock markets in the region, however, experienced significant corrections in the first quarter of 2006, although valuations still remain well above long-term averages. Indirect evidence from the performance of real estate and construction shares supports other evidence that real estate prices are also near record levels.

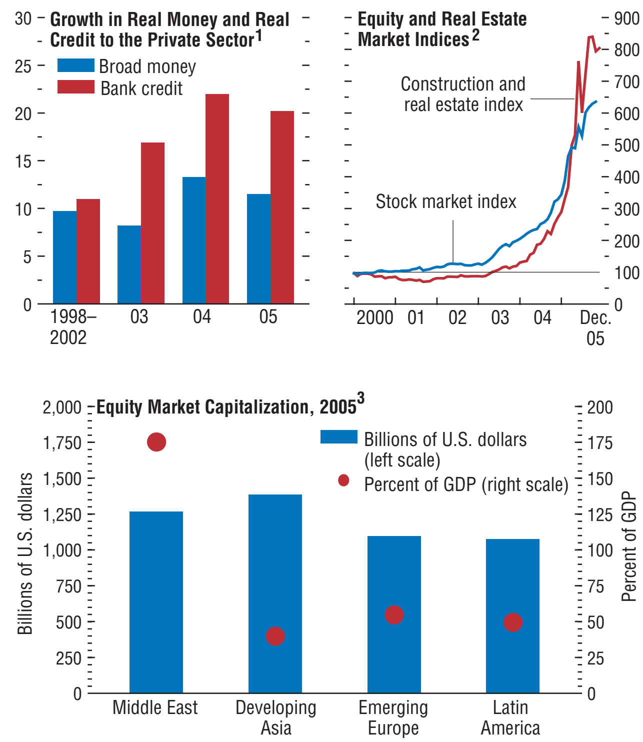
A key challenge in the region is to channel liquidity into productive investment in both the oil and non-oil sectors, given the need to raise potential growth and provide increased employment opportunities for the growing working-age population. In particular, financial sector reforms that support the development of deeper capital markets would allow new and smaller firms to tap into the pool of available liquidity to fund their investment plans. An increased role for managed funds could also allow investment by small investors in diversified portfolios, reducing portfolio volatility and facilitating greater flexibility in their spending decisions. More generally, however, recent developments have increased the exposure of bank balance sheets to any downturn in asset markets—possibly resulting from an unexpected drop in oil prices or increased geopolitical uncertainty—and supervisory authorities will need to carefully monitor these risks, particularly in terms of lending to the construction sector.

Turning to developments in individual countries, the growth outlook for the Islamic Republic of Iran remains favorable, supported by high oil revenues, the recovery in agriculture, and a strong performance of the manufacturing sector. Inflation, however, still remains in double digits, underscoring the need for fiscal restraint and greater exchange rate flexibility. Prudent macroeconomic policies, reforms of the financial sector and the public subsidy system, and increased private sector participation in the economy are essential preconditions if higher oil revenues are to be successfully used to foster growth and employment.

In Saudi Arabia, activity expanded by 6.5 percent in 2005, supported by both the oil and non-oil sectors, with substantial current account and

Figure 1.19. Middle East: Surging Asset Markets

Oil-related revenues have fueled growth in bank credit and asset prices. Regional equity markets have grown similar in size to other emerging market regions.



Sources: SHUAA Capital; IMF, *International Financial Statistics;* and IMF staff calculations.
[1] Oil exporters: Bahrain, I.R. of Iran, Kuwait, Libya, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Republic of Yemen, and United Arab Emirates.
[2] Indices represent the Arab composite with January 1, 2000 base year.
[3] Emerging Europe includes Russia and Ukraine; Developing Asia excludes Taiwan Province of China, Korea, Singapore, and Hong Kong SAR; and the Middle East includes the countries of the Cooperation Council of the Arab States of the Gulf (GCC) plus Egypt, Jordan, and Lebanon.

fiscal surpluses and subdued inflation. With oil export volumes not expected to increase substantially in the short term, growth is projected to remain broadly unchanged during 2006–07, with the current account surplus anticipated to remain high based on current oil price forecasts. The government's plans for substantial investment in the oil sector and infrastructure, accompanied by further structural reforms aimed at greater private sector participation, should help sustain strong growth and reduce unemployment. The substantial strengthening of the fiscal position and reduction of public debt will also create room for additional social spending in the areas of health and education.

Despite the very difficult security environment, Iraq has managed to maintain overall macroeconomic stability. Growth of 10 percent is projected in 2006, although the outlook is subject to considerable risks. The fiscal position has improved on account of higher oil revenues and the undershooting of some expenditure due to project implementation difficulties. The approval of the Stand-By Arrangement with the IMF in December paves the way for further debt reduction by Paris Club creditors which, along with the successful $14 billion debt exchange with private creditors, is expected to reduce debt obligations to a more sustainable level. Planned expansion of the oil sector, reform of public subsidies, and improved administrative capacity remain key challenges in the period ahead.

Economic activity picked up momentum in Egypt in 2005, with strengthening domestic demand broadening the expansion and boosting the prospects for robust growth this year. Inflation has declined impressively to below 5 percent, aided by the appreciation of the pound in early 2005. While the current account surplus has narrowed—with still buoyant export growth and rising remittances offset by higher imports of oil and capital goods—strong private capital inflows against the backdrop of recent nominal exchange rate stability poses challenges for monetary policy. Looking forward, a key macroeconomic challenge is to steadily reduce government deficits and public debt, both to reduce vulnerabilities and create space for more productive public spending and higher private investment, the latter a key to raising growth and reducing high and rising unemployment. The recent momentum in privatization is welcome and efforts to resolve nonperforming loans in state-owned banks should be stepped up.

Elsewhere in the Mashreq, Jordan has successfully adjusted to higher oil prices and a sharp decline in external grants through a significant reduction in fuel subsidies and expenditure restraint, and growth, while slowing, is projected to remain robust in 2006. Activity in Lebanon is expected to rebound in 2006 following the stabilization of the political situation. Public debt—already extremely high—remains on an upward trajectory, and sustained measures to raise the primary surplus will be critical to reducing the debt burden and risks to the financial system.

Economic activity in Israel expanded by 5.2 percent in 2005, underpinned by robust private consumption and tourism revenues. The strength of domestic demand and wages has increased inflationary risks, prompting the Bank of Israel to raise interest rates in October and November. Looking ahead, growth prospects are favorable, although political and security risks remain. The government will need to outline specific spending plans to meet the medium-term budget deficit target of 3 percent of GDP and put high public debt—over 100 percent of GDP—on a firm downward path.

Appendix 1.1. Recent Developments in Commodity Markets

The authors of this appendix are Valerie Mercer-Blackman, To-Nhu Dao, Paul Nicholson, and Hossein Samiei.

The IMF commodities and energy price index increased by over 29 percent in dollar terms (30 percent in special drawing right, or SDR, terms) in 2005, on surging fuel and base metals prices. Energy prices rose by 39 percent, owing to significant increases in oil and natural gas prices.

Prices of nonfuel commodities rose by 10 percent during 2005, reaching record highs in nominal terms. Most metal prices experienced significant increases in 2005. Robust economic activity and limited supply response have been the main drivers of higher energy and metal prices. Looking ahead, limited excess capacity in the oil sector is likely to persist well beyond 2006, and prices will continue to be susceptible to geopolitical events. In contrast, metal prices are projected to weaken somewhat as capacity comes on stream by end-2006.

Crude Oil and Other Petroleum Products

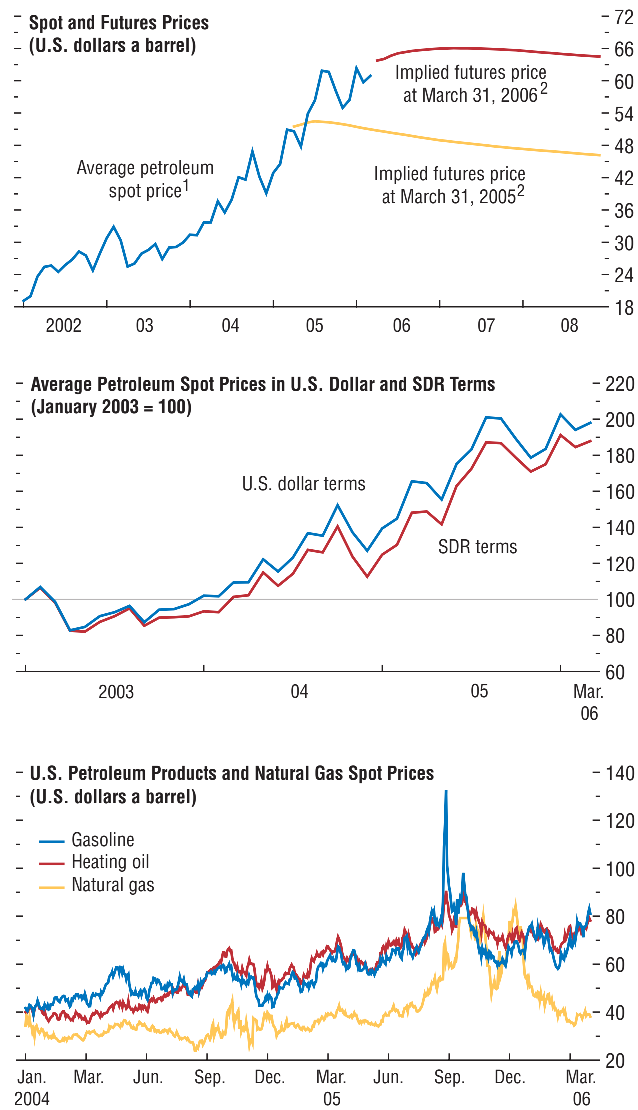
The energy market has remained tight and increasingly susceptible to short-term events, reflecting concerns about future supply in the face of limited excess capacity among members of the Organization of the Petroleum Exporting Countries (OPEC).

Price Developments

The average petroleum spot price (APSP)[11] rose by another 41 percent in 2005. Prices spiked sharply in early September, peaking at $66 per barrel in the wake of Hurricane Katrina. Coordinated action by the International Energy Agency (IEA) and the U.S. government to provide additional supplies from strategic reserves, as well as OPEC's accommodative supply stance, temporarily calmed the market, and by November crude oil prices dropped back to pre-Katrina levels. Prices bounced back, however, in January 2006 and have fluctuated mostly in the $60–66 range, owing to renewed geopolitical concerns in the Islamic Republic of Iran, Iraq, and Nigeria. These countries together account for about 11 percent of world production, well above the current OPEC spare capacity of 2–3 percent of world production. Prices of refined products followed a similar trend up until December 2005 (Figure 1.20).

[11]The IMF average petroleum spot price is an equally weighted average of the West Texas Intermediate, Brent, and Dubai crude oil prices. Unless otherwise noted, all subsequent references to the oil price are to the APSP.

Figure 1.20. Crude Oil Prices, Futures, and Petroleum Product Prices



Sources: Bloomberg Financial Markets, LP; and IMF staff calculations.
[1]Average unweighted petroleum spot price of West Texas Intermediate, U.K. Brent, and Dubai Fateh crude.
[2]Five-day weighted average of NYMEX Light Sweet Crude, IPE Dated Brent, and implied Dubai Fateh.

Table 1.12. Global Oil Demand by Region
(Millions of barrels a day)

	Demand		Annual Change 2005		2004
	2005	2004	Million barrels a day	Percent	Percent
North America	25.43	25.34	0.09	0.4	3.3
Europe	16.30	16.33	–0.03	–0.2	1.3
OECD Pacific	8.63	8.53	0.10	1.2	–1.8
China	6.59	6.43	0.16	2.5	15.2
Other Asia	8.72	8.56	0.16	1.9	6.3
Former Soviet Union	3.80	3.76	0.04	1.1	4.7
Middle East	5.91	5.62	0.29	5.2	6.6
Africa	2.90	2.81	0.09	3.2	2.9
Latin America	4.99	4.86	0.13	2.7	4.1
World	83.25	82.23	1.02	1.2	3.8

Source: International Energy Agency, *Oil Market Report*, March 2006.

Following a gasoline price spike in the aftermath of the hurricane, the result of bottlenecks in refinery capacity, prices fell to pre-Katrina levels by November. Unlike crude oil, they remained fairly stable, as relatively warm winter weather in January kept inventories at comfortable levels, but increased in March owing to strong demand in the United States.

U.S. natural gas prices almost doubled in 2005, peaking at $15 per MMBTU (million British thermal units), following the hurricanes in the Gulf of Mexico. Prices have eased below $10 recently, but remain above their five-year average. As of early February, about 16 percent of natural gas production in the Gulf of Mexico was still shut in. Prices in Europe, which have been lower than in the United States, also spiked in January owing to price disputes between Russia and Ukraine.[12]

Oil Consumption

Global oil consumption in 2005 rose by 1.1 million barrels a day (mbd)—well below the 3 mbd increase in 2004 and somewhat lower than initial projections by the IEA—mostly on account of lower consumption growth in China and the United States (Table 1.12). Record-high prices—particularly of gasoline—may have begun to play a role in slowing consumption, but the evidence is limited and consumption growth still remains near the average of the past two decades. Other key factors include hurricane-related disruptions in the United States and developments in China—in particular, the apparent resolution in 2005 of shortage of coal-powered electricity generation, which had in 2004 increased demand for stand-alone diesel power generators; and policies in 2005 aimed at controlling domestic product prices, which encouraged local refineries to export abroad and repressed domestic consumption.

Oil Production

To satisfy growing demand in the face of flat non-OPEC supply in 2005, OPEC production (including natural gas liquids and condensates) increased by 1 mbd, to 34 mbd. Production levels in most OPEC countries (excluding Iraq) are close to their quotas, but Iraq's production has been disappointing. At 1.6 mbd in December, Iraq's production was 20 percent below 2004—and well below its capacity of 2.5 mbd—reflecting inadequate storage capacity and delivery bottlenecks, as well as sabotage attacks on production infrastructure. OPEC's spare capacity (excluding Iraq) stood at 1.25 mbd at end-2005 (Figure 1.21).

Non-OPEC supply in 2005, at 50.1 mbd, was almost unchanged relative to 2004, largely owing to production shortfalls in Russia (in part resulting from the production slowdown in former Yukos fields); and the United States (mainly due to infrastructure damage in the aftermath of the hurricanes, with production in the Gulf of Mexico still 430,000 barrels a day below pre-Katrina levels). Production also fell slightly in other oil-producing OECD countries, while some production gains occurred in non-OPEC Africa.

[12]Prices of natural gas in the three main markets (Asia, Europe, and the United States) can vary significantly owing to the difficulty of transporting natural gas.

Early indications are that global oil production is somewhat below expectations so far in 2006, mainly due to attacks on oil installations in Nigeria, weather-related disruptions in the North Sea and the former Soviet Union, and ongoing security-related disruptions in Iraq.

Inventories

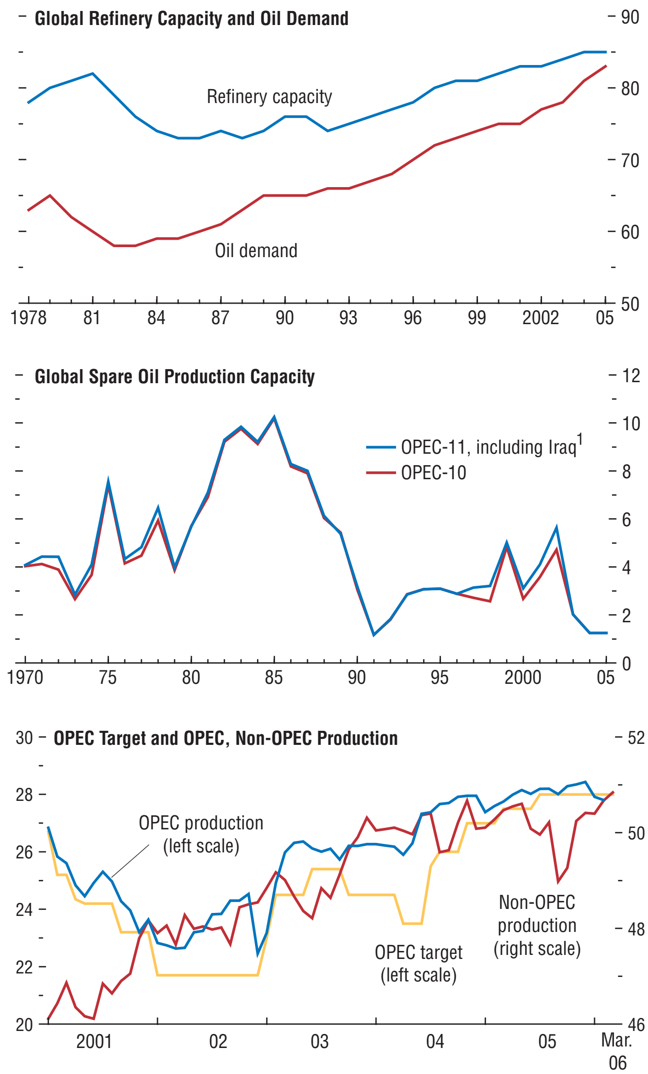
The behavior of inventories is the most telling sign of a shift in the oil market balance in 2005 as, despite high prices, OECD commercial crude inventories have risen to their highest level in the past five years. Government-controlled inventories have also risen in both levels and days of forward cover. This contrasts markedly with the typically negative relationship between prices and inventories observed in the past, suggesting that concerns about future supply have likely led to precautionary accumulation of stocks on the part of consumers and governments. The fundamental negative relationship between inventories and the spread between spot and long-dated futures prices still holds (Figure 1.22).

Short-Term Prospects and Risks

Going forward, while mild winter weather in the United States may have provided some breathing space, the oil market is likely to be characterized by robust consumption growth and production uncertainties, in the context of buoyant global activity and limited spare capacity. The IEA projects global oil consumption growth of 1.5 mbd in 2006, broadly in line with other analysts' projections. Consumption in China is projected to pick up by 0.4 mbd to 7 mbd. Many analysts are becoming increasingly bullish about prices. Based on the futures market, prices are expected to remain at $61.25 per barrel on average in 2006 and increase slightly to $63 in 2007.

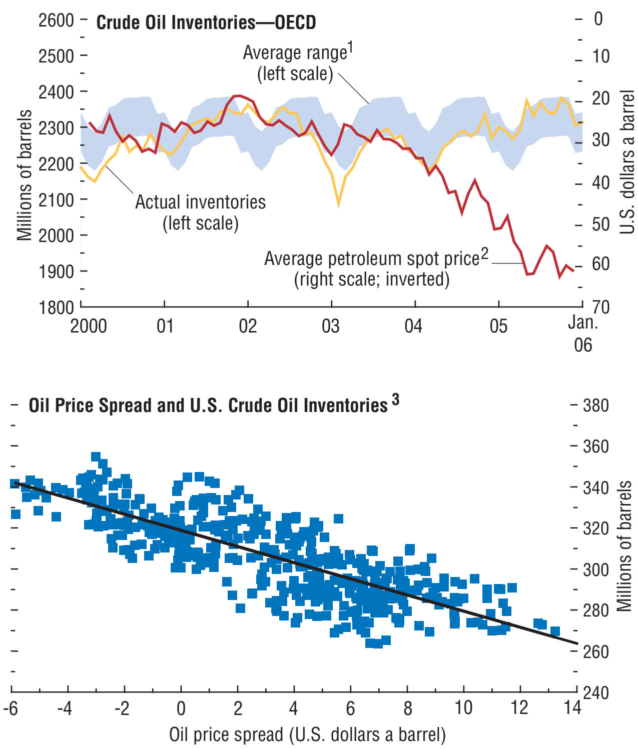
Supply-side risks remain significant, including in Nigeria (unrest in the oil-producing region); Iraq (security situation); and the Islamic Republic of Iran (the nuclear standoff). Recent attempts to attack oil facilities in Saudi Arabia have further increased risks of disruptions. Prospects for non-OPEC supply are also uncertain, given that out-

Figure 1.21. World Refinery Capacity, Spare Capacity, and Production
(Millions of barrels a day)



Sources: Bloomberg Financial, LP; British Petroleum Statistical Review; International Energy Agency; U.S. Department of Energy; and IMF staff calculations.
[1]OPEC-11 spare capacity refers to production capacity that can be brought online within 30 days and sustained for 90 days.

Figure 1.22. Commercial Oil Inventories, Spot and Futures Prices



Sources: Bloomberg Financial, LP; International Energy Agency; U.S. Department of Energy; and IMF staff calculations.

[1]Average of each calendar month during 1992–2004, plus a 40 percent confidence interval based on past deviations.

[2]Average petroleum spot price of West Texas Intermediate, U.K. Brent, and Dubai Fateh crude.

[3]All prices are derived from NYMEX contract prices. Spread is the spot price minus the 24-month forward futures price.

put was virtually flat in 2005 compared with earlier expectations of an increase of over 1 mbd. In addition, concerns have increased regarding Russia's reliability as an oil and gas supplier, following its decision to briefly cut off gas supplies to Ukraine and Georgia in early January (which in one case affected supplies to western Europe). In this context, like many analysts (including the U.S. Department of Energy), IMF staff believes that the IEA's and OPEC's projections in the 1.2 mbd range for non-OPEC supply growth in 2006 may be optimistic. Even if OPEC's capacity increases by a projected 1 mbd, spare capacity will likely continue to remain low, and consist mostly of the heavy grades, for which refining capacity is limited.

Medium-Term Prospects and Policies

In light of the current tightness in the oil market and risks going forward, the key issue is how investors and consumers are responding to higher prices and supply-demand imbalances. The IEA estimates that investment in the oil sector is probably 20 percent below what is needed to meet projected demand over the medium to long term. In contrast, oil-exporting countries and major oil companies argue that they are investing as rapidly as is appropriate. Against this background, this section discusses prospects for investment and demand adjustment in the oil market.

Is Investment Forthcoming?

Many analysts argue that international oil companies have followed overly conservative investment strategies and have been slow to respond to higher oil prices, despite demand growth surpassing capacity growth for at least three years. This may have resulted from the persistence of the cost-cutting mentality of the 1990s. For their part, company managers argue that short-term price movements can only be a small factor in their planning decisions because of the long time horizons in the industry, and the importance of longer-term fundamentals, shareholder preferences, and business strategy.

Given past experience, they stress the need to wait and assess the permanence of higher prices before making investment decisions. To date, oil corporations appear to have used a large part of their profits to distribute to shareholders, buy back shares, accumulate cash reserves, or acquire other companies.[13]

Nevertheless, recent evidence does suggest that investment has increased significantly in nominal terms. A biannual survey by Lehman Brothers and Citigroup of 316 oil companies suggests that spending in 2005 was 20 percent higher than the previous year, and it could grow by 14–15 percent in 2006. Moreover, major oil countries such as Norway, Saudi Arabia, the United Arab Emirates, Mexico, and Brazil have markedly increased their capital expenditure, in some cases by over 50 percent in 2005, and have announced ambitious investment plans for 2006.

Of course, these investments may not affect output in the short to medium term, because the average time between initial exploration of a field and near-full-capacity upstream production is at least five years.

However, new investment, while significant in nominal terms, may not be large in real terms. Surveys suggest that the industry is facing increasing costs and a given dollar of investment will produce less quantity of oil than in the past. First, as it is becoming more difficult to find large oil fields where the oil is relatively easy to extract, production is moving increasingly into higher cost and riskier areas. Some company surveys show that the share of investment in exploration has increased, reflecting smaller average size of fields and more complex technologies necessary to extract the oil. Second, costs are increasing in part as a result of a lack of skilled and experienced personnel and petroleum engineers in the industry—reflecting the leaner operations during the low oil price period of the 1980s and 1990s—and limited supply of drilling rigs, tankers, and related equipment. These additions to costs may be cyclical in nature but are affecting the real value of investments.[14]

Other factors contributing to higher production costs and limited investment of international oil companies are impediments to foreign investment in some oil-rich countries, either in the form of increases in royalty and export taxes, or restrictions on ownership and licensing. Many non-OECD oil-producing countries only allow foreign companies to enter as subsidiaries or contractors, which is much less attractive for international oil companies than ownership contracts. Saudi Arabia and Kuwait are effectively closed to foreign direct investment, as they are concerned that the international oil companies tend to extract oil too rapidly, thus reducing the ultimate recovery rate. Of course, this trend may not necessarily translate into less investment everywhere: some national oil companies, in particular Saudi Aramco, have major investment plans and have access to the latest technology. The recent general backlash against privatization that has occurred in emerging and transition economies has also affected the oil industry (e.g., the case of Yukos in Russia, and recent trends in Argentina, Bolivia, Ecuador, and Venezuela). While oil-exporting countries may be justified in requiring larger payments for the sale of their national assets, higher export and royalty taxes have become an increasing share of overall foreign investment costs in the industry.

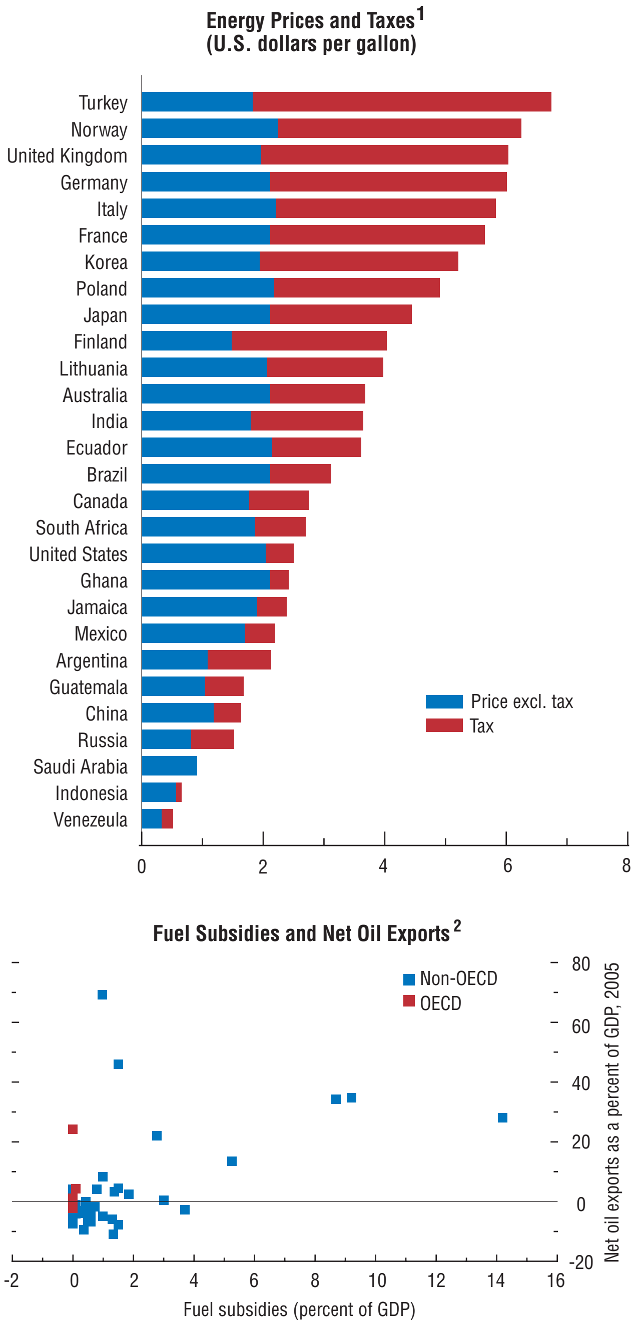
Demand Adjustment: Substitution and the Role of Taxes and Subsidies

The delayed adjustment in some important consumer countries in part reflects the time it takes for consumers and governments to assess the permanence of the price increase so as to

[13]National oil companies in India and China are also purchasing shares in oil fields, on the belief that this will increase their domestic energy security.

[14]Downstream investment has also been plagued by uncertainty about the mix of grades, loss of know-how in refinery building, and excessive regulations in many OECD countries. Global refinery capacity has increased only 7 percent since 1980, while capacity in the OECD countries has actually declined by 10 percent.

Figure 1.23. Energy Prices, Taxes, and Fuel Subsidies



Sources: Energy Détente; International Energy Agency; and IMF staff calculations.
[1]Latest 2005 observations.
[2]Fifty-three countries are represented. Fuel subsidies refer to implicit and explicit costs borne by the public sector. Estimates may not always be directly comparable.

readjust budgets accordingly. Over the longer term, the speed of adjustment of demand will depend markedly on government policies and on the viability of alternative technologies.

Many alternative energy sources that were not economically and technologically feasible during the high oil price episode of the 1970s are now viable. The most salient close substitutes to petroleum-based fuels are sugar-based ethanol, which can now be used in some gasoline-powered vehicles, and biodiesel (a substitute for petro-diesel). In Brazil, for example, over 60 percent of new cars can use ethanol. Both ethanol and biodiesel now receive fiscal incentives in many countries, justified by their generally lower greenhouse gas emissions compared to petroleum-based fuels. Mandatory mix requirements may also help spur their demand.[15] Nonetheless, markets for these fuel technologies are still in their infancy, and in most cases a speedy switch by consumers is unlikely because it requires a high sunk cost (such as, for example, switching to a different type of vehicle). Governments will also need to encourage the adoption of suitable infrastructure for the new technologies.[16]

Improved taxation policies would also help energy demand adjustment. While pre-tax gasoline prices are similar across many countries (Figure 1.23), retail taxes vary significantly. There is, for example, scope for higher gasoline consumption taxes in the United States—which consumes a quarter of the world's oil—so as to reduce excessive consumption. On the other hand, some European countries have very high taxes, in part aimed at encouraging conservation and correcting pollution externalities. A better taxation policy to be considered over the

[15]The implementation of emission-reduction schemes under the Kyoto agreement, such as the EU Carbon Trading Scheme, should further encourage the adoption of these and other carbon-reducing alternatives in the years ahead.

[16]In the United States, for example, plans to offer gasoline-powered cars that run 85 percent on ethanol will only be attractive to a wide number of consumers if there are sufficient fuel stations that offer the right fuel mix.

medium term would be to decouple externality charges from fuel prices by targeting the externality directly, for example through congestion charges (as in the United Kingdom) or producer emissions fees on all energy sources.

Many developing countries maintain general implicit and explicit subsidies for diesel, kerosene, and gasoline at substantial fiscal costs. These countries need to take steps to reduce subsidies (especially for diesel and gasoline where most of the benefits go to the rich) to allow price signals to work. A set of well-publicized targeted compensation schemes can be designed to mitigate the impact on the poor—for example, through direct or indirect government grants—lowering taxes that bear more heavily on the poor whenever it is feasible, or two-tier pricing systems. Such schemes can be financed by savings made from lower subsidies. Demand adjustment by developing country oil producers, in particular, where even gasoline is subsidized heavily (Figure 1.23), will be crucial to maintaining the oil supply-demand balance in the medium term. At the extremes, a gallon of gasoline in Venezuela costs $0.15 and in the Islamic Republic of Iran $0.34, compared to an average of $4.95 in OECD countries. The implied fiscal costs are very large, seriously hampering government's ability to allocate resources to more productive social expenditures. The IEA estimates that, under current policies, the share of global demand coming from developing countries will increase from about one-third in 2004 to almost one-half in 2030, with demand from the largest exporters in the Middle East and North Africa growing by 73 percent, and demand from China more than doubling (compared to the 17 percent increase in the OECD).

Nonenergy Commodities

The IMF nonfuel commodity price index rose by 10 percent in 2005, picking up strongly in the second half of the year and reaching a nominal record high in December 2005—and its highest level in real terms since 1997—on surging metal prices (Table 1.13). The recent period contrasts strikingly with the general downward trend observed in real nonfuel commodities prices over many years, in part reflecting substantial efficiency gains in agriculture and resource extraction technologies, in particular in the 1980s and 1990s.

Table 1.13. Nonenergy Commodity Prices

(Percent change for 2005)

	U.S. Dollar Terms	Contribution[1]	SDR Terms
Food	–0.3	32.8	–0.2
Beverages	21.0	10.8	21.3
Agricultural raw materials	1.8	7.7	2.00
Metals	26.4	48.7	26.9
Overall nonenergy	10.3	100.0	10.6

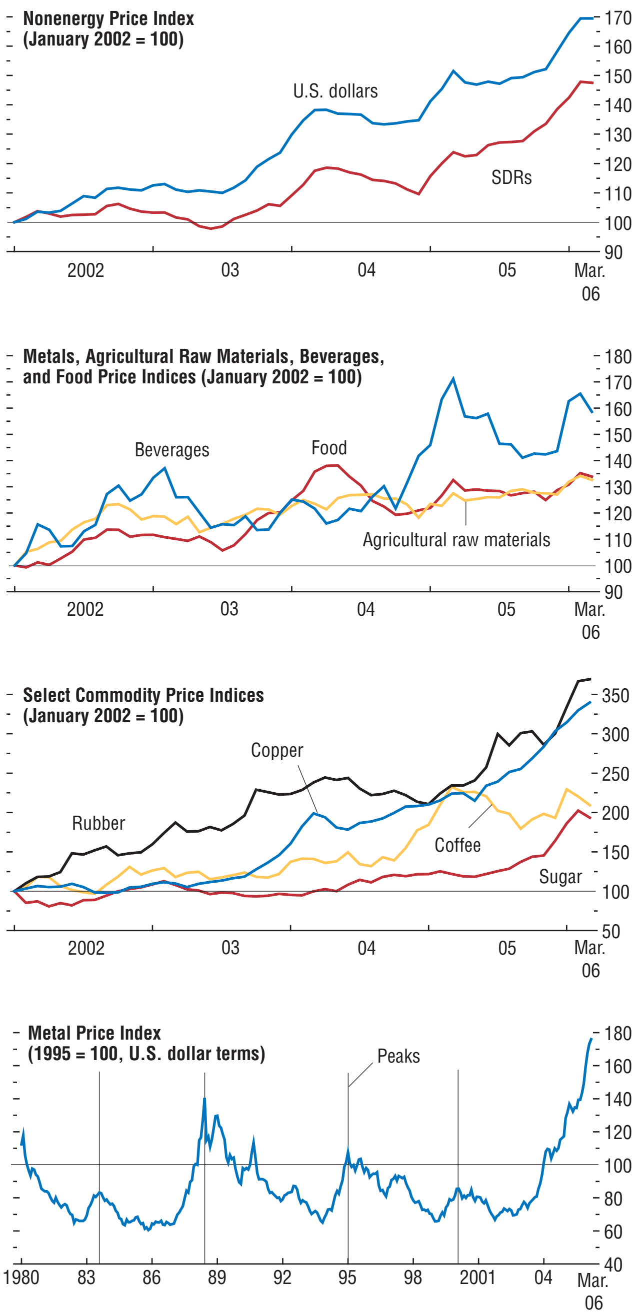
Sources: IMF, Primary Commodity Price Database; and IMF staff estimates.

[1]Contributions to change in overall nonenergy price index in U.S. dollar terms, in percent. Contributions to change in SDR terms are similar.

A number of factors are contributing to the current upsurge: (1) strong demand from Asian emerging markets, in particular China; (2) high energy prices, which have contributed to higher prices for many nonfuel commodities—for example, energy-intensive aluminum and steel, some agricultural commodities (through higher fertilizer prices), sugar and edible oils (which are inputs in alternative fuels, demand for which has increased), and natural rubber (a substitute for petroleum-based synthetic rubber); and (3) increased financial investment in commodity markets as investors seek diversification from traditional stocks and bonds, as well as protection against potential inflation or changes in the value of the dollar.

Price performance across commodities also reflects inherent differences in their production conditions, in particular between base metals and other nonfuel commodities (Figure 1.24). The base metals markets are in some ways closer to the oil market, although supply response tends to be speedier—in particular for copper and zinc. In the case of the food and beverages market, in contrast, global supply can respond very quickly. In addition, the regularity of the cycle around the trend is somewhat more uniform for base metals because the demand move-

Figure 1.24. Nonenergy Commodities



Source: IMF staff calculations.

ments among metals tend to coincide more closely, and their supply is not affected by unpredictable weather changes.

Recent Developments and Prospects

The IMF metal price index rose by 26 percent in 2005, defying analysts' expectations that prices would dampen as capacity came on stream. Higher prices reflect robust demand owing to strong industrial production growth and construction activities in China and the United States, as well as a series of supply shocks, including labor strikes in the United States and Chile in the copper industry and delays in Chinese zinc mine expansion projects planned for 2005. Higher energy prices forced closure of some aluminum processing plants, thus pushing up prices, while increased demand for uranium for nuclear energy caused a further significant increase in prices. Looking ahead, metal prices are expected to increase by 7 percent in 2006 on the continued strength of copper, zinc, aluminum, and uranium. Production is expected to catch up toward the end of the year.

The food price index remained almost unchanged in 2005 relative to 2004. Sugar was the strongest component of the index, rising to 24-year highs, as Brazil and Europe reduced exports: Brazil's sugar cane crop has been increasingly used for the production of ethanol, and EU exports have been limited by a WTO ruling and subsequent legislation. Oilseed prices fell, owing to large harvests and multiyear high inventories of soybeans, and offset a demand-driven gain in seafood prices. Overall beverage prices rose by 21 percent in 2005 on the strength of Robusta coffee prices reflecting weather-related supply disruptions in Vietnam, the world's largest producer. Looking forward, food prices are expected to rise slightly in 2006, as strong growth in sugar prices is offset by a small decline in the prices of other foods.

The agricultural raw material price index rose 2 percent in 2005, after falling in the first half of the year. Natural rubber prices rose on robust demand, as higher oil prices pushed up the prices of synthetic rubber, its substitute. Sawnwood prices showed strong recovery in the second half of 2005, owing to robust construction activity in China and new demand from the United States for the reconstruction of the hurricane-affected areas. In contrast, cotton prices declined in 2005 owing to good global harvests.

Semiconductors

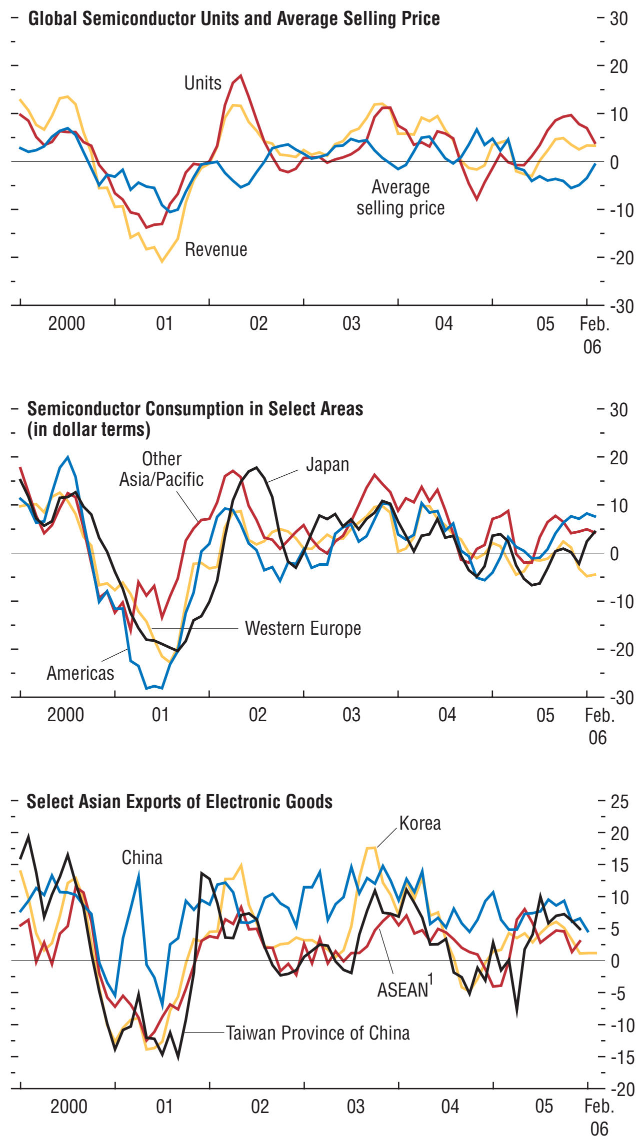
Worldwide semiconductor sales revenue grew 6.8 percent in 2005 to reach record levels, after growing 28 percent in 2004 (Figure 1.25). Strong growth in unit sales more than offset falling prices, which resulted from a capacity overhang. Consumer interest in electronics was the primary cause of higher quantity demanded, as prices fell on cutting edge technologies and new products were introduced. Business purchases have been slow, owing to uncertainty regarding inflation, interest rates, and higher energy costs. In Asia (excluding Japan), consumption of semiconductors grew 16 percent in 2005.

Global capital spending by semiconductor producers increased slightly in 2005. In general, increasing tightness in existing capacity is expected to increase capital spending in 2006. Capacity utilization in the fourth quarter of 2005 was reported 91.8 percent, with leading-edge capacity at 98.4 percent. The global book-to-bill ratio for semiconductor equipment sales stood at 1.24 in February.

China's exports of electronics grew over 30 percent in 2005, while exports of other Asian countries grew more slowly. Over the medium term, regional and technological factors may shift production within Asia. For example, the increasing replacement of hard drive memory by flash memory will benefit Japan, Korea, and Taiwan Province of China over ASEAN-4 countries, which are heavily geared toward producing hard drives. And China's emergence as an important location for electronics manufacturing will likely attract new semiconductor investment to the country.

Figure 1.25. Semiconductor Market

(Seasonally adjusted; quarterly percent change of three-month moving average)



Sources: World Semiconductor Trade Statistics; and IMF staff calculations.
[1]Consists of Indonesia, Singapore, Malaysia, the Philippines, and Thailand.

Most analysts are optimistic about sales revenues in 2006. The semiconductor Industry Association (SIA) forecasts growth in sales revenues of 7.9 percent in 2006. Strong sales of consumer products are projected to continue as prices fall on higher-end products and more new product releases are scheduled. Business purchases are expected to grow, owing to expected new software releases, which may force a replacement cycle.

Appendix 1.2. The Global Implications of an Avian Flu Pandemic

The main authors of this appendix are Sandy Mackenzie, Johannes Wiegand, and Selim Elekdag.

Avian flu—or “A-strain flu”—refers to a type of influenza virus that is endemic in aquatic birds but can, in certain circumstances, be transmitted to human beings. When avian flu viruses merge and swap genetic material—a process called “antigenic shift”—new flu strains emerge that differ from both parent viruses. Antigenic shift can cause *human* epidemics if the new virus is easily transmitted between humans. The current H5N1 virus has not yet mutated into so deadly a form, but it has mutated rapidly in its avian hosts, and it has jumped the species barrier from birds to human beings.

The first documented human outbreak of the H5N1 virus occurred in 1997 in Hong Kong SAR. It infected 18 people, killing six of them. The virus resurfaced in December 2003 in poultry in Korea and spread to other east Asian countries. It reached southeastern Europe in August 2005, probably transmitted by migratory birds, and West Africa, as well as southern and central Europe, in February 2006. As of April 4, the World Health Organization (WHO) reported 191 human cases and 108 deaths since 2003.

The cost of a deadly epidemic in human terms is beyond any reckoning. However, an epidemic’s impact on the health of a population is normally characterized by its attack rate—that is, the share of the population that contracts the illness—and the case mortality rate—the share of the ill who succumb to the illness. There have been three avian influenza epidemics in the twentieth century. Although they are thought to have had similar attack rates, their case mortality rates have differed greatly. The Spanish flu pandemic of 1918–19 was by far the most lethal (see Box 1.7), and is thought to have claimed the lives of 40–50 million people worldwide.

It is next to impossible to predict what the case mortality rate of a future pandemic would be. This appendix discusses possible effects of a severe outbreak, with attack and case mortality rates similar to those observed in the United States during the 1918 pandemic—specifically, an attack rate of about 25 percent and a case mortality rate of 2.5 percent, implying overall mortality of 0.6 percent. It should be emphasized that such a scenario is not the most likely—as mentioned above, other influenza epidemics in the twentieth century have been far less virulent, and the probability of an epidemic with human-to-human transmission is still considered low at this juncture.

For simplicity, the appendix assumes that attack and case fatality rates would be the same in all countries. However, in 1918 substantially higher mortality rates than those observed in the United States were reported from other areas of the world. It appears plausible that in some developing countries, limited availability of medical care, overburdened public health facilities, and lack of sanitary infrastructure could cause higher mortality rates than would occur in advanced economies today.

Apart from the attack and the case mortality rates, the key parameters that determine the impact of an epidemic include its length and the average duration and number of periods of infection (i.e., periods when the virus has not returned to dormancy). Flu-like illnesses tend to last several weeks. It is not possible to be categorical about average periods of infection. The estimates of this appendix are based on the assumption that there would be one period of infection lasting six weeks. This is in line with the American experience in 1918—although there were three waves of contagion—in that a

Box 1.7. The Spanish Flu of 1918–19

The Spanish flu of 1918–19 was by far the most lethal influenza pandemic of the twentieth century. It infected about one-fourth of the global population and took the lives of 40–50 million people. This renders the Spanish flu the third most deadly pandemic on record, surpassed only by the plague pandemics of the sixth and fourteenth centuries. One unusual feature of the Spanish flu was that it killed not only the very young and the very old, but also adults in their prime years with above-average frequency, creating a "W-shaped" mortality pattern (Noymer and Garenne, 2000).

Despite its name, the first outbreak of Spanish flu was recorded in early 1918 in army camps in the United States. The pandemic came in three waves, with the second wave—beginning in August 1918 simultaneously in Brest/France; Freetown/Sierra Leone; and Boston/Massachusetts—being the most deadly. Mortality rates varied greatly between countries, ranging from an estimated 0.6 percent of the population in the United States to 5 percent in India and 20 percent on some Pacific islands, such as Fiji or Western Samoa. For many countries, the mortality figures have a large margin of error, which explains why estimates on the global death toll vary greatly.

Although data on the U.S. economy in 1918 are better than most, they are not good enough to allow the drawing of firm conclusions regarding the economic impact of the Spanish flu. In particular, there are no comprehensive national accounts or household survey data. Higher-frequency indicators show that both U.S. industrial production and the business activity index dipped in October 1918—that is, at the height of the epidemic—but then promptly rebounded. Factory payroll numbers behaved in a similar fashion, although data on the labor force as a whole are lacking. There were also temporary and modest reductions in passenger rail transport and retail sales. A recent study by the Canadian Department of Finance estimates that the overall impact on annual GDP was only 0.4 percent. However, it appears implausible that an outbreak of similar virulence today would have comparably limited effects (see the main text). In late 1918, the United States was still on a war footing, and there may have been considerable social as well as economic pressure to stay on the job.

A study by Brainerd and Siegler (2003) concentrates on the *aftermath* of the pandemic, studying U.S. economic growth across states between 1919–21 and 1930. The authors find that there was a *positive* relationship between the mortality rate and growth: one more death per thousand resulted in an *increase* of per capita growth over the next 10 years of at least 0.15 percent per year, which would point to a sustained period of catching up after a short and sharp shock. However, this result seems at odds with the observation that the pandemic's immediate impact on economic activity was only moderate.

There are only a few pieces of analysis that shed light on the economic impact of the Spanish flu in other countries. In a study on India—where mortality was particularly high—Schultz (1964) estimates that agricultural production fell by 3.3 percent during the pandemic, compared to a reduction in the agricultural workforce by 8 percent. However, more recent work by Bloom and Mahal (1997) finds no link between the population and the production loss.

Note: The main authors of this box are Sandy Mackenzie and Johannes Wiegand.

very large share of flu-related deaths occurred in one month—October. A further assumption is that the disease assails all countries within a matter of weeks.

The appendix draw parallels with the 1918 pandemic wherever possible. History can only provide very limited guidance to the economic impact of a pandemic, however, given the huge changes in economic organization and the progress in medicine and public health since then. The recent SARS (Severe Acute Respiratory Syndrome) epidemic is another possible model—better in some respects, given the improvements in economic statistics and the greater comparability of economic and medical institutions—but its relevance is limited by the virus's low infectiousness and mortality.

The next section analyzes the channels through which an avian flu pandemic would affect the aggregate output of an economy before turning to the impact on the budget and financial institutions. The final section summarizes the overall impact and considers the major policy conclusions.

Channels of Transmission

The following section examines the effects an avian flu outbreak would have on the supply side and demand side, including the impact on external demand.

Supply of Labor and Capital

The principal supply-side effect of an avian flu pandemic would be on labor force numbers and average hours worked. Given the stated assumptions, deaths caused by the pandemic could reduce the global labor force by about 20 million people, with three-quarters of the loss in developing countries. While the pandemic raged, large numbers of workers would be ill and unable to work. Others would be asked to stay at home, or would choose to do so to avoid infection or to care for a sick relative. The temporary impact of illness and absenteeism on total hours worked would be much larger than the immediate impact of mortality. In some sectors of advanced economies, telecommuting might compensate for a small part of the impact of absenteeism.

Once the pandemic had run its course, average hours worked should recover quickly to their normal level. They might even rise above it, as industry increased production to accommodate a bounce-back in demand (see below). The *working age population* would probably be permanently reduced, although this effect would be at least partly offset by an increase in the labor force participation rates of the survivors.

A pandemic would depress investment, at least temporarily, if it caused investment projects to be deferred until capacity utilization rates had recovered. Once the pandemic had subsided, however, it is likely that previously postponed investment would proceed. Hence, it is unlikely that the capital stock would be permanently affected.

Supply of Energy, Transportation, and Other Key Inputs

Shortages of key inputs like energy, water, and transportation would affect factor productivity. In the short run, the extent of disruptions would depend on the impact of the pandemic on labor, especially skilled labor, and on whether absent employees could be replaced (the impact on air, maritime, and road transport being possibly of greatest concern). The widespread adoption of just-in-time inventory management techniques is another possible source of disruption. Once the pandemic had run its course, production ought to recover quickly.

Overall Effects on Aggregate Supply

Overall, the most likely scenario is a short, but possibly sharp, decline in aggregate supply. A purely illustrative estimation of its magnitude can be derived from assumptions about the size and duration of the decline in hours worked and the parameters of an aggregate production function. Specifically, if 25 percent of the work force falls sick, stays home, or is sent home for six weeks and if 0.6 percent of the work force dies, aggregate labor input would decline by about 13 percent for one quarter, or about 3 percent for a year. A Cobb-Douglas production function with a coefficient on labor input of 0.6 then implies a drop in aggregate supply in the quarter of about 8 percent or a drop in terms of annual GDP of about 2 percent. This fall is likely to be reinforced by a temporary decline in factor productivity.

The American experience of 1918 is not easy to interpret, but it points to a much smaller decline. This suggests that absenteeism may not have been particularly great, possibly because of social pressures on workers to stay at work and the absence of a social safety net to cushion any declines in earned income. A 1918-scale pandemic in contemporary circumstances could well lead to a much larger decline in labor input.

Domestic Consumption and Investment

The impact of the pandemic on consumption would come through two main channels. First, with large numbers of people unable to work, incomes and, therefore, spending would decline, particularly for households that have limited savings or that receive limited sick pay. Second, during the contagious period, the demand for consumer goods—especially postponable durable and semi-durable consumer goods—would decline, as households shunned physical contacts in malls, market places, and other retail establishments or household members convalesced. The former effect would likely dominate in low-income countries, where consumer durables account for a smaller share of total consumption; the latter in more advanced economies. Provided that income levels were maintained or picked up sharply once the pandemic had ended, demand for consumer goods could be expected to recover quickly (and in advanced economies a significant rebound in purchases of durables could be expected). As mentioned above, investment postponed during the pandemic could be expected to recover once the pandemic had passed.

External Demand

Given the global decline in supply and demand, the volume of global trade would drop sharply for a period. Countries specializing in exports of investment goods, consumer durables or travel-related services, such as tourism, could suffer a particularly sharp decline in export earnings and a deterioration in external current accounts. SARS reduced airline passenger arrivals in Hong Kong SAR by nearly two-thirds in the month following the month of the peak of the outbreak, although it recovered to its pre-SARS level four months later. Commodity exporters would probably experience a temporary terms-of-trade loss. Trade might also be affected by more restrictive inspection of goods in transit. Restrictions imposed on public health grounds could be a cloak for protectionist measures in some countries. Once the pandemic had ended, however, there is no reason why global trade should not recover fully.

Financial Institutions and Financial Systems

A pandemic could disrupt payments, clearing, settlement, and trading systems significantly. The source of vulnerability is basically the same as for utilities—reliance on specialized workers who must work together. The key to minimizing the risk of a serious slowdown or systemic failure is to implement contingency plans that provide for an adequate number of replacements, and perhaps alternative operating and backup systems. The more successful these efforts, the less likely would be a general panic entailing a massive and destabilizing flight to quality that could trigger major problems with creditor and counterparty risk (see the IMF's *Global Financial Stability Report*, April 2006, for a detailed discussion of these and related issues). One key issue is how disruptions of the financial system in one country would affect others. Serious problems in major financial centers could have a destabilizing knock-on effect. Disruptions in small countries would be less serious, but could nonetheless trigger contagion. Avoiding serious disruption to financial systems will also speed the recovery of countries from the pandemic.

Even if the core financial system continued to function adequately, some outflow of capital from emerging market countries would still be expected. Some emerging market countries would be more at risk than others; for example, countries whose current accounts would be worsened by the pandemic, or countries already deemed vulnerable to capital flight. However, basically stable countries would be unlikely to be pushed into crisis if the economic impact of the pandemic would be short-lived and the crisis well managed.

The Overall Effect and Policy Implications

If a global avian flu pandemic were to break out, the costs in terms of death and human suffering, of course, would be beyond calculation. From a narrow economic perspective, affected countries could be expected to suffer a sharp temporary decline in output. While the size is impossible to assess with any degree of certainty, the illustrative estimate of an 8 percent drop in GDP in one quarter from reduced labor input alone—equivalent to a 2 percent drop in annual GDP—is not outlandish. This could prove to be a significant underestimate if the fall in demand and effects from disruptions of physical and infrastructure services were large.[17] Some countries could be particularly vulnerable, in particular economies that depend heavily on exports of durable goods and services, countries that were vulnerable to a capital account crisis already before the pandemic, and developing countries with a weak public health infrastructure and relatively low institutional and financial capacity to deal with the outbreak. Once infrastructure services had been restored, economic activity could be expected to rebound relatively quickly, and the long-run economic impact of the pandemic would be modest.

As described above, the pandemic would lead to substantial reductions in both supply and demand. In principle, if demand dropped more than supply as many expect,[18] the overall impact would be deflationary and monetary policy should be eased; if the reverse, policy should be tightened. In practice, it will be very difficult to know which effect is dominating, and for how long the resulting supply-demand imbalance will last. In such circumstances, and given the likely adverse impact on confidence and probable strong demand for liquidity, monetary policies should err on the accommodative side. There may also be a need for temporary regulatory forbearance, particularly if asset values suffered a sharp decline.

On the fiscal side, a pandemic would temporarily worsen the budgetary balance. Revenues—particularly sales and VAT receipts and payroll taxes—would fall sharply, the more so if tax collection was disrupted; expenditures on medical and income support programs would also rise significantly. Given the one-off nature of these expenditures, the temporary widening of budget deficits should be accepted, wherever this would not pose serious risks to fiscal or external sustainability. Moreover, budgetary procedures would need to be flexible enough to reallocate public expenditures quickly across spending categories. At the present juncture, the key issue is to ensure sufficient funding of preventive measures, to reduce the risk that a pandemic takes hold and the costs if it does. Given the public good characteristic of measures to fight infectious disease, rich countries should fully subsidize the costs of such programs in poor countries. Extensive technical assistance with public health issues may also be needed.

As will be evident from the discussion above, the impact of a pandemic will depend critically on adequate contingency planning to ensure that the financial and physical infrastructure

[17]Several studies have attempted to simulate the effect of a human H5N1 pandemic on GDP. The results depend typically on the assumptions made about mortality and about the relative size of demand-side effects. One of the most sophisticated studies is McKibbin and Sidorenko (2006). The authors use a model with 20 countries/regions to simulate epidemic outbreaks that differ by the degree of severity. The model allows for differing mortality rates across countries—they vary with a proxy for the availability and quality of health care—and country risk premiums, which vary with mortality rates. With these assumptions, some emerging market economies are hit very hard by the pandemic. Canada, the United States, and the euro area are the least affected.

[18]A recent study of the hypothetical effects of a pandemic on the U.S. economy concluded that the demand-side would be greater than the supply-side impact, on the assumption the demand for certain services entailing congregations or crowds would drop to zero for a time (Congressional Budget Office, 2005). The recent SARS experience—where most of the economic damage was caused by demand-side effects—provides only limited guidance, as SARS had a minimal impact on labor market participation and other supply parameters.

continue to function. Given extensive global financial market linkages, countries that already have well-designed business continuity plans for their central bank and financial institutions have an interest in seeing that others achieve a similar standard. At the present stage, preparations appear well advanced in a few countries, particularly those affected by the 2003 SARS outbreak. However, in general the level of preparedness and awareness is still low.

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