III. Developments in the emerging market economies

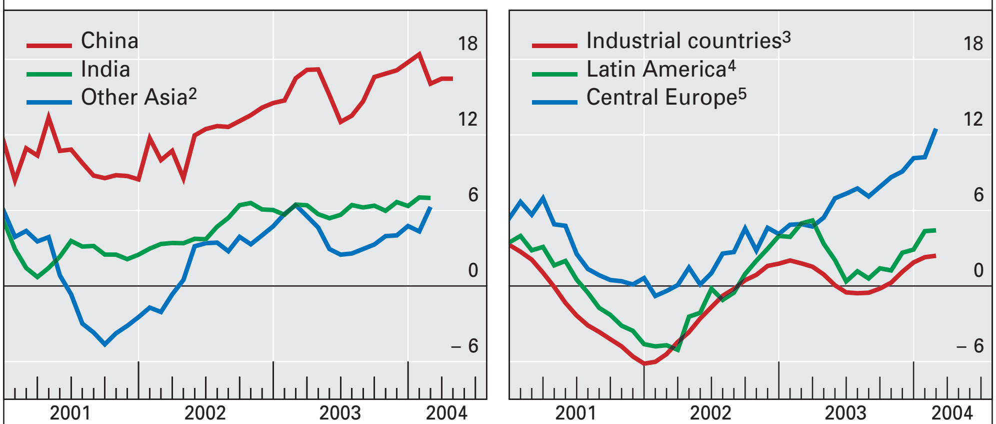
Highlights

Ample global liquidity, reflecting easy monetary conditions and a greater willingness on the part of investors to bear risks in international capital markets, strengthened growth in emerging economies from mid-2003. At the same time, the negative effects of several shocks wore off. A distinct reversal, however, took place in April 2004 as long-term interest rates rose sharply, emerging market credit spreads widened and equity prices fell.

During the expansion, which began around the end of 2001, China emerged as a major contributor to global economic activity, with growth in industrial production consistently surpassing that of other countries and regions (Graph III.1). In the rest of Asia, growth rebounded in most countries once the SARS outbreak was contained. In Latin America, however, there was some divergence in growth rates, notwithstanding the stimulus from stronger demand in the United States, much higher commodity prices and a progressive easing of monetary policy. In the first quarter of 2004, growth was still moderate in Brazil, had risen significantly in Mexico, and was strong in Argentina. In central and eastern Europe (CEE), the prospect of accession to the European Union and buoyant demand in other regions led to a substantial rise in industrial production in the Czech Republic, Hungary and Poland. The consensus of forecasts for 2004 (Table III.1) is for a marked pickup in growth in Latin America and continued strong growth in the other main regions.

Industrial production

Annual changes, in per cent[1]



[1] Three-month moving averages; for the country groups, weighted average of the countries listed based on 2000 GDP and PPP exchange rates. [2] Indonesia, Korea, Malaysia, the Philippines, Taiwan (China) and Thailand. [3] France, Germany, Italy, Japan, the United Kingdom and the United States. [4] Argentina, Brazil, Chile, Colombia, Mexico and Peru. [5] The Czech Republic, Hungary and Poland.

Sources: IMF; national data.

Graph III.1

Output growth, inflation and current account balances

	Real GDP[1]			Consumer prices[1, 2]			Current account balance[3]		
	Average 1999–2002	2003	2004	Average 1999–2002	2003	2004	Average 1999–2002	2003	2004
Asia[4]	6.2	7.4	7.3	1.8	2.5	3.6	3.5	4.6	2.0
China	7.7	9.1	8.6	–0.3	1.2	3.4	2.1	3.3	1.0
Hong Kong SAR	4.0	3.1	6.0	–3.1	–2.6	–0.4	5.2	9.4	10.3
India	5.1	8.1	6.8	4.3[5]	5.4[5]	5.0[5]	–0.1	0.8	–0.1
Korea	7.6	3.1	5.6	2.5	3.5	3.3	2.9	2.4	2.4
Other Asia[6]	3.5	4.4	5.4	4.8	2.9	3.2	7.7	9.8	5.8
Latin America[4, 7]	1.0	1.4	4.2	8.2	7.1	6.8	–2.2	0.6	0.6
Argentina	–4.7	8.7	7.7	9.2	3.7	7.1	–1.7	5.8	3.7
Brazil	2.1	–0.2	3.3	8.8	9.3	6.4	–3.8	0.8	0.3
Mexico	2.7	1.3	3.2	7.4	4.0	4.2	–2.8	–1.4	–1.9
CEE[4, 8]	2.9	3.7	4.5	10.3	4.0	5.0	–5.2	–4.4	–3.9
Russia	6.6	7.3	6.8	36.1	13.7	10.5	12.5	9.0	6.1
Turkey	0.8	5.8	5.0	54.8	25.3	12.4	–1.3	–3.0	–3.1
Africa	3.3	4.1	4.2	11.5	10.3	8.6	2.9	–0.7	–1.3
Middle East	4.1	5.4	4.1	8.5	8.6	8.9	2.7	7.3	6.0
Memo: G7 countries	*2.2*	*2.2*	*3.4*	*1.7*	*1.8*	*1.7*	*–1.4*	*–1.6*	*–1.5*

Note: Figures for 2004 are based on May consensus forecasts and IMF, *World Economic Outlook*.

[1] Annual changes, in per cent. [2] For Latin America, end of period values. [3] As a percentage of GDP. [4] Weighted average of the economies listed, based on 2000 GDP and PPP exchange rates. [5] Wholesale prices. [6] Indonesia, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [7] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [8] Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia.

Sources: IMF; OECD; © Consensus Economics; JPMorgan Chase; national data; BIS estimates. Table III.1

Growth was associated with very sharp and broadly based increases in oil and non-oil commodity prices, driven in part by the continued strong expansion of industrial production in China. While the pass-through to final prices has until recently been muted, the threat of deflation in the emerging market economies has receded. Inflation turned positive in China in late 2003, and rising prices for raw material inputs are squeezing margins or creating inflationary pressures in a number of Asian economies. Concerns that inflationary pressures might lead to a breaching of inflation targets prompted monetary tightening in Mexico and a temporary interruption in the lowering of interest rates in Brazil. Higher commodity prices also contributed to current account surpluses in some countries and produced terms-of-trade gains in Africa.

The global economic environment played a large role in shaping developments in emerging economies in 2003. Renewed capital inflows and much narrower credit spreads supported some highly indebted countries. However, they also put upward pressure on exchange rates, especially in Asia, and foreign exchange intervention was very heavy. In some cases this intervention helped fuel more rapid growth in money and credit. The sharp rise in commodity prices also had major implications for several countries, boosting revenues in some, and contributing to higher production costs or inflation in others.

Return of capital inflows

Net private capital flows to the 21 largest emerging market economies were estimated at about $170 billion in 2003 (Table III.2), the highest level recorded since the peak of over $200 billion in 1996. Both portfolio flows (equities and bonds) and other flows (commercial bank and other loans) were significantly higher than in 2002. Foreign direct investment (FDI), however, continued to decline, with its share in total flows falling below 45% from 70% on average during the 1990s. Asian economies attracted the bulk of the inflows last year,

Capital flows reached the highest level since 1996

Net private capital flows to emerging market economies

In billions of US dollars

	Annual average 1990–2000	2001	2002	2003[1]
Emerging market economies[2]				
Total flows	111	57	66	171
Direct investment	76	129	96	76
Portfolio investment[3]	50	–21	–28	29
Other private flows[4]	–15	–51	–3	66
Memo: Current account balance	*–24*	*45*	*107*	*142*
Change in reserves[5]	*–56*	*–89*	*–177*	*–282*
Asia[6]				
Total flows	35	31	41	111
Direct investment	35	42	47	45
Portfolio investment[3]	12	–12	–18	36
Other private flows[4]	–12	1	12	30
Memo: Current account balance	*14*	*66*	*99*	*123*
Change in reserves[5]	*–37*	*–82*	*–151*	*–215*
Latin America[7]				
Total flows	62	36	–3	16
Direct investment	34	59	34	24
Portfolio investment[3]	30	1	–13	–5
Other private flows[4]	–2	–24	–24	–3
Memo: Current account balance	*–39*	*–47*	*–8*	*9*
Change in reserves[5]	*–11*	*3*	*0*	*–27*
CEE[8]				
Total flows	20	–10	28	43
Direct investment	12	16	14	6
Portfolio investment[3]	9	–2	4	–2
Other private flows[4]	–1	–24	10	39
Memo: Current account balance	*–2*	*27*	*16*	*12*
Change in reserves[5]	*–12*	*–7*	*–23*	*–33*

[1] Estimates of capital flows based on national balance of payments data and IIF. [2] Comprises the economies in Asia, Latin America and CEE listed in the footnotes and South Africa. [3] Debt and equity assets and liabilities. [4] Includes net flows intermediated by commercial banks and other private sector agents (not including financial derivatives). [5] A negative value indicates an increase. [6] China, India, Indonesia, Korea, Malaysia, the Philippines, Taiwan (China) and Thailand. [7] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [8] The Czech Republic, Hungary, Poland, Russia and Turkey.

Sources: Central banks; IMF; Institute of International Finance (IIF). Table III.2

with China alone absorbing over 60% of FDI in all emerging markets. Brazil, China, India and Korea were important destinations for portfolio inflows, while countries in Asia and CEE benefited from a resumption in loan flows.

Bond, equity and loan flows remained strong in early 2004 and are expected to increase further this year compared with 2003. Emerging market borrowers issued an estimated $26 billion of bonds and notes in international markets during the first quarter of 2004. Increased capital flows were accompanied until April 2004 by reduced volatility and a marked compression of sovereign bond spreads, particularly for lower-rated bonds.

Renewed capital inflows over the past few years have been accompanied by a widening of current account surpluses in Asia, a reversal of the large deficits in Latin America, and smaller surpluses in CEE. In 2003, for instance, the three key emerging market regions all recorded aggregate current account surpluses. The concurrent increase in private capital inflows and current account surpluses raises the question of the uses of capital inflows in the emerging market economies. Investment rates have been constant on average over the past three years. However, there has been a sharp increase in foreign exchange reserves since 2001, suggesting that a significant part of the inflows has boosted official reserves (discussed below).

What factors have influenced recent capital flows?

The return of capital inflows and the compression of bond spreads raise questions about their sustainability. To the extent that they reflect macroeconomic and structural improvements – that is, better fundamentals attracting the flows to the emerging economies (the "pull" factors) – higher inflows and favourable external financing conditions could last. But to the extent that they reflect low industrial country interest rates, buoyant global liquidity and investors' willingness to undertake riskier investments (the "push" factors), any change in these conditions in the industrial countries could renew concerns about emerging market vulnerabilities.

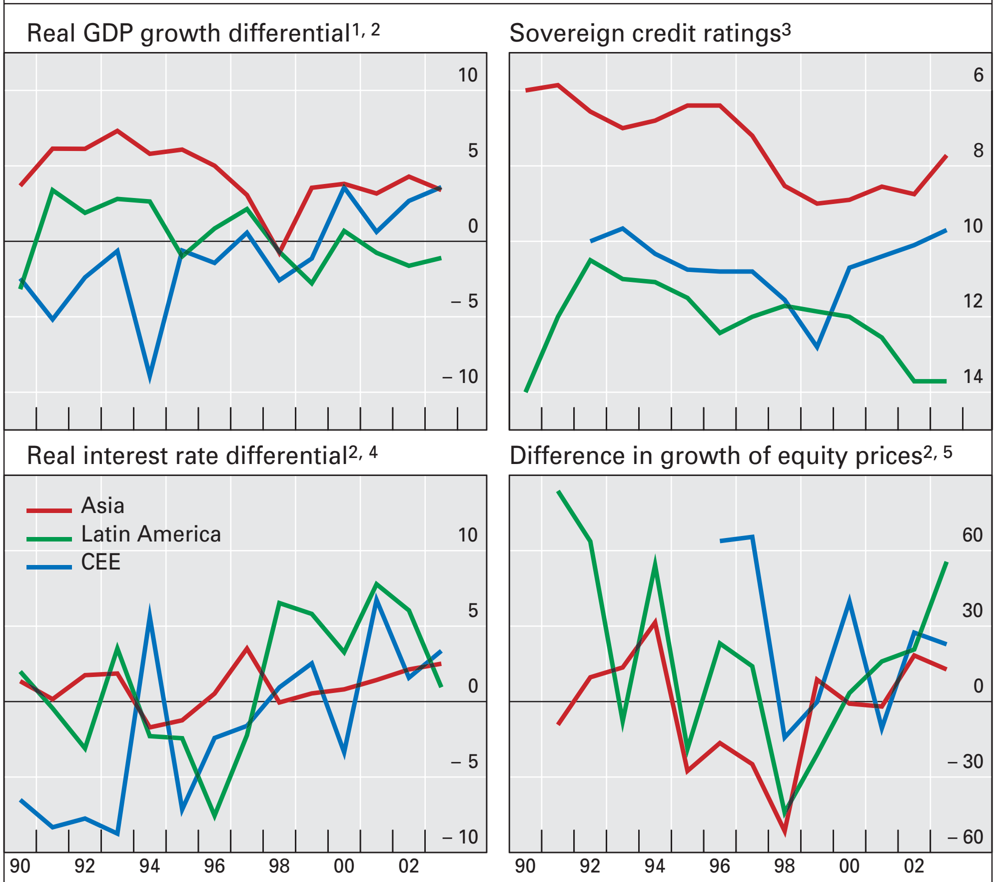
Determinants of recent capital inflows

Empirical evidence is mixed on the relative importance of "pull" and "push" factors in influencing the recent capital flows to the emerging market economies. Other than relative growth performance, which has an effect on all capital inflows, the factors driving FDI seem to be independent of those influencing portfolio and loan flows.

FDI flows were affected by growth and privatisations

Flows of FDI to Latin America have declined since 1999, largely as a result of slower growth (Graph III.2, top left-hand panel) reflecting the crisis in Argentina and the slowdown in Brazil and Mexico. The slower progress of privatisation in several countries has also held back FDI. Consequently, crisis-related events in Latin America may have magnified previously latent risks of investing in emerging market countries, in particular risks to FDI stemming from a possible abrogation of private contracts. In contrast, FDI has continued to flow to the Asian emerging economies, especially China, in a context of better growth performance and structural improvements. Similar factors also benefited the economies in CEE. However, after averaging 3–6% of GDP per year since 1995, cumulative FDI in CEE had reached such high levels that it became difficult to absorb further increases. Moreover, privatisations of

Determinants of capital flows to emerging market economies



Note: For an explanation of the regions, see Table III.2. For the top left-hand panel, regional averages using US dollar GDP weights. For the other panels, simple average.

[1] Regional growth rates minus growth in the G7 economies. [2] Percentage points. [3] On a scale from 1 (highest) to 24 (lowest). [4] Money market rates deflated by consumer prices minus US real rate. [5] Regional growth rates of indices in US dollar terms minus US equity growth.

Sources: IMF; JPMorgan Chase; national data. Graph III.2

state-owned assets, in particular sales of commercial banks to foreign-owned institutions, had largely been completed by 2002. Under the influence of these factors, FDI inflows to CEE fell sharply last year.

FDI benefited large economies or those in trade integration schemes

Detailed studies, such as recent reports by the Committee on the Global Financial System and the IMF Capital Markets Consultative Group, have established that, over the past decade, FDI flows have shifted towards countries with large domestic markets (including in the financial and services sectors) and those that participate in free trade agreements or regional trade integration schemes. To date, this shift has benefited Brazil, China, Mexico and EU accession countries in CEE, and it might well benefit India in the future (see below).

Portfolio flows responded to push and pull factors

Portfolio flows have been much less stable and subject to greater influence from global factors than FDI flows. The decline in bond and equity flows during 2001 and 2002 thus reflected not only conditions in the real economy (lower growth in industrial countries, crises in Argentina and Turkey and weaker growth prospects), but also financial market factors such as the fallout from the bursting of the technology and telecoms bubbles and increased risk aversion on the part of investors. Similarly, the surge in portfolio inflows in 2003 seems to have resulted from a combination of such factors. Among the country-specific factors were improved credit ratings in many emerging economies (Graph III.2, top right-hand panel) as well as rising commodity prices and the prospect that emerging equity markets would benefit from strengthening global growth. This expectation helped underpin a sharp rise in emerging market equity prices (Graph III.2, bottom right-hand panel).

Ample liquidity influenced portfolio flows

Yet favourable liquidity conditions in international capital markets have also played an important role. Very low policy interest rates in the main industrial countries encouraged investors to search for yield in the emerging markets, where bond returns and short-term real interest rates (Graph III.2, bottom left-hand panel) were higher, and equity prices were rising faster than in industrial countries. In addition, factors such as a low dispersion of spreads among differently rated emerging market bonds point to a greater "risk appetite" among industrial country investors (see Chapter VI).

Improved credit ratings and higher interest rates attracted loans

Other private capital flows (mostly loans by commercial banks and trade credit provided by other private sector lenders) turned positive in net terms last year for the first time since the mid-1990s. As in the case of portfolio flows, economies with improved credit ratings and relatively faster growth attracted larger loan inflows. At the same time, higher domestic interest rates relative to industrial countries fuelled increased loan flows to Asia and CEE.

How sustainable are capital inflows?

The risks that capital flows might reverse ...

The shift in the composition of capital flows towards more volatile portfolio investments and loans raises the question of vulnerabilities to possible reversals. For example, sovereign bond spreads widened significantly starting in April 2004, in part because of expectations that US interest rates would rise. In some countries, the interest differential between domestic bonds and comparable US Treasury securities also widened. Increased financial market volatility and the sharp widening of sovereign bond spreads between mid-April and mid-May 2004 demonstrated that, for countries with an uncertain fiscal outlook or those with high public debt levels, positive market sentiment can be quickly reversed. In addition, emerging market economies with floating rate debt or debt denominated in or linked to foreign currencies could find their debt burdens increased if interest rates rose or their currencies depreciated.

... are moderated by improved performance ...

At the same time, several factors moderate such risks; some of these factors are discussed in more detail below. The global recovery has strengthened and broadened, with global commodity prices rising strongly. The favourable external financing environment has enabled many countries to meet a significant part of their financing needs for 2004. Some highly indebted countries, including Brazil, Mexico and Turkey, have taken advantage of the favourable market conditions to improve their debt profiles by lowering borrowing costs, extending maturities and reducing the share of short-term external debt and debt indexed to short-term interest rates and exchange rates. Low inflation, increased reserve holdings and the earlier shift to floating exchange rates should also help reduce vulnerabilities. Brazil, Turkey and some other countries have, in addition, maintained tight fiscal policies and continued to implement structural and other reforms.

... but some countries remain vulnerable

Nevertheless, some countries have loosened their fiscal stance and slackened the pace of adjustment, or have seen a significant expansion of private sector credit. In these countries, underlying vulnerabilities masked by the ready access to financing are likely to become more apparent if the external financing environment turns less favourable.

Exchange rates and reserve accumulation

Policy responses

Exchange rates tended to appreciate ...

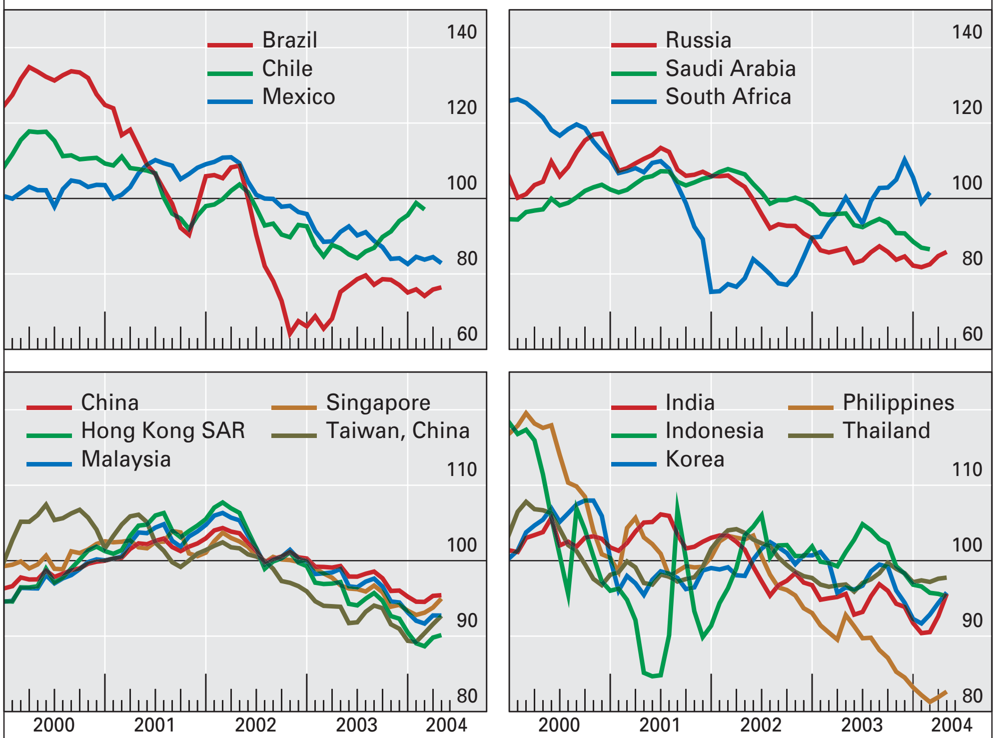
Countries responded in a number of ways to higher commodity prices and capital inflows. Some allowed their currencies to appreciate to an extent that was consistent with inflation targets. For example, in 2003, the currencies of Brazil and Chile recovered sharply from large depreciations. The Russian rouble and South African rand also appreciated throughout 2003, supported by rising exports and capital inflows. As a result, the nominal effective exchange rates of Brazil, Chile and South Africa appreciated last year (Graph III.3, upper panels).

... and countries allowed more outflows

Other countries relaxed restrictions on outflows or restricted inflows to dampen exchange rate appreciation. For instance, last year China liberalised

Nominal effective exchange rates

2000–03 = 100



Note: An increase indicates an appreciation.

Sources: IMF; national data; BIS calculations. Graph III.3

exchange restrictions on individual overseas travel, encouraged certain types of domestic firms to invest abroad, and initiated a scheme to induce domestic institutional investors to increase their outward investment. In order to curb inflows, the authorities temporarily suspended approvals of new investment under the qualified foreign institutional investors scheme and placed daily limits on the conversion of dollars into domestic currency by individuals. Similarly, India liberalised investment by domestic companies and financial institutions in overseas assets, allowed the prepayment of foreign currency debt by firms, and permitted residents to hold foreign currency accounts. Thailand limited non-residents' short-term baht lending in September 2003 and subsequently set limits on the amount and maturity of their baht deposits. Korea imposed restrictions (later partly relaxed) on non-deliverable forward markets to dampen currency speculation.

Reserves in Asia rose significantly

Still another response was to intervene in foreign currency markets, as reflected in a significant build-up of reserves in all major regions last year (Table III.3). Total reserves in emerging Asia rose by over $350 billion between the beginning of 2003 and early 2004. China, India, Korea and Taiwan, China (hereafter, Taiwan) together accounted for over 85% of the increase. Motives for accumulating reserves among Asian economies have varied (see Chapter V), but central banks' attempts to resist appreciation against the US dollar in the face of large and mostly speculative inflows were important. In China, for instance, reserves have increased by an average of over $10 billion per month since the beginning of last year. Countries with more flexible exchange rate regimes (India, Korea and Thailand) also intervened to slow appreciation. Given

Foreign exchange reserves[1]
In billions of US dollars

	1996	2000	2001	2002	2003	March 2004
Asia[2]	477.4	694.5	770.5	944.2	1,208.1	1,302.9
China	105.0	165.6	212.2	286.4	403.3	439.8
Hong Kong SAR	63.8	107.6	111.2	111.9	118.6	123.8
India	19.7	37.3	45.3	67.0	97.6	107.2
Korea	33.2	95.9	102.5	120.8	154.5	162.7
Taiwan, China	88.0	106.7	122.2	161.7	206.6	226.5
Latin America[3]	141.3	136.1	135.9	140.1	170.7	178.8
Argentina	17.7	24.4	14.5	10.4	13.1	13.5
Brazil	58.3	32.5	35.7	37.4	49.1	51.6
Mexico	19.2	35.1	44.4	49.9	57.7	60.3
Central Europe[4]	40.1	51.5	51.3	63.2	72.9	75.4
Russia	11.3	24.3	32.5	44.1	73.2	79.6
South Africa	0.9	5.8	5.8	5.6	6.2	7.9

[1] End of period; for the regions, sum of the economies listed in the footnotes. [2] China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [3] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [4] The Czech Republic, Hungary and Poland.

Sources: IMF; national data. Table III.3

the dollar's depreciation against other major currencies since the beginning of 2002, the trade-weighted exchange rates of most Asian economies depreciated significantly over the past two years (Graph III.3, lower panels).

Reserve accumulation was also strong in Latin America

Reserve accumulation was also strong in Latin America, particularly in those countries that benefited from higher commodity prices and capital inflows. In Mexico, the authorities implemented a special mechanism (an auction of 50% of the reserve increases during a certain measurement period) to counteract the build-up of international reserves, largely arising from the growing revenues of the state oil company that had to be surrendered to the bank. Brazil's reserves exceeded $50 billion by March 2004, although nearly half of this amount corresponded to debt owed to the IMF. In Argentina, the authorities attempted to rebuild some of the reserves lost following the 2001 crisis. In CEE, foreign reserves grew by relatively small amounts. Excepting a brief spell in the third quarter of last year, when the rouble came under depreciation pressure, the Russian central bank continued to purchase large amounts of surplus oil revenues from the market. In South Africa, the closure of the forward book in early 2004 has been followed by rising reserves held by the central bank.

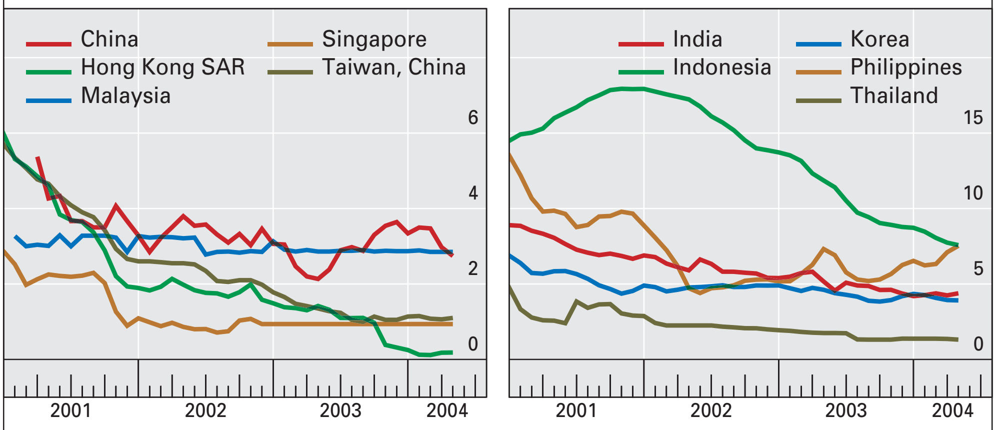
Challenges looking ahead

Many countries were able to avoid unwarranted monetary easing

Reserve accumulation poses several domestic policy challenges for central banks (see Chapter V for the global implications). One such challenge is maintaining their desired monetary policy stance. To the extent that central bank purchases of reserves are not fully sterilised, they can create an unwarranted easing of monetary conditions. Nevertheless, such risks appear to have been contained so far. With inflation in most of Asia remaining low, many countries moved to cut interest rates or to hold them at low levels (Graph III.4). Hence central banks' desire to ease monetary conditions reduced the potential need for sterilisation of reserve accumulation. However, in some instances central banks intensified their sterilisation efforts by selling either

Short-term interest rates in Asia

Monthly averages, in per cent[1]



[1] For China, three-month moving average.

Sources: Bloomberg; Datastream; national data.

Graph III.4

government bonds or their own bills. As a result, except in China, and also in Hong Kong SAR (hereafter, Hong Kong) where deflation persists, both base and broad money growth in excess of output appeared to remain well contained (Table III.4).

However, potential challenges remain

However, a continued process of large-scale intervention could still raise significant domestic policy challenges. First, reserve accumulation might at some point compromise the ability of central banks to contain future monetary growth. China's experience raises questions in this regard. Despite effective sterilisation operations by the central bank, base money has risen rapidly over the past two years, increasing banks' lending capacity. At the same time, strong demand for credit, combined with banks' greater ability and willingness to lend, has contributed to strong growth in credit and broad money aggregates. To help offset such pressures, the central bank has raised reserve requirements by 1½ percentage points since September 2003 and has given repeated "window guidance" to banks to curb excessive lending to certain sectors. The central bank also tightened monetary policy by increasing interest rates on its rediscounting and uncollateralised lending facilities, and raised reserve requirements on weak banks by another ½ percentage point.

Technical difficulties in sterilising reserves

Elsewhere, large reserve accumulation has already led to increasing technical difficulties, such as finding eligible instruments with which to mop up additional liquidity. The Reserve Bank of India – which in the past had absorbed a significant proportion of government bond issuance – faced a shortage of instruments for sterilisation operations towards the end of last year. To overcome this problem, the government began to issue bonds under a special market stabilisation scheme, up to a certain limit, for exclusive use by the central bank for sterilised intervention.

Monetary aggregates: growth in excess of nominal GDP[1]

	Base money[2]			Broad money		
	2001	2002	2003	2001	2002	2003
Asia[3]	1.0	2.7	4.5	4.1	7.0	3.8
China	1.1	4.5	5.6	5.8	10.9	7.5
Hong Kong SAR	8.2	8.0	21.3	–1.3	–0.1	10.6
India	0.9	1.0	2.1	4.7	7.9	1.0
Korea	10.0	7.0	3.1	2.3	5.4	–1.0
Taiwan, China	–6.5	–5.1	–4.0	6.1	0.1	4.8
Other Asia[4]	–2.2	–3.4	5.3	–0.9	–2.6	–2.5
Latin America[3, 5, 6]	11.1	54.0	1.8	3.3	5.0	0.2
CEE[3, 7]	11.2	2.0	0.7	5.5	–1.6	0.6

[1] Rates of growth relative to growth in nominal GDP; end of period values. [2] Notes plus bank deposits at the central bank. [3] Weighted average of the countries listed based on 2000 GDP and PPP exchange rates. [4] Indonesia, Malaysia, the Philippines, Singapore and Thailand. [5] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [6] The very large rise in base money in 2002 is mainly due to Brazil (119%). [7] Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia.

Sources: IMF; national data. Table III.4

A second major policy challenge is that perceptions of an undervalued currency associated with foreign exchange market intervention and reserve accumulation can have significant expansionary effects on the economy even if sterilisation is effective. The rapid growth in capital inflows and investment in China last year provides some evidence of such expansionary forces. Moreover, several other Asian economies have recently seen lower interest rate differentials vis-à-vis US dollar paper, reflecting growing market expectations of currency appreciation. In India, for instance, the long-term interest rate differential fell from over 5 percentage points at the beginning of 2001 to less than 2 points by February 2004. Differentials were close to zero or negative in Hong Kong, Malaysia and Thailand in the first quarter of 2004. Narrower spreads, related to large short-term capital inflows, have contributed to booming stock markets and rapid credit expansion in the consumer and housing sectors.

An undervalued exchange rate can be expansionary …

Third, reserve accumulation exposes the financial system to several risks. For instance, to the extent that resisting appreciation proves unsustainable, large investments in the tradable sector might seem, with hindsight, to be a misallocation of resources. As demonstrated by the experience of previous investment booms in East Asia, such imbalances create the risk of excess capacity, with adverse implications for growth in the medium term. Furthermore, lower long-term spreads and the expansionary forces associated with them raise risks of a boom and bust cycle for the economy. Such a risk is particularly high in economies exposed to speculative capital inflows, which could reverse, triggering a sharp fall in asset prices and the exchange rate. Relatively illiquid financial markets, and the key role of foreign investors in stock markets in a number of cases, might make some economies particularly vulnerable to such risks.

… creating risks of overinvestment

Yet another risk arises from central banks' exposure to potential future losses from reserve accumulation. At present, the conventional carrying cost of reserves appears to be small because of very low domestic interest rates. Some estimates put such costs at less than ½% and 1% of GDP, respectively, in India and the Philippines in 2002 and at negative levels in Hong Kong and Korea. Were domestic interest rates to rise, however, costs of sterilisation would increase significantly. Moreover, large foreign reserves expose the official sector to sizeable currency risks.

Potential risks to central banks

Credit-led demand and household spending

Export-led growth strategies in many countries, particularly those with rising current account surpluses, are increasingly being seen as providing important benefits initially, but also as having inherent limitations. Over time, the encouragement of domestic demand might prove a natural complement. This shift in focus has advanced furthest in Asia and CEE. In contrast, higher saving was needed in Latin America, where current account deficits have recently turned to surpluses.

Domestic demand is a priority

With investment spending still sluggish in many emerging economies, after having fallen significantly following the Asian and Russian crises in 1997–98, Attention has focused on higher consumption …

attention has focused on the prospects for boosting consumption spending. Consumption/GDP ratios have risen significantly in Asia: between 1997 and 2003 they increased by 3 percentage points in China (to 61%); 8 percentage points in Korea (to 78%) and Singapore (to 55%); and 12 percentage points in Indonesia (to 81%). The average consumption ratio in CEE has also risen sharply. In Latin America consumption ratios have declined since 2001, but the decline slowed in 2003 as consumption revived in some of the larger economies, notably Argentina and Mexico.

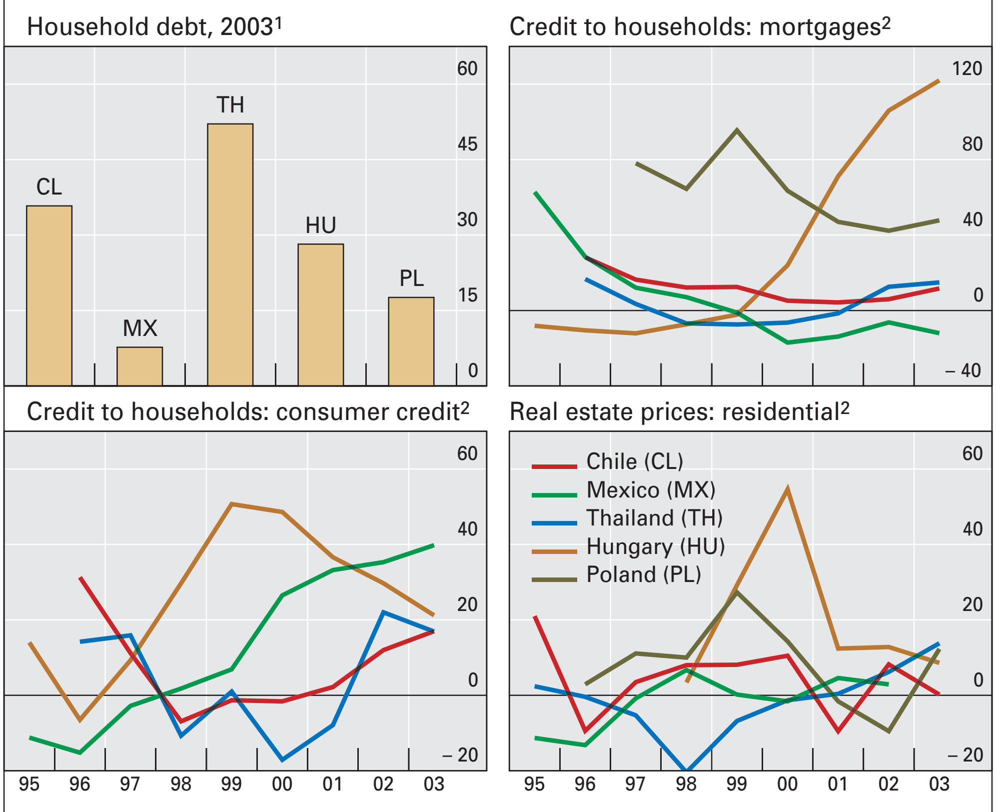
… supported by bank credit

Much of the rise in consumption has been driven by lower interest rates, and has been supported by an expansion of bank credit to the household sector and more liquid global conditions in 2003. Often with government encouragement, and in some cases spurred by competition and financial innovations associated with foreign bank entry, credit to households (mortgage lending and/or consumer credit, including credit card loans) has expanded in China, Korea and Thailand, in CEE and Russia, and to some extent in Mexico (Graph III.5). The growing importance of consumer credit is also reflected in FDI patterns, as foreign firms are entering the credit card or retail sectors in a number of emerging market economies (eg Brazil, Mexico and CEE).

Credit in CEE grew rapidly

The expansion in credit in CEE economies and Russia is particularly striking. In CEE, the growth in credit to households has been very rapid. For example, in Hungary, mortgage credit growth averaged 81% between 2000

Household credit and property prices



[1] As a percentage of disposable income. [2] Annual changes, in per cent.

Source: National data. Graph III.5

and 2003, while consumer credit growth averaged 32% between 1998 and 2003. In Russia, mortgage credit grew by 118% in 2003, and consumer credit by 48%, starting from a low base.

Increased lending to households in emerging economies facilitates home ownership and provides households with an alternative source of finance to the informal sector. In countries where the infrastructure for delivering household credit is not well developed, such credit is still in effect rationed, with only a small (high-income) segment of the population having access to credit, and interest rates are often prohibitively high.

Household credit is likely to grow further

There are reasons to believe that household credit will continue to rise in the future. First, lending to households has provided an important source of diversification for financial sectors that have been too dependent on corporate lending. Second, in those countries where household credit was largely absent until recently, often due to lending restrictions, the pent-up demand for credit remains high. Third, such credit growth has been accompanied by a general increase in household income and wealth. The latter has been boosted in particular by rising stock prices – which has helped households sustain higher debt levels.

Rapid credit growth may create risks ...

Nevertheless, the rapid growth in credit creates risks which may not be well managed. Households could become overextended and might then be unable to service their debt. Such difficulties would of course be accentuated should a housing market bubble develop and then collapse.

Overextended borrowers?

... including high household debt levels ...

The vulnerability of households to higher debt levels differs widely across emerging market economies. In Mexico and CEE there appears to be less concern about such vulnerability for at least three reasons. First, ratios of private sector credit to nominal GDP are still low in these economies. To illustrate, bank credit to the private sector in 2003 was around 16% of GDP in Mexico and 33–42% in the Czech Republic, Hungary and Poland. This compares to 64% in Chile, 90% in Thailand and 112% in Korea. The corresponding ratios of household debt to income are also lower (Graph III.5). Second, banks in many of these countries are stronger now than they were some years ago when crises reduced the size of financial sectors. Third, a significant amount of credit is being extended by foreign banks with more effective risk management techniques. For example, in 2002, the share of foreign banks (50% or more foreign ownership) in total assets of the banking sector was over 80% in Mexico and ranged from 67 to 90% in Poland, the Czech Republic and Hungary. This compares to 6% in Thailand and 32% in Korea.

... which have raised concerns in Korea and Thailand

In contrast, the sharp growth in credit card debt in Thailand and Korea has been a major concern. In Thailand, the number of bank-issued credit cards increased by 23% in 2003 from a year earlier, to 4.2 million, while outstanding card debt was up 33% over the same period (to nearly $2 billion, or 1.3% of 2003 GDP). Several million more cards are in circulation from non-bank issuers. Non-performing credit card debt is reportedly still low (3–4% of total debt). Nevertheless, in a pre-emptive move effective April 2004, the Bank of Thailand adopted a series of measures to restrict credit card issuance.

Korea is seeing the aftermath of a credit card boom

While Thailand is still in the midst of a credit card boom, Korea is experiencing its aftermath. After several years of rapidly rising credit card borrowing, Korean consumers began to face difficulties servicing their credit card debt, particularly cash advances that had to be paid back in full at the end of each month. Many consumers serviced their debt on one credit card by drawing on other credit cards, worsening their financial position and further exposing their lenders. The average credit card delinquency ratio in Korea (payments overdue one month or more as a percentage of total managed assets) rose to 14% at the end of 2003, from around 6% a year earlier. In 2003, the eight local credit card companies reported net losses of nearly 1.7% of 2003 GDP after posting profits a year earlier. Moreover, their capital adequacy ratios turned negative, falling from 13% to –5.5% over the same period in spite of significant additions to capital.

Overheated real estate markets?

Overheating real estate markets in Asia

Overheating in property markets in emerging economies is not generalised, but confined to certain countries and areas. For example, property prices have risen at double digit rates in Shanghai for three years in a row (18% over a year earlier in 2003), but price gains in some other urban areas of China have been modest. In Korea, property prices in Seoul increased sharply in 2002 but then levelled off somewhat following the adoption of measures to curb speculation in property markets. They subsequently picked up again from February 2003, but appear to have stabilised following the government's announcement in October 2003 of additional measures to curb speculation. Real estate prices in Thailand have risen since 2001, and available indicators suggest a significant pickup in recent real estate activity. In the last quarter of 2003, an index of the value of land transactions was up 142% (year on year) while an indicator of construction activity was nearly 55% higher (year on year). Nevertheless, housing rental values have fallen as easier financing conditions have increased the supply of housing, and vacancy rates in rental markets have risen as renters have been induced to purchase their own homes. A similar decline in rental values occurred in Mexico. Property prices in a number of CEE economies have been highly volatile. For example, in Hungary the rise in property prices peaked at 55% in 2000 but moderated to 9% in 2003.

Policy responses and outstanding issues

Targeted regulatory restrictions limit vulnerabilities

The vulnerabilities that might arise from rapid growth in credit to households could be addressed in two ways. One is to impose targeted regulatory restrictions in order to dampen growth in certain markets or limit price volatility. For example, to curb speculation in property markets in Korea, a government panel in October 2003 proposed sharp increases in capital gains taxes on property sales by owners of three or more residential properties. To reduce the vulnerability of the financial sector, ceilings on loan-to-value ratios on mortgage lending (targeting luxury properties) have been imposed in both Korea and Thailand. In the credit card sector, remedies attempted have included restricting or penalising aggressive marketing practices, prohibiting new credit card issuance, imposing credit ceilings (based on income), and requiring a certain rate of repayment of credit card debt. Institutions engaged in the credit card business have also been required to increase provisioning against potential losses on a number of occasions.

The use of targeted regulatory restrictions may be warranted because of market imperfections; for example, in a number of emerging economies, property markets are thought to be vulnerable to speculators. Similar restrictions still exist in a number of advanced economies and were widespread a few decades ago.

Market discipline can strengthen the financial system ...

Another approach is to rely on market discipline, which should encourage the survival of well managed firms. If such discipline is effective, individuals who are less creditworthy will find it more difficult to gain access to credit. In addition, a creditor taking excessive risks will face higher costs of financing (or ratings downgrades), or may incur such large losses that it goes out of business. Recent developments, however, suggest that four factors can undermine market discipline.

... but is undermined by various factors

First, lenders in emerging markets commonly lack adequate information about the creditworthiness of borrowers. For example, while there are mechanisms for collecting data on delinquencies and other pertinent information about borrowers, the data are sometimes incomplete or are not shared among financial institutions for competitive reasons. A number of emerging market countries are therefore establishing credit bureaus or enhancing their effectiveness in order to remedy these problems. Second, the consumer credit business, including credit cards, is very lucrative. Thus, lenders have a strong incentive to build market share aggressively. The growth in the credit card business in emerging economies has also been fuelled by financial innovations that have facilitated access to low-cost financing, such as the securitisation of domestic credit card receivables in international markets. Third, in some countries, lenders appear to discount excessively the risk that borrowers might become overextended. For example, lenders have offered credit cards to individuals without first checking their credit histories, including to borrowers with no sources of income to service their debt. Finally, governments have at times been reluctant to allow financial institutions that have made poor lending decisions to fail, due to concerns about the impact either on the financial system or on borrowers. This raises the issue of moral hazard.

Economic booms in China and India

Sources of the recent expansion in China

China witnessed an investment boom last year

Robust growth in China was a major element in the recovery of emerging economies in 2003. Despite the dampening influence of SARS in the first half of the year, industrial output grew by 16% in 2003, compared with 13% in the previous year. The rise was led by fixed investment spending, particularly in steel, aluminium, cement and real estate construction. While investment in new projects rose by a modest 10%, that on projects already planned in

China's trade

Annual changes, in per cent

	Exports			Imports		
	2001	2002	2003	2001	2002	2003
Total	6.7	22.4	34.7	8.2	21.2	39.9
Of which:						
Primary products	4.1	7.5	22.3	–2.0	7.6	47.8
Crude materials	–6.0	5.0	14.3	10.6	2.7	50.1
Mineral fuels	8.6	–1.7	32.9	–15.1	10.2	51.6
Chemical and related products	11.2	14.0	35.8	6.4	21.5	25.5
Manufactures	7.3	23.7	35.8	10.9	24.4	38.3
Manufactured goods	3.1	20.7	30.3	2.8	15.6	31.8
Machinery and transport	15.1	33.6	47.9	16.3	28.2	40.8

Sources: CEIC; national data. Table III.5

previous years expanded by over 50%. Investment growth appears to be gaining further momentum this year. Thus, during the first quarter of 2004, nominal capital spending by private and state-owned enterprises grew by 40% (year on year) or more.

Consumption was strong

Growth was also supported by consumption, as increased bank lending and stronger household income fuelled spending on automobiles and other high-value consumer products. Fiscal policy remained favourable to growth as well. While buoyant revenues towards the end of the year reduced the fiscal deficit to 2.5% of GDP in 2003, public spending on SARS-related relief measures had underpinned demand during the first half. The reliance on fiscal stimulus is expected to decline this year, with the government having announced a reduction in the issuance of special bonds to boost infrastructure spending.

Both exports and imports grew

Exports grew strongly (up by almost 35% in 2003), stimulated by surging US demand. Front-loading of shipments by exporters ahead of the reduction of VAT rebates from January 2004 provided a temporary boost. Since the boom in investment and exports was to a large extent dependent upon the processing of inputs, it was accompanied by an even stronger rise in imports (40%), particularly of crude materials, minerals and machine tools and equipment (Table III.5). China's share in global consumption of such products has increased sharply. For instance, last year China accounted for 42% of global consumption of coal, 34% of iron ore, 20% of copper and 7% of oil. As a result, the trade surplus declined to \$25 billion in 2003 and turned into a deficit in the first quarter of 2004. Although the direct contribution of net trade to growth was almost zero in 2003, buoyant export earnings were transmitted to domestic demand via higher enterprise profits and household disposable income.

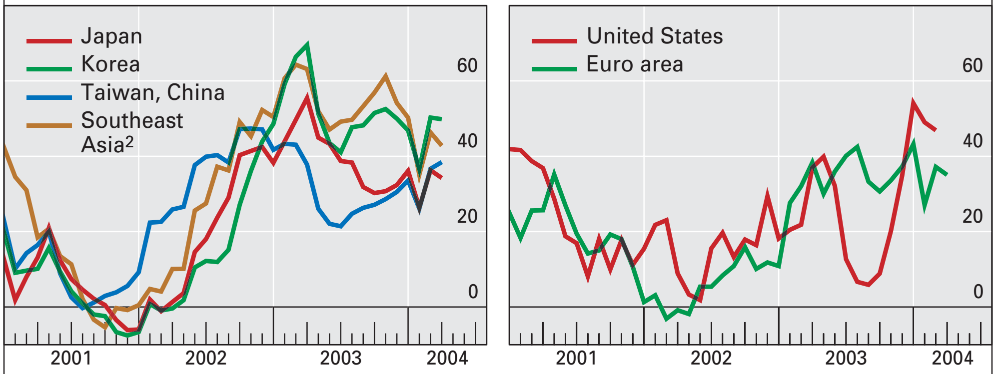
Regional and global implications

China is a global leader in manufacturing ...

China's rapid growth reflects its emergence in recent years as a leading global supplier of manufactures. Its share in global manufacturing rose to 7% last year, with an increasing part of the value added accounted for by exports. Low labour costs and productivity improvements have strengthened China's

China's import demand

Annual changes, in per cent[1]



[1] Three-month moving averages. [2] Indonesia, Malaysia, the Philippines and Thailand.

Sources: CEIC; national data. Graph III.6

competitiveness. As a result, its share in global merchandise exports doubled in the past three years to nearly 8% in 2003. At the same time, the increased vertical integration of the production process has raised imports from neighbouring countries and boosted intraregional trade in Asia.

... affecting trading partners ...

The impact of China's recent boom has varied widely across countries and regions, with countries closely integrated with China's export processing industries gaining significantly. China's imports from Japan, Korea and Taiwan, for instance, increased by 30–50% last year (Graph III.6, left-hand panel). Exports to China contributed to the upturn in investment spending in Japan, while trade and tourism flows from China played a major role in Hong Kong's steady recovery from deflation. China's imports from other emerging East Asian economies also grew strongly last year, sharply increasing its contribution to their export growth. Nevertheless, from a long-term point of view, China has also exerted a competitive influence on others by raising its share in industrial country markets, particularly in low value added segments where other East Asian economies had earlier enjoyed competitive advantages.

... as far as Latin America

China's strong demand has also benefited other regions. For instance, boosted by demand for primary commodities, China's nominal imports from Brazil rose by 80% in 2003. China's imports from the United States and the euro area also increased significantly last year (Graph III.6, right-hand panel), but the impact on their economic activity was small given that China accounts for only 3–4% of their export markets. Reflecting rising import demand, China's trade deficit with the rest of Asia widened sharply by about $30 billion between 2000 and 2003. At the same time, China's exports to the United States grew by 22% last year. This widened China's bilateral trade surplus to over $100 billion and led to increased protectionist pressures in the United States (see Chapters II and V).

Sustainability of the current expansion

The very rapid increase in fixed investment spending last year could be a particular source of vulnerability. At 0.45, China's investment/GDP ratio is one

Risks of overinvestment remain high

of the highest in the world. Not only does this create the risk of the economy overheating in the short run, but, if sustained, it could also lead to overinvestment and poor rates of return in the medium term. A large part of the growth in investment has also been concentrated in state-owned enterprises, where returns are lower than in the private sector. This might imply a rise in excess capacity and a strengthening of long-run deflationary forces in the economy. Moreover, to the extent that current investment rates are unsustainable, domestic demand might slow in the future, increasing China's reliance on exports to maintain its high growth.

More loans also pose risks ...

Financial fragility is also a concern, since investment has been financed by strong growth in bank credit (Graph III.7, left-hand panel). In addition, lending to the property sector has been rising rapidly (45% in 2003), with a large part of the increase accounted for by loans to real estate developers. Such lending has been associated with steep rises in property prices in the major metropolitan areas such as Shanghai. The authorities responded last year by issuing guidelines to banks to limit loans to the property sector and to individuals for building a second home or luxury houses. A large liquidity overhang has also encouraged banks to step up consumer lending, for which credit appraisal standards tend to be poor. Such developments could imply higher default rates in the future and increase the level of non-performing loans in the banking system. These were estimated at 15% of total loans last year.

... as do overheating and inflation

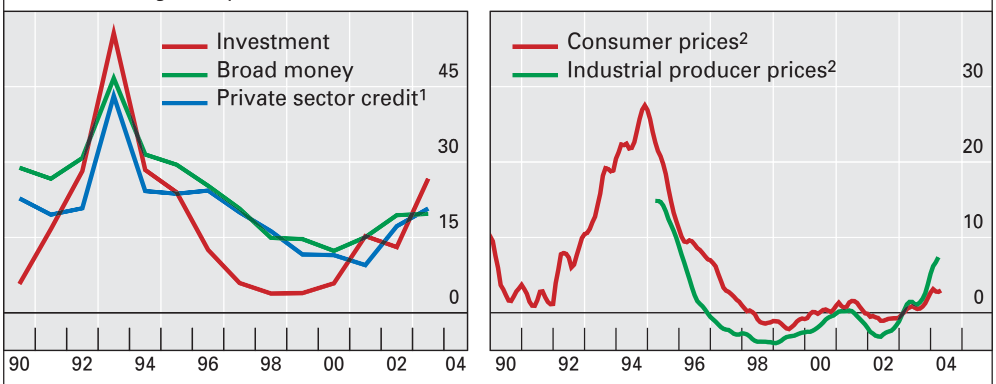
High inflation is another potential risk. The current expansion has relied on the intensive use of resources, resulting in widespread shortages of metals, power and basic inputs in the economy. For instance, last year China's consumption of steel accounted for 90% of the increase in global steel demand and outstripped domestic supply. Its consumption of nickel and copper also exceeded domestic supply by wide margins.

Rising inflation pressures ...

These developments have marked an end to deflation and led to a pickup in consumer price inflation (Graph III.7, right-hand panel). Inflation in industrial producer prices has been higher, with prices of steel and other metals rising by between 25 and 80% by March 2004. In the past, producer price inflation had

Investment, money, credit and prices in China

Annual changes, in per cent



[1] Domestic credit to the private sector. [2] Three-month moving average.

Sources: IMF; CEIC; national data. Graph III.7

generally stayed below consumer price inflation, reflecting strong productivity gains and firms' inability to pass on cost increases due to weak demand. This seems to have changed last year as inflation expectations strengthened, prompting firms to pass on a larger part of their cost increases. It is also worth noting that, historically, China's price cycles have been closely associated with those of investment and money growth (Graph III.7, left-hand panel). A sharp acceleration in investment and credit in the early 1990s led to high rates of inflation, while subsequent monetary tightening resulted in a prolonged period of deflation. Economic activity also slowed to more sustainable rates.

... triggered measures to cool the economy

Recognising these risks, the authorities recently introduced reforms to strengthen the banking system as well as a series of steps to cool the economy. In December 2003, the government recapitalised two of the four large state-owned commercial banks, using $45 billion in foreign exchange reserves. In an effort to improve governance, these two banks are to be listed on the stock exchange and securities will be issued to private investors. Similar measures are planned for the remaining state-owned commercial banks.

The central bank also began tightening monetary policy in September 2003, raising reserve requirements several times and stepping up administrative controls to restrict the financing of investment in some sectors. Signalling its intention to achieve slower and more balanced growth, the government lowered its GDP growth forecast for 2004 to 7%, and at the same time announced a gradual unwinding of public construction projects combined with measures to promote rural incomes.

The effects are yet to be felt

Nevertheless, data for the first quarter of 2004 suggest that growth is accelerating. Bank credit growth (above 20% in March) and inflation have also remained high. Investment demand continues to rise, partly reflecting already planned projects, as well as a sharp reduction in real interest rates. Further tightening might, therefore, be required to prevent the economy from overheating.

Growth accelerates in India

India was the second fastest growing Asian economy last year

The Indian economy grew by over 8% last year, the second fastest rate in Asia after China. Growth has been led by a strong rebound in agriculture, owing to a good monsoon, and a steady recovery of industry, whose performance had lagged. The services sector, accounting for over 55% of GDP, grew by 8%. On the demand side, higher rural incomes, low interest rates and rising stock prices have boosted consumer and investment spending. Growth forecasts for the next two years remain strong.

Conditions favour continued high growth

The recent optimism reflects a number of factors. Increased foreign competition has led many firms to restructure, raising profitability. Net profits of large companies grew at an annual rate of 30% in the last two quarters of 2003. The authorities have taken steps to accelerate privatisation, cut import tariffs and further open the economy to foreign investors. The current account balance has been in surplus since 2001 and net FDI and portfolio investment inflows have more than doubled since 2002, although such inflows remain well below those of China. Moreover, increased income and access to bank credit in the past two years have strengthened household purchasing power, driving consumption of durables and housing investment.

Growing software industry and outsourcing boost outlook

Another important factor boosting India's future prospects has been its growing software and other service-related industries. Benefiting from its cost advantages and a large and highly skilled workforce, as well as cost cutting in industrial countries, India has attracted increasing amounts of global software and offshore outsourcing business. As a result, the IT and software-related sectors have grown rapidly during the past five years, raising their share of GDP to 4% and contributing significantly to exports (Graph III.8, left-hand panel). Revenues from the outsourcing business were projected to have increased by over 50% to reach $4 billion in 2003. The potential for future growth is large since global outsourcing is forecast to rise substantially in the next decade.

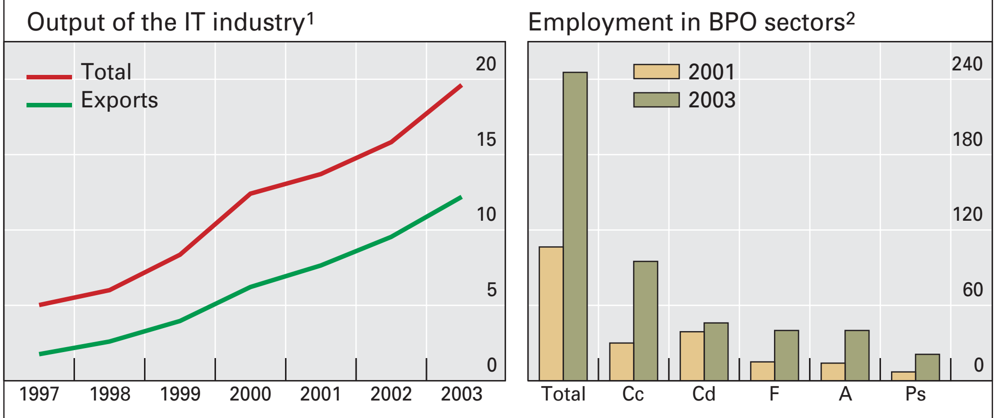
Outsourcing to India is still a small part of global employment

Outsourcing to India has raised concerns that it adversely affects job prospects, particularly in the United States, which is the most important market for India's outsourcing business. Such concerns have prompted some state authorities in the United States to place restrictions on the transfer of jobs to low-cost centres (similar legislation is pending at the federal level). However, while job growth in a number of business process outsourcing (BPO) sectors in India has more than doubled during the past two years (Graph III.8, right-hand panel), it remains small compared to the number of job losses in the United States. According to some estimates, even if job transfers from the United States were to grow at a high rate over the next few years, their equivalent share in total US employment would probably remain below 1% by 2010. Moreover, outsourcing can yield considerable gains in the industrial countries by reducing costs. In the future, as labour shortages emerge in industrial countries, outsourcing can help mitigate the problem.

Significant challenges remain

Nevertheless, there are challenges to maintaining high growth in India. Given that its potential rate of growth is estimated at about 6%, maintaining the current higher rate of growth will require either increasing the present investment rate (24% of GDP) or significantly raising productivity. Both would be fostered by further opening up the economy to foreign investment. India's

The IT sector in India



Cc = Customer care; Cd = Content development; F = Finance; A = Administration; Ps = Payment services.

[1] In billions of US dollars. [2] IT-enabled and business process outsourcing (BPO) services, in thousands.

Source: National Association of Software and Service Companies, *Strategic Review 2004*. Graph III.8

infrastructure also needs to be improved, and the privatisation of state-owned enterprises accelerated. In addition, at over 9% of GDP, India's fiscal deficit remains very large. This has contributed to a high real interest rate and the crowding-out of more productive private investment.

Commodity markets and prices

Recent developments and long-term trends

Sharp rise in commodity prices

Last year saw a further rise in commodity prices measured in US dollars. By spring 2004, prices had increased by over 70% since their trough in late 2001 (Table III.6). The higher oil price has already been reflected in retail energy prices in the industrial countries (see Chapter II). The rise in non-oil commodity prices has raised "upstream" producer prices but has not significantly affected global retail prices. Nonetheless, some analysts interpret the price surge as evidence of inflation expectations more generally and see it as a sign that the period of low global inflation might be about to end. Others view higher non-oil commodity prices as a sign of increased demand but, given their low weight in total costs, not as a reliable predictor of future inflation. Analysing commodity price behaviour from a longer-term perspective gives reason to believe that the price rise has not yet peaked. It also raises questions about how this might affect growth prospects in commodity-exporting countries. In particular, countries in Africa – heavily reliant on exports of oil or non-oil commodities – will have a unique opportunity to turn terms-of-trade gains into sustainably higher growth.

The higher oil price reflected strong demand …

In contrast to earlier expectations, as expressed in futures quotations, the price of crude oil has increased sharply since mid-2003 (Graph III.9). An unexpected rise in demand (notably in China but also in other emerging Asian economies and the United States) was one factor. In addition, delays in restoring oil exports from Iraq and political unrest in Nigeria and Venezuela tended to reduce supply. The unexpected rise in demand, together with a persistent negative spread between spot and futures prices ("backwardation"), brought commercial inventories to a historical low, resulting in increased price volatility. Although production in Iraq has now been restored to prewar levels, oil prices in US dollars are likely to remain high or might even rise further this year, given the projected recovery in global growth and heightened concerns about terrorist attacks on oil facilities. The effect of OPEC's decision

Selected commodity prices, March 2004

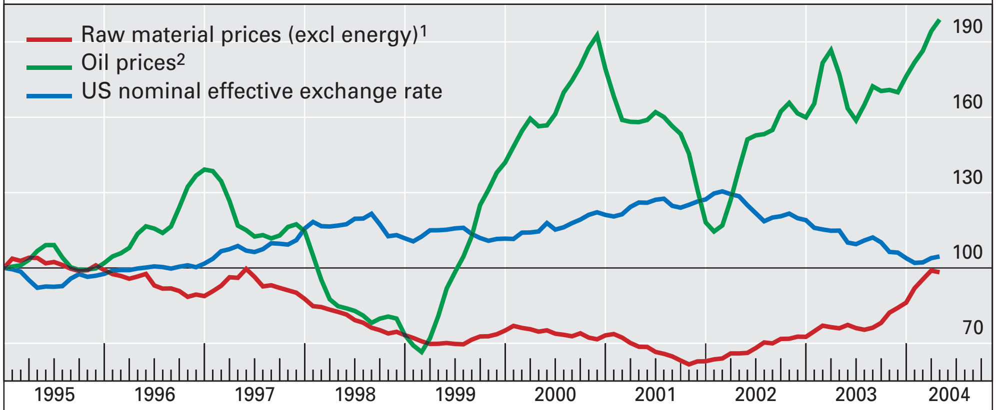
In US dollar terms, December 2001 = 100

Total	Oil	Non-oil materials	Industrial materials	Foodstuffs	Cotton	Soybeans	Wheat
172	182	157	162	133	169	219	136
Wool	Coal	Iron ore	Aluminium	Copper	Lead	Nickel	Zinc
141	140	126	123	204	182	259	145

Sources: IMF; Hamburg Institute of International Economics (HWWA). Table III.6

Commodity prices and US nominal effective exchange rate

December 1994 = 100



[1] In US dollar terms, as calculated by the HWWA. [2] Unweighted three-month moving average of the dollar price of Dubai Fateh, UK Brent and West Texas Intermediate.

Sources: HWWA; national data; BIS. Graph III.9

to cut supply as from 1 April is uncertain, given that most members still produce above target and that Saudi Arabia has since encouraged members to increase their supplies.

... but the medium-term trend is uncertain

It must be emphasised, nevertheless, that making accurate forecasts of future oil prices is difficult because both supply and demand are highly uncertain and swings in net demand can be large. For instance, the projected increase in supply over the next five years is conditional on substantial new investment in production capacity and pipelines. On the demand side, the gradual rise in the share of services in GDP and increased energy efficiency should help to moderate consumption of oil. However, if the shift in global GDP in favour of China and India (where energy efficiency is still relatively low) continues, demand for oil could rise more than currently forecast, and prices too. In fact, while China accounts for only 7% of global oil consumption, it is already the world's second largest oil importer. Considering also that OPEC's share of global production is likely to increase over the medium term (given that it controls over 60% of total oil reserves), a reversal of the downward trend in the real price of oil observed since 1980 cannot be ruled out.

Non-oil prices also recovered ...

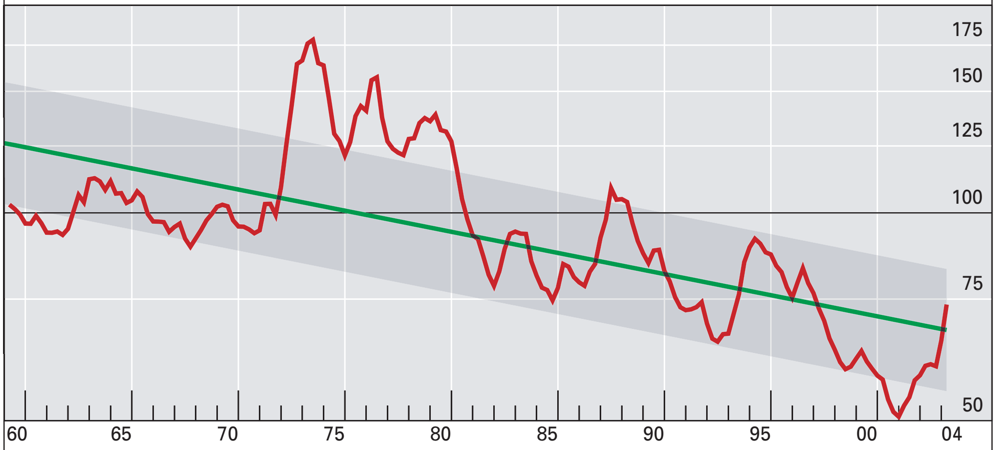
Even after the recent rally, the nominal dollar price of non-oil commodities is virtually at the same level as it was 40 years ago. This implies that, in real terms (ie deflated by an index of producer prices or export unit values in the industrial countries), such prices have declined at an annual rate of nearly 1.5% over the last 40 years. This is not far from a trend observed over the last 150 years. Seen from this longer-term perspective, real non-oil commodity prices were at a historical low at the end of 2001 (Graph III.10). Thus, one reason for the recent recovery might be the tendency of such prices to return, albeit slowly, to their long-run trend.

... partly due to the weaker dollar

Yet other factors have also been at play. Since the end of the Bretton Woods period, real commodity prices have tended to move inversely with the effective value of the US dollar. This was particularly evident during the first

Real non-oil commodity prices from a historical perspective[1]

Quarterly averages, 1960 = 100; semi-logarithmic scale



[1] Raw material prices (excluding energy) in US dollar terms deflated by US producer prices. The shaded area represents ±1 standard deviation around the log trend.

Sources: HWWA; national data; BIS. Graph III.10

half of the 1980s and the second half of the 1990s, when the appreciation of the dollar and high real interest rates forced producers of non-oil commodities to increase supply to service their dollar-denominated debt. The resulting downward pressure on commodity prices was amplified by lower demand in countries with currencies depreciating against the dollar. Conversely, in the more recent period of dollar depreciation, increased demand from importers, combined with lower supply, has caused prices to rise. The marked growth in manufacturing (a commodity-intensive production sector) in China and, more recently, in the United States has also contributed. In addition, the higher price of oil (an important input in the production of many commodities) has reinforced upward price pressures.

Despite possible price moderation this year ...

What are the short- and medium-term prospects for non-oil commodity prices? While the demand for such products is likely to increase further this year as the global recovery spreads to more countries, supply side factors might have an attenuating effect. Last year, for instance, inventories of some metals fell to historical lows and weather-induced reductions in the supply of certain food products led to an unusually sharp price acceleration. Moreover, the surge in prices appears to have been aggravated by speculative purchases by investors using commodities to hedge against the declining dollar. However, as supply and demand adjust, most of these forces might become less influential later this year. For instance, metal prices weakened in April in response to both higher inventories and rumours that China would tighten bank lending.

... the medium-term negative trend might flatten

Non-oil commodity price prospects are uncertain

The prospects for non-oil commodity prices beyond the next year are still more uncertain. On the one hand, the emergence of China as an important producer of manufactured goods and user of commodities suggests that the price of non-oil commodities relative to that of manufactured goods could rise over the medium term, possibly reversing the negative trend observed in the past. On the other hand, numerous empirical analyses of commodity price behaviour over the last 150 years have been unable to identify any breaks in the negative trend. It is true that the short-run supply elasticity for commodities is rather low and that fluctuations in demand can have large short-run effects on relative prices. However, over the longer run, both demand and supply tend to respond to such changes and the trend is then restored.

Potential policy implications

Price volatility a challenge to policy

The long-run declining trend of non-oil commodity prices has meant that exporters of such products have faced a secular reduction in their real disposable income. More importantly, perhaps, the fact that price volatility dominates long-run trends for both oil and non-oil commodities means that their short-run movements are highly unpredictable. In fact, as Graph III.11 shows, there is a positive correlation across countries between the share of primary products in total exports and the volatility of GDP.

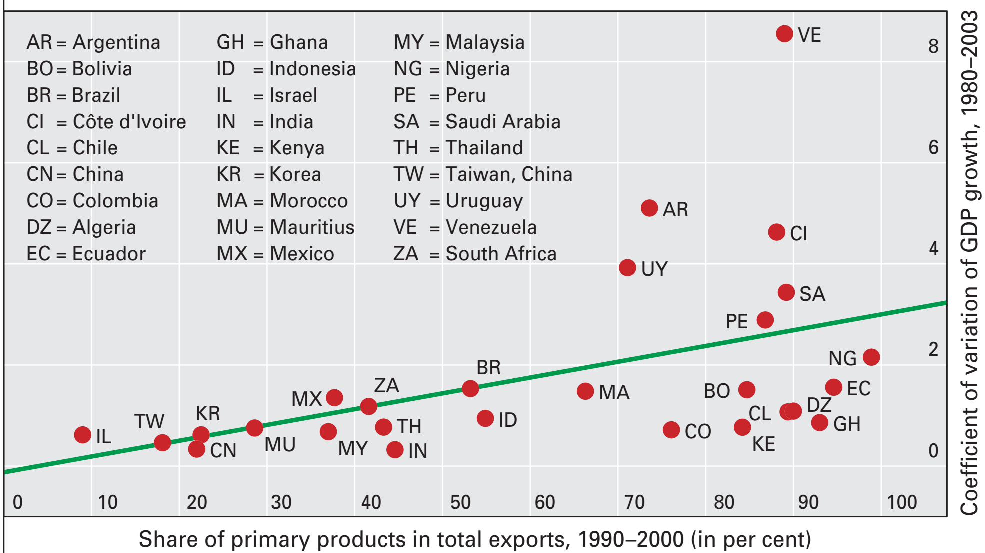
A flexible exchange regime could act as a shock absorber …

Might appropriate policies ameliorate this problem? Some have argued that the adoption of a flexible exchange rate regime could act as a shock absorber as currency appreciation (depreciation) in response to a rise (fall) in export prices would dampen the effect on the domestic economy. Indeed, the experience of African commodity exporters with currencies linked to the euro (previously the French franc) shows that they have suffered larger output disruptions as a result of terms-of-trade changes than countries with flexible rates.

… but is only a partial solution

Yet relying on a flexible exchange rate to dampen the effects of commodity price movements is subject to several caveats. A flexible exchange rate cannot solve the problem of a secular decline in the real price of commodities. Moreover, for other export or import-competing sectors (for instance manufacturing), there is no "optimal" exchange rate regime. If the exchange rate is flexible and appreciates in response to higher commodity prices,

Primary product exporters and volatility of GDP growth



Sources: IMF; UNCTAD; WTO; national data. Graph III.11

manufacturers' profit margins are squeezed through lower prices. Conversely, if the exchange rate is fixed, such firms are likely to face cost pressures, as higher profits in the commodity sector will push up wages. Finally, and perhaps most importantly, there is a trade-off between reducing variations in output and inflation. Thus, African commodity producers with a fixed exchange rate have experienced lower and more stable inflation rates than countries with flexible regimes.

Procyclicality of fiscal policy ...

Because earnings from commodity exports often constitute a very high proportion of government revenue, fiscal policy or fiscal rules might be needed as a complementary instrument for macroeconomic stabilisation. Indeed, many commodity exporters have displayed not only a procyclical fiscal policy but also a strong deficit bias; temporary increases in commodity prices have often been followed by a permanent rise in government spending and eventually a weaker budget balance. In Nigeria, for instance, the recovery of oil prices during 1998–2000 led to a budget surplus of 6½% of GDP. However, because increased oil revenue raised government spending substantially, the budget balance deteriorated by 12% of GDP in just two years and the current account balance by over 20%.

... could be reduced by a fiscal rule

In such circumstances, a fiscal rule could decouple government expenditure from fluctuations in the revenue from commodity exports. Taking the petroleum fund in Norway (widely regarded as the most advanced and sophisticated scheme of its type) as a model, several emerging market countries have created (or are planning to create) stabilisation funds as a first step towards reducing the procyclicality of their fiscal policy. Chile, for instance, established a copper stabilisation fund several years ago, and this fund is now integrated into the government's medium-term target for fiscal policy. Algeria's oil stabilisation fund is of more recent origin but has already contributed to stabilising the budget balance in the face of volatile oil prices. Nonetheless, with the current oil price well above the reference price embedded in the scheme, and strong political pressures to meet social needs and increase spending on construction, this year might provide a crucial test of the fund's ability to stabilise fiscal policy.