III. Issues in emerging market economies

Highlights

The expansion which has been under way in emerging market economies since 2002 consolidated further in the period under review. Strong growth in many countries was accompanied by increasing export values and large current account surpluses. This permitted a sizeable reduction in external debt burdens and a further significant build-up of foreign currency reserves. Fiscal positions also improved, and balance sheet positions strengthened. Partly reflecting these factors, consumer and investor confidence remained buoyant. In contrast with previous experience, domestic demand proved remarkably resilient to higher oil prices even in oil-importing countries.

External conditions have been unusually favourable to emerging market economies in the current cycle. These include strong global demand, large terms-of-trade improvements for many countries and much easier external financing. One major question is whether the authorities in emerging markets have adequately exploited these favourable circumstances to secure lasting improvements in fiscal positions. A second question concerns imbalances that might raise inflation risks or lead to unsustainable increases in asset prices. While inflation has, so far, remained well contained in many countries, prospects are uncertain in the light of volatile commodity prices and very low or negative real short-term interest rates. A bout of turbulence in financial markets in May 2006 has added to this uncertainty. A major challenge for the monetary authorities in many countries is how to avoid policy mistakes that might put macroeconomic and financial stability at risk.

Macroeconomic overview

Growth was robust in all regions last year (Table III.1). Moreover, in China revised GDP figures reveal that previous growth rates had been significantly underestimated. Growth accelerated in India; Korea successfully emerged from the 2003 credit card debacle; and much of Southeast Asia continued to grow at a strong rate. In Latin America, notwithstanding some slowdown, the expansion remained intact, and industrial output rebounded in Brazil and Mexico in early 2006. Argentina, Chile, Colombia and Peru all continued to see above trend growth. The expansion also remained strong in central and eastern Europe, although Hungary and Turkey had to deal with increased market volatility following the financial turbulence which began in Iceland in the early part of 2006. Growth was robust in much of the Middle East and Africa under the influence of higher commodity prices, especially oil.

Output growth and current account balance

	Real GDP[1]				Current account balance[2]		
	Average 2002–04	2005	2006		Average 2002–04	2005	2006
			First quarter	Full-year forecast			
Asia	7.6	8.0	8.7	7.7	158	252	220
China	9.7	9.9	10.3	9.6	50	161	137
Hong Kong SAR	4.5	7.3	8.2	5.3	14	22	23
India[3]	6.6	8.3	9.3	7.5	2	–16	–19
Korea	4.9	4.0	6.2	5.2	15	17	7
Other Asia[4]	5.1	5.0	5.6	4.8	76	70	73
Latin America[5]	2.5	4.3	5.5	4.6	9	39	31
Argentina	1.9	9.2	9.7	7.7	7	5	4
Brazil	2.5	2.2	3.4	3.5	3	14	9
Mexico	2.1	3.0	5.5	4.0	–10	–6	–7
Central Europe[6]	3.5	4.0	5.4	4.8	–19	–16	–17
Russia	6.4	6.4	6.3	6.2	41	84	90
Turkey	7.5	7.4	2.6	5.3	–8	–23	–28
Africa[7]	4.6	5.2	…	5.7	–3	15	24
Middle East[7]	5.4	5.9	…	5.7	64	196	241
Total[8]	6.1	6.7	7.6	6.7	242	549	560
Memo: G7	*2.1*	*2.6*	*2.8*	*2.8*	*–376*	*–614*	*–710*

Note: 2006 data are based on May consensus forecasts, JPMorgan Chase and IMF.

[1] Annual changes, in per cent. Regional figures are weighted averages based on 2000 GDP and PPP exchange rates. [2] In billions of US dollars. Regional figures are the sum of the economies included. [3] Annual data are fiscal years beginning in April. [4] Indonesia, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [5] The economies listed plus Chile, Colombia, Peru and Venezuela. [6] The Czech Republic, Hungary and Poland. [7] Country coverage according to IMF definition. [8] Comprises the economies above. For quarterly GDP growth, excluding Africa and the Middle East.

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

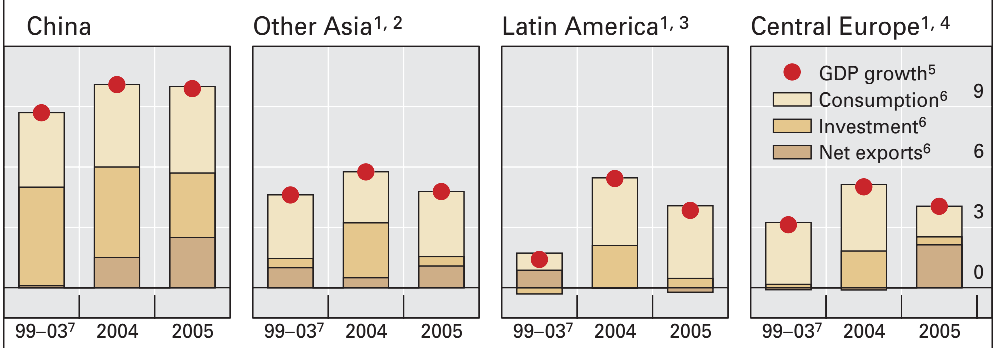
Pattern of demand

External demand remained important …

External demand continued to play an important role in a number of countries (Graph III.1). In general, demand for emerging market exports remained very strong while improved terms of trade played a special role in commodity-exporting countries. Moreover, the export performance of Asian economies was helped in particular by an end to the inventory-led slowdown in the electronics sector which had begun in 2004. Compared to earlier downturns, firms have been relatively quick this time in reducing their excess inventories. In addition, the slowdown in the global demand for high-tech products proved to be only temporary. The combined effects of these developments were reflected in strong exports and large current account surpluses in many countries.

Nevertheless, the contribution of external demand to growth varied across countries. The contribution rose particularly sharply in China last year and remained substantial in Hong Kong SAR, Korea and Singapore. This was also true in several central European economies, notably the Czech Republic and Poland, which saw a significant improvement in their trade balances. By contrast, the contribution of net external demand declined in several oil-importing Asian economies and Latin America.

Contributions to real GDP growth



[1] Weighted average of the economies listed, based on 2000 GDP and PPP exchange rates. [2] Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [3] Argentina, Brazil, Chile and Mexico. [4] The Czech Republic, Hungary and Poland. [5] In per cent. [6] In percentage points. [7] Annual average.

Sources: JPMorgan Chase, *World Financial Markets*; national data. Graph III.1

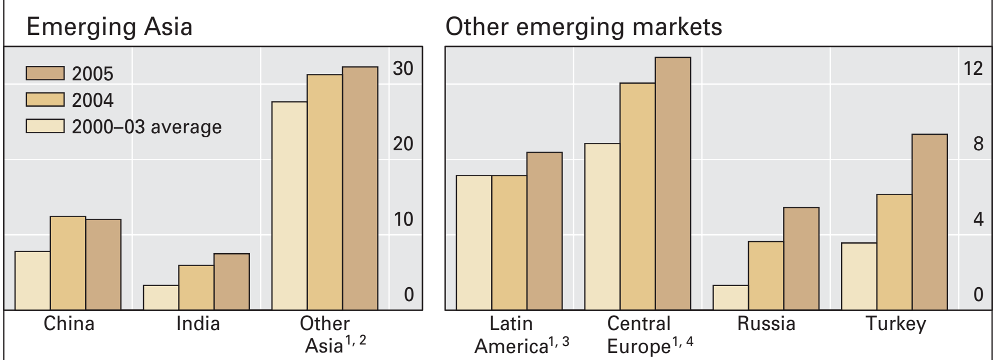
... but household spending was also strong ...

In all regions, growth was supported by strong household spending. Robust private consumption was supplemented, in many countries, by increased spending on residential construction. Two factors played an important role.

First, household spending and consumer confidence were boosted by rising incomes, falling unemployment and high asset prices. In China, for instance, household spending was underpinned by robust growth in both urban and rural incomes (of 9½% and 6%, respectively, in real per capita terms in 2005). A rebound in agricultural income and improved household balance sheets, respectively, played a similar role in India and Korea. In Hong Kong, the recovery was associated with a rebound in asset prices. In Latin America, similar income and wealth effects were supported by large improvements in the terms of trade (see the next section). In Argentina and Chile, private consumption was driven last year by strong increases in real

Household credit

As a percentage of GDP



[1] Weighted average of the economies listed, based on 2000 GDP and PPP exchange rates. [2] Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. [3] Argentina, Brazil, Chile and Mexico. [4] The Czech Republic, Hungary and Poland.

Sources: CEIC; national data. Graph III.2

wages, which also played a role in several central and eastern European economies. In the Czech Republic, the demand for consumer durables picked up on the back of strong household income. In Turkey, household spending on consumer durables continued to rise against a background of declining inflation and interest rates.

... boosted by bank lending

Second, a rapid expansion in bank lending provided a further boost to household spending. This has been reflected in a sharply rising ratio of outstanding household credit to GDP in many countries over the past few years (Graph III.2). A major factor boosting such credit has been the low borrowing costs associated with continuing easy monetary policies (see the section on monetary policy). Other contributing factors have been a decline in inflation, a progressive deregulation of credit markets, tax rebates to home buyers and far-reaching financial innovations attracting an increasing number of households to mortgage markets.

In Brazil, lending to households surged last year (by 37%) following the introduction of a payroll guarantee scheme that effectively protects banks against default risk. In Saudi Arabia, a rapidly growing young population, and the fact that banks can now recover their debts by attaching wage payments, contributed to a similar rate of credit expansion.

Non-residential investment in Asia was weak ...

In contrast to robust household spending, non-residential investment – particularly capital spending by the corporate sector – remained relatively weak (Table III.2) in most regions. This was especially true in Asia, where non-residential investment as a percentage of GDP either continued to fall or remained far below the levels seen prior to the 1997–98 Asian financial crises. China has

Fixed investment

As a percentage of GDP

	Residential investment[1]			Non-residential investment			Total investment		
	1996[2]	2000	2005[3]	1996[2]	2000	2005[3]	1996[2]	2000	2005[3]
Asia									
China	2.9	3.3	5.9	29.9	29.5	39.3	32.8	32.9	45.2
Hong Kong SAR	15.1	11.8	7.6	15.7	14.6	13.2	30.8	26.4	20.8
India[4]	4.5	6.1	6.9	20.2	16.8	17.8	24.7	22.9	26.0
Korea	7.0	4.3	5.9	30.5	26.8	23.2	37.5	31.1	29.1
Other Asia[5, 6]	10.3	6.0	5.1	25.5	17.3	17.4	35.7	23.3	22.6
Latin America									
Argentina	5.0	4.7	4.5	13.1	11.5	17.0	18.1	16.2	21.5
Brazil	9.0	8.7	7.0	10.2	10.6	13.0	19.3	19.3	20.0
Chile	9.3	7.1	7.5	17.1	13.7	14.9	26.4	20.7	22.4
Mexico	3.8	4.7	4.8	14.1	16.7	14.5	17.8	21.4	19.3
Central and eastern Europe[5, 7]	7.2	6.3	4.4	16.4	17.4	15.9	23.6	23.7	20.4
South Africa	1.7	1.4	2.0	14.6	13.7	14.9	16.3	15.1	16.8

[1] Including all construction where a breakdown is not available. [2] For South Africa, 1998. [3] Or latest available. [4] Fiscal years beginning in April. [5] Weighted average of the economies listed, based on 2000 GDP and PPP exchange rates. [6] Malaysia, the Philippines, Singapore and Thailand. [7] The Czech Republic, Hungary, Poland and Turkey.

Sources: CEIC; Datastream; Eurostat; national data. Table III.2

been a major exception to this trend. In India, strong profits and rising equity prices have also been associated with a revival of investment more generally.

... in spite of strong profits

The fact that non-residential investment in several parts of Asia has been weak despite strong profits and improved balance sheets has surprised many observers. Nevertheless, various indicators suggest that some of the previous constraints on corporate spending have eased over the past several years. For example, firms have substantially lowered their leverage ratios since the 1997–98 crises. In Korea, the debt/equity ratio was cut by about two thirds to 111% between 1998 and 2005. Moreover, excess capacity has been substantially reduced or eliminated, and the flow of bank credit to the corporate sector has improved. Korea, Indonesia and Malaysia, for instance, saw substantial increases in non-residential investment last year.

Mixed investment picture elsewhere

In Latin America, the picture was more mixed, with investment being particularly volatile in Brazil. After recording an annual rate of over 10% in 2004, real investment growth in Brazil fell to 2% in 2005. In Mexico, the recent weakness in non-residential investment has been associated with a loss in the competitiveness of the export sector. For instance, Mexico's share in US imports declined by about 1½ percentage points between 2001 and 2005. By contrast, non-residential capital spending has rebounded in Argentina over the past two years. In central and eastern Europe, investment ratios have fallen over the past five years, partly reflecting weak non-residential investment.

Rising inflation pressures

Inflation low but pressures rising

Strong growth and rising commodity prices put upward pressure on prices in all regions. Nevertheless, despite these pressures inflation remained well contained in most countries last year (Table III. 3). In China, output growth was particularly strong but was associated with very low measured inflation. In India and Korea, headline inflation softened towards the end of last year, after rising significantly in 2004. In several countries in Asia, inflation movements were affected by the timing of the withdrawal of oil subsidies. As for Latin America, inflation was on a downward path in Brazil and Mexico in much of the second half of 2005. In Chile, underlying inflation remained subdued, although headline inflation did rise towards the end of 2005. In contrast, Argentina and Venezuela continued to experience relatively high rates of inflation. In central Europe, inflation declined in most countries last year, reflecting not only exchange rate appreciation but also increased competition at the retail level. Turkey's inflation fell again last year, continuing a longer-term trend.

Outlook and risks

Strong growth likely in 2006 but there are risks of slower exports ...

Forecasts for 2006 are for continued strong growth or even an acceleration in most emerging market economies. Nevertheless, most countries are expected to remain in current account surplus, and inflation is forecast to remain moderate. Such forecasts are evidently not without some risks.

First, the continued dependence of a large number of countries on export-driven growth means that they are exposed to volatility in major industrial economies, as well as in China. Countries that have received a substantial degree of external financing might also be subject to changes in investor sentiment. Second, there are some risks from credit-financed household spending. A too rapid expansion in housing demand might lead to overheating in the property market, particularly in Asia. Property prices have been rising in Asia over the past two years, although in several cases (eg Hong Kong, Singapore and Thailand) they are recovering from a previous downturn. Korea faced a major challenge in the real estate market last year as property prices rose sharply in some cities in the first half of 2005. In response, the authorities introduced a package of stabilisation measures (including higher taxation, restrictions on mortgage lending for speculative purposes, and additional land allocation for construction) to cool the real estate market. South Africa has seen a major upturn in the property market, with residential property prices increasing by 50% in the past two years.

... overheated property markets ...

... and perhaps overextended households

A third source of vulnerability is that banks in many countries, particularly in central Europe, have shifted a large part of their risks to the household sector through lending at variable interest rates or in foreign currency. It is difficult to assess whether households would be able to withstand unexpected shocks that could quickly increase their debt burdens. Furthermore, the experience of Korea in 2003 has demonstrated that the rapid expansion of

Consumer prices[1]

Annual changes, in per cent

	Headline				Core[2]		
	2004	2005	2006 April[3]	2006 Full-year forecast[4]	2004	2005	2006 April[3]
Asia[5]	4.4	3.4	3.1	3.8	2.1	2.0	1.2
China	3.9	1.9	1.2	2.2	–0.6	0.2	–1.0
India	6.6	4.8	3.6	4.9	7.0	3.9	2.5
Indonesia	6.1	10.5	15.4	13.5	6.0	7.5	9.4
Korea	3.6	2.8	2.0	2.8	2.4	2.3	2.2
Thailand	2.8	4.5	6.0	4.5	0.4	1.6	2.9
Other Asia[5, 6]	2.3	3.4	3.3	3.3	1.6	2.4	2.4
Latin America[5]	6.1	5.7	5.1	5.2	5.8	5.7	5.2
Argentina	6.1	12.3	11.6	12.3	6.4	14.2	11.6
Brazil	7.6	5.7	4.6	4.4	7.9	5.6	5.0
Mexico	5.2	3.3	3.2	3.4	3.8	3.1	3.2
Other Latin America[5, 7]	4.2	3.7	3.7	3.7	3.8	3.0	3.7
Central Europe[5]	4.0	2.3	1.6	1.6	2.9	1.8	1.2
Czech Republic	2.8	1.9	2.8	2.7	2.4	1.8	2.3
Hungary	6.8	3.6	2.7	2.3	5.8	2.1	0.7
Poland	3.6	2.1	0.7	1.0	2.1	1.8	0.9
Russia	10.9	12.7	9.8	9.9	7.9	6.7	6.0
South Africa	1.4	3.4	2.8	4.1	4.7	4.1	2.3
Turkey	8.6	8.2	8.8	7.6	12.3	11.0	11.6

[1] For India, wholesale prices. Average of period; for Latin America, end of period. [2] Headline excluding food and energy or national definition. [3] Or latest available. [4] Consensus forecast published in May. [5] Weighted average of the economies listed, based on 2000 GDP and PPP exchange rates. [6] Hong Kong SAR, Malaysia, the Philippines, Singapore and Taiwan (China). [7] Chile, Colombia and Peru.

Sources: IMF; OECD; CEIC; © Consensus Economics; national data; BIS estimates. Table III.3

household debt, even when denominated in local currency, can generate significant volatility in consumption and adversely affect future growth.

Two major external challenges

Two important developments over recent years have been large shifts in the terms of trade of emerging market economies and continued strong demand for emerging market assets. Such developments have major implications, not only for growth, but also for the conduct of fiscal and monetary policies.

Shifts in the terms of trade

Sharp terms-of-trade movements ...

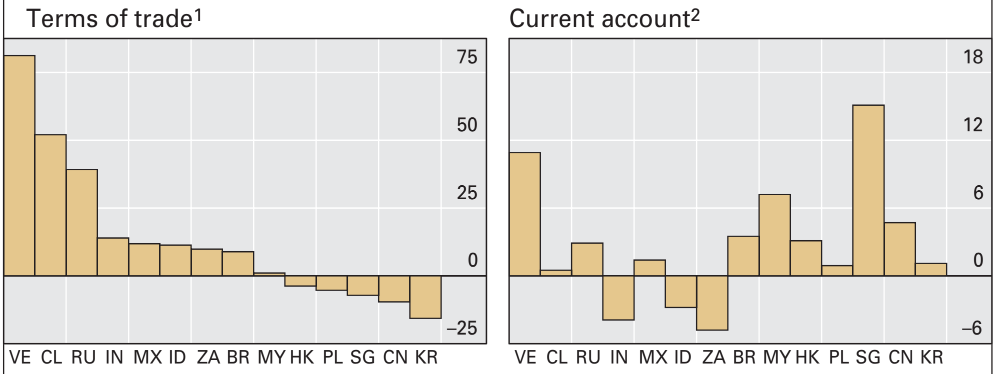
Swings in relative prices since 2002 have been associated with large terms-of-trade movements in emerging market economies. For example, oil prices in dollar terms almost doubled between 2001 and early 2006, after falling sharply in the 1990s. Prices of industrial metals and certain agricultural raw materials also increased rapidly during the same period. At the same time, world manufacturing prices have strengthened only modestly. As a result, commodity-exporting countries have seen some of the largest improvements to their terms of trade in recent years (Graph III.3, left-hand panel). By contrast, countries with a significant concentration of exports in manufactures or services, and large oil import requirements, have suffered substantial terms-of-trade losses.

... boosted current account surpluses for some ...

The impact of terms-of-trade changes has also varied across commodity-exporting countries. Strong terms-of-trade improvements have been associated with higher current account surpluses in several Latin American countries (Graph III.3, right-hand panel). Brazil, Chile, Colombia, Peru and Venezuela have all benefited from large increases in the prices of their main commodity exports. Gains from higher export prices have also been substantial in other regions, particularly oil-exporting economies like Russia and Saudi Arabia.

External positions

Cumulative change, 2003–05

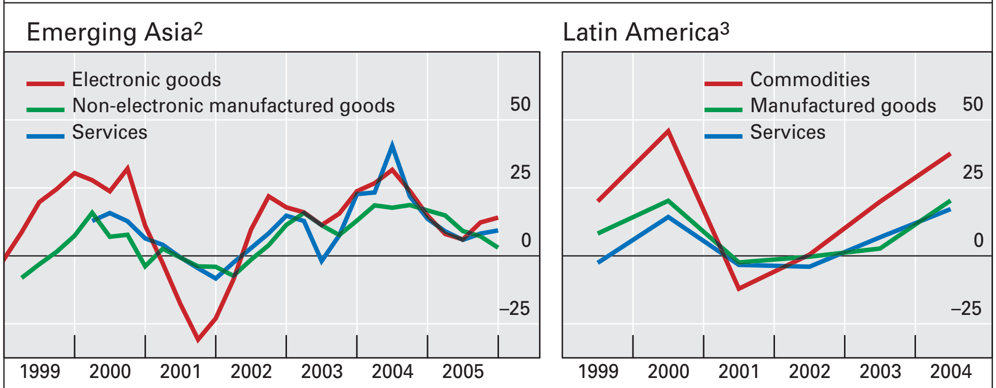


BR = Brazil; CL = Chile; CN = China; HK = Hong Kong SAR; ID = Indonesia; IN = India; KR = Korea; MX = Mexico; MY = Malaysia; PL = Poland; RU = Russia; SG = Singapore; VE = Venezuela; ZA = South Africa.

[1] In per cent. [2] In percentage points of GDP.

Sources: IMF; Datastream; Economist Intelligence Unit; national data. Graph III.3

Exports[1]



[1] Annual changes, in per cent; in US dollar terms. [2] Aggregates of Korea, Malaysia, Singapore, Taiwan (China) and Thailand. [3] Aggregates of Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.

Sources: IMF; United Nations, *Commodity Trade Statistics*; CEIC. Graph III.4

... helped also by higher export volumes ...

At the same time, many countries with improved terms of trade have also benefited from a large increase in export volumes. This has applied not only to commodity exports, but also to a broad spectrum of manufactures and services. For example, while the export prices of Argentina's primary commodities fell by 9% last year, this was more than offset by a 27% rise in export volumes. Nevertheless, in some other commodity-exporting countries, increased imports and other payments far exceeded export growth, resulting in a net deterioration of the current account. This was the case in South Africa, which saw a record current account deficit of over 4% of GDP last year.

... but caused limited terms-of-trade losses for others

There is some evidence to suggest that the adverse impact of terms-of-trade losses on commodity-importing countries has been more limited than expected, notably in Asia, where dependence on oil tends to be rather high. Despite a major deceleration last year, export growth remained strong in most of Asia (Graph III.4), helping to offset terms-of-trade losses. In effect, part of the additional revenues of oil-exporting countries was recycled back to the Asian region through the trade sector. Indeed, the exports of Asia (excluding Japan) to oil-exporting countries rose by 27% during the first half of 2005. The net result was that many Asian economies continued to enjoy large current account surpluses.

Favourable terms of trade to last?

One question concerns the sustainability of the recent shift in the terms of trade, against the historical background of the high volatility of commodity prices. On the one hand, it is possible that strong global growth will lead to yet further increases in the demand for commodities. The continued buoyancy of the Chinese economy points in this direction. Last year, China accounted for over 57% of the incremental demand for aluminium, 60% of that for copper and over 30% of that for oil. Such a trend could be reinforced in the future by a major expansion of Indian demand for oil and other commodities. On the other hand, past experience suggests that the prices of non-oil commodities have been more volatile and have a stronger tendency to revert to the mean than does the price of oil. This may be partly due to differences in market structure, given that the cartelised structure of the oil market facilitates control of supply. In contrast, in other markets (especially those for agricultural commodities), supply conditions are more responsive to price levels. Higher real prices of commodities could still dampen future demand, especially when technological innovation leads to more efficient use of commodity inputs.

Strong demand for emerging market assets

The demand for emerging market assets strengthened during the period under review. Net private capital flows reached about $254 billion in 2005, distinctly up from 2004 (Table III.4), and well above the levels prevailing in 1998–2002. Sizeable flows appear to have continued in the first quarter of 2006, although there has been some recent volatility.

Net capital inflows rose significantly

Net capital flows to central Europe and Latin America increased significantly in 2005, although net private flows to Asia halved. Portfolio investment and other private flows explain most of the changes in private capital flows by region. In Asia, net portfolio investment reversed direction, resulting in outflows in 2005 (at least partly reflecting substantial gross outflows) while other private flows (which include cross-border bank lending) also fell.

FDI still most important

Net foreign direct investment (FDI) is still the most important component of net capital flows and reached $212 billion in 2005, a moderate increase from 2004. Its regional distribution in 2005 was also similar to that a year earlier: $72 billion to Asia, $51 billion to Latin America and $41 billion to central and eastern Europe, with the remainder distributed evenly between Africa and the Middle East. In some cases, gross inflows were larger than net inflows, reflecting growing FDI outflows from emerging economies. Several multinational firms based in emerging economies now have large positions abroad. For example, in 2004 the FDI stock abroad exceeded $100 billion for both Singapore (104% of GDP) and Russia (18%), and amounted to $69 billion for Brazil (11.5%) and $32–38 billion for China (2.4%), South Africa (18%) and Korea (4.7%).

Significant regional variation

Net inflows differ considerably across regions and economies. In central and eastern Europe, where economic integration with the rest of Europe continued to advance, net inflows exceeded 6% of GDP. By contrast, they were much lower in Latin America. Only a small group of countries had relatively large current account deficits and a corresponding need for large capital inflows: Hungary, South Africa and Turkey stood out in this regard. Other countries with current account deficits are India, Mexico and Poland.

Emerging market debt more in demand …

Under current conditions, it remains unclear how far increased capital flows to emerging market economies reflect easy conditions in developed financial markets (so-called "push" factors), due to developments in policy or market sentiment. Earlier fears that monetary policy tightening in the United States would lead to shifts out of emerging market assets proved unfounded, at least prior to May 2006, when equity prices in many countries fell sharply. Indeed, sovereign bond spreads continued to fall even as US policy rates were steadily increased during 2004 and 2005 (Graph III.5, panel A). Sovereign spreads for several Latin American borrowers have narrowed. Central and eastern Europe has also registered sustained improvements. The sovereign spreads of crisis-hit Asian countries, which rose to an average of 830 basis

Net private capital flows to emerging market economies

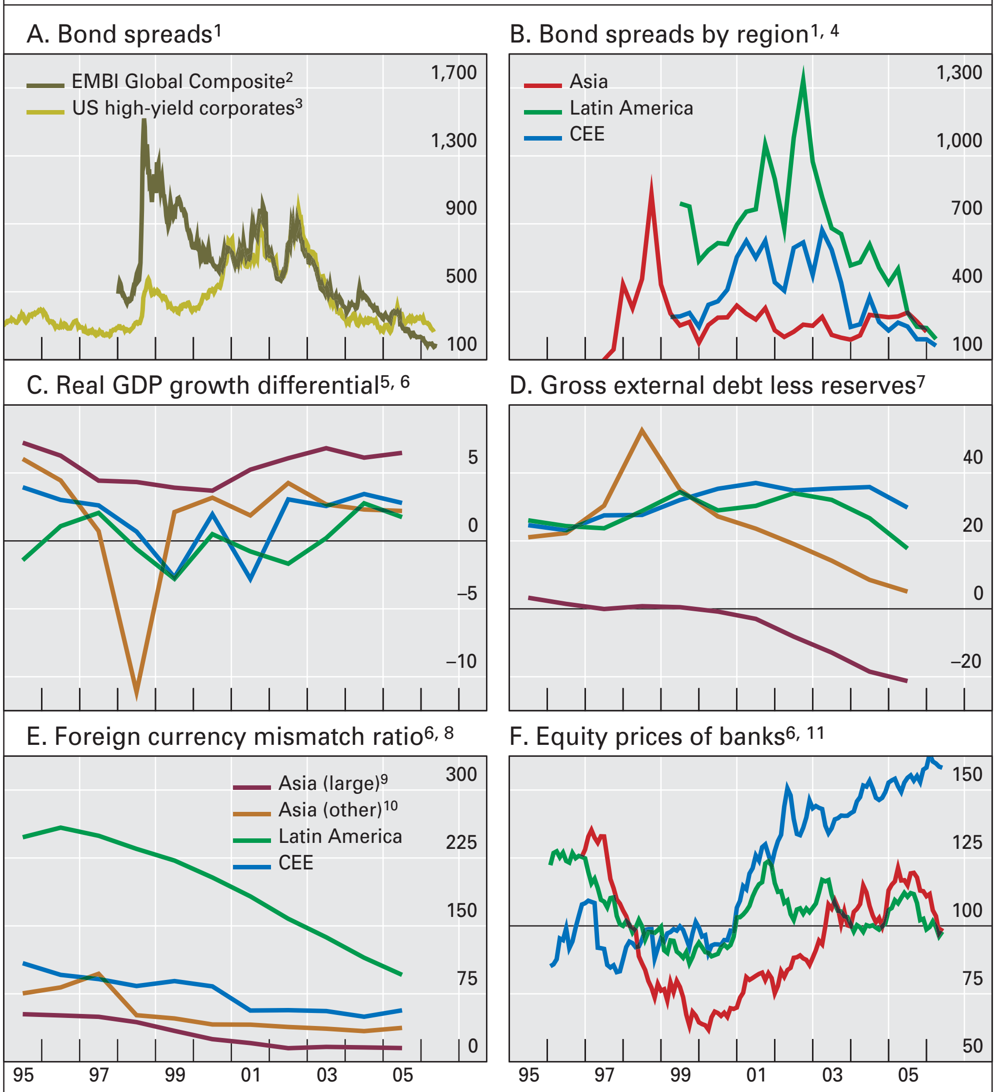
In billions of US dollars

	Annual average 1990–97[1]	Annual average 1998–2002	2003	2004	2005
Emerging market economies[2]					
Total flows	130	79	160	231	254
Direct investment	74	167	158	184	212
Portfolio investment	50	–3	–4	35	39
Other private flows	6	–85	7	12	3
Memo: Current account balance	*–78*	*70*	*229*	*311*	*511*
Change in reserves[3]	*–73*	*–116*	*–352*	*–515*	*–580*
Official flows	*21*	*8*	*–62*	*–82*	*–139*
Other[4]	*2*	*–41*	*23*	*56*	*–46*
Asia					
Total flows	55	–1	64	120	54
Direct investment	36	58	68	60	72
Portfolio investment	15	–5	4	4	–31
Other private flows	4	–54	–9	56	13
Memo: Current account balance	*–10*	*104*	*166*	*184*	*241*
Change in reserves[3]	*–37*	*–87*	*–227*	*–340*	*–282*
Official flows	*6*	*1*	*–18*	*2*	*5*
Other[4]	*–13*	*–17*	*14*	*34*	*–18*
Latin America					
Total flows	48	37	16	6	25
Direct investment	23	62	35	48	51
Portfolio investment	31	1	–8	–14	28
Other private flows	–6	–26	–11	–28	–54
Memo: Current account balance	*–37*	*–53*	*7*	*18*	*30*
Change in reserves[3]	*–19*	*3*	*–36*	*–24*	*–32*
Official flows	*3*	*12*	*6*	*–7*	*–25*
Other[4]	*5*	*1*	*7*	*8*	*2*
Central and eastern Europe					
Total flows	9	34	52	71	108
Direct investment	7	23	17	34	41
Portfolio investment	4	2	6	27	29
Other private flows	–2	9	30	10	38
Memo: Current account balance	*–6*	*–24*	*–37*	*–59*	*–63*
Change in reserves[3]	*–6*	*–11*	*–12*	*–14*	*–41*
Official flows	*0*	*0*	*–5*	*–7*	*–9*
Other[4]	*4*	*1*	*3*	*9*	*4*
Memo: Fuel exporters					
Private capital flows, net	*0*	*–9*	*13*	*5*	*5*
Current account balance	*9*	*60*	*109*	*189*	*347*

[1] 1994–97 for the fuel exporters. [2] Also includes Africa, the Commonwealth of Independent States and the Middle East. [3] A minus sign indicates an increase. [4] Includes errors and omissions.

Source: IMF, *World Economic Outlook*. Table III.4

Elements of demand for emerging market assets



Note: Country groupings for Asia and central and eastern Europe (CEE) differ between panels.

[1] In basis points. [2] Over US Treasuries, as calculated by JPMorgan Chase. [3] Index yield for a basket of non-investment grade corporate bonds denominated in US dollars, over 10-year swap rates. [4] EMBI Global sub-indices. Regional averages based on weights in the EMBI Global Composite. [5] Regional growth rates minus growth in the G7 economies; in percentage points. [6] Weighted averages based on 2000 GDP and PPP exchange rates. [7] As a percentage of GDP. [8] Foreign currency share of total debt divided by the ratio of exports to GDP. [9] China, India and Taiwan (China). [10] Indonesia, Korea, Malaysia, the Philippines and Thailand. [11] Relative to overall equity price indices, in US dollar terms; 1996–2005 = 100.

Sources: IMF; Bloomberg; Deutsche Bank Research; JPMorgan Chase; national data; BIS calculations.

Graph III.5

points in the wake of the crisis, have now fallen, but are still above those of mid-1997 (Graph III.5, panel B). Nevertheless, it remains to be seen what the effects of concerted monetary tightening in the major industrial countries might be.

… reflecting ample international liquidity …

Still with regard to "push" factors, a number of explanations could be offered for declining sovereign spreads. One is the growing diversification of portfolios to include emerging market securities. Another is that conditions in developed bond markets remain highly liquid. This held down yields on long-term US bonds during 2005, encouraging a search for yield. While this effect has diminished in 2006 with the rise in US long-term rates, it is noteworthy that the spread on US high-yield bonds stabilised towards the end of the period under review while that for emerging market bonds continued to fall (Graph III.5, panel A). Such a development cannot then be attributed solely to global financial conditions but must also reflect investors' assessment that the underlying risks in holding emerging market debt have changed for the better (for additional perspective, see Chapter VI).

… better fundamentals …

Turning to the "pull" factors driving capital inflows, economic fundamentals have improved in four key ways in this decade. The first is that economic reforms and deeper integration with the world economy have lifted growth rates in most countries relative to those in the major developed market economies (Graph III.5, panel C). The effects of EU accession by countries in central and eastern Europe, an increased trade orientation in Latin America and the growing integration of China and India into the global economy have stimulated growth in the countries concerned and have also boosted demand for goods produced by other emerging market economies.

… lower external indebtedness …

The second improvement is that current account surpluses have enabled several countries to reduce their net external indebtedness. Foreign reserves have increased and external debt has been repaid, with a particular focus on official or restructured debt. In some cases, external debt has been reduced by drawing on foreign reserves. For example, Russia cleared its debt to the IMF and paid $15 billion to the Paris Club of official creditor countries last year. In December 2005, Brazil paid off $15.5 billion owed to the IMF and Paris Club debt of $2.6 billion; in April 2006, it paid off its Brady bond debt (albeit partly funded by new external debt). Argentina has also repaid its outstanding debt to the international financial institutions (Graph III.5, panel D). In April 2006, Nigeria became the first African country to eliminate its Paris Club debt, totalling $30 billion; $12.4 billion was repaid and the remaining debt was forgiven. An important domestic counterpart of growing current account surpluses and external debt repayment has been significant increases in national saving rates. One notable example is that the saving rate in Latin America as a whole rose to 22% of GDP in 2005, compared with around 17% of GDP in the early 2000s.

… stronger balance sheets …

A third improvement is that currency mismatches have been reduced (Graph III.5, panel E). The currency of denomination of international bank lending has progressively shifted towards the use of local currencies. Governments and other borrowers in capital markets have reduced their reliance on foreign currency debt as they have issued more domestic paper. According to BIS statistics, the total amount outstanding of domestic bonds and notes issued by borrowers in Latin America rose from $228 billion in 2000 to $379 billion in 2005; external debt securities fell by $17 billion over the same period. The proportion of exchange rate-indexed debt in domestic debt markets has declined in a number of important cases. For example, in Brazil the share of such indexed debt in total public debt fell from 37% in 2002 to 2.3% by the first quarter of 2006. Domestic debt markets have also deepened, with international trading of domestic debt instruments rising sharply. Significantly, there also appears to have been a gradual extension of the maturity structure of domestic government debt in some countries. The greater depth of local currency debt markets offers global investors new means of considerably improving returns. Because domestic bond yields in emerging markets appear to respond more to domestic factors, and have comparatively low correlations with yields in developed markets or in other emerging markets, such paper also offers diversification opportunities.

… and improved banking systems

A fourth change is that the financial positions both of the non-financial corporate sector and of banks have strengthened in recent years. Corporate leverage ratios have fallen, and there has been a significant and broad-based improvement in banking systems. Banks' returns on assets have grown, and a number of indicators suggest that the quality of banks' balance sheets has risen. Another simple indicator is that the ratio of bank stock price indices to overall stock indices – which fell sharply during the crises of the late 1990s – has recovered (Graph III.5, panel F).

But risks remain

In short, current account surpluses and reduced net external indebtedness, combined with substantial improvements in growth, national balance sheet positions and banking systems, have supported a strong revival of foreign demand for emerging market assets. At the same time, it must be recognised that new conditions pose certain risks. While domestic bond market development can impose discipline on fiscal authorities by signalling market concerns about inappropriate policies, it could in some cases increase the temptation to resort to inflationary financing. Moreover, the changing exposures of domestic investors could influence financial stability. On the one hand, the increase in local institutional investors is beneficial for market development and the diversification of risks. On the other hand, there is evidence that holdings of domestic government bonds in some countries are concentrated in the portfolios of banks, exposing them to significant interest rate risk.

Fiscal policy

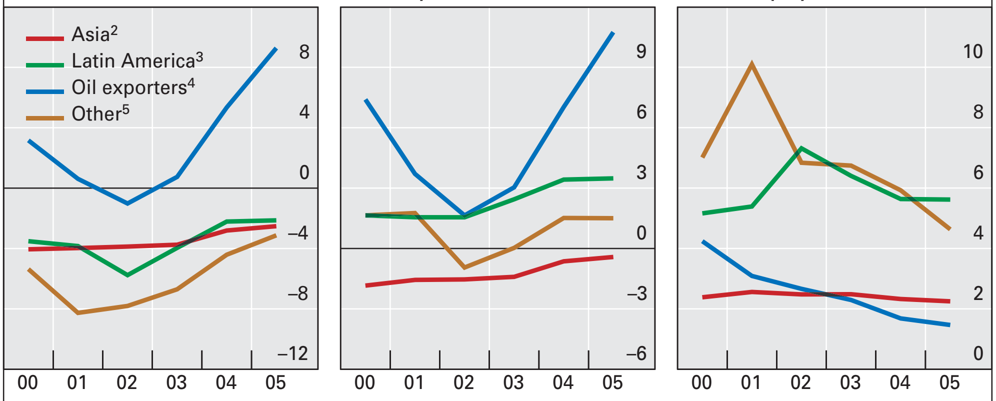
The improvements in the terms of trade and the easy availability of financing for emerging market economies, as well as the robust economic performance of the global economy, raise the question of whether these countries have taken adequate advantage of these favourable conditions to improve their fiscal positions, and in particular to reduce their public debt. Debt reduction should be a priority in emerging market economies since most of them appear to be "debt intolerant". That is, levels of debt that are readily maintained by developed countries appear to leave emerging markets still exposed to possible financial stress.

How much fiscal adjustment?

Headline balances have risen …

Fiscal positions have moved towards surplus in recent years; the improvement in the median headline balance in the sample (Graph III.6) was 2.3 percentage points of GDP between 2002 and 2005. Changes among oil exporters have been particularly large, while those in Asia have been more limited than in other regions in the past two years. In the sample of countries in the graph,

Public finance developments[1]



[1] As a percentage of GDP. Weighted average of the economies listed, based on 2000 GDP and PPP exchange rates. [2] China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. [3] Argentina, Brazil, Chile, Colombia, Mexico and Peru. [4] Russia, Saudi Arabia and Venezuela. [5] The Czech Republic, Hungary, Poland, South Africa and Turkey.

Sources: IMF; OECD; Moody's. Graph III.6

budget surpluses have generally been maintained by countries with already low debt ratios (eg Chile, Korea and Thailand), and particularly by oil exporters (eg Russia, Saudi Arabia and Venezuela). Nevertheless, most emerging market economies still have significant fiscal deficits, with the median being 1.6% in 2005.

... interest payments have declined ...

The median interest payment in emerging market economies has fallen, in some regions considerably. Interest rate declines have been particularly dramatic in Argentina and Turkey. In general, countries have taken advantage of easier financing conditions by issuing new debt on better terms. In some cases, this has facilitated the prepayment or buyback of existing higher-cost public debt. In others, countries have been able to prefinance their debt requirements at the lower rates that have prevailed in recent quarters. It is estimated that emerging market borrowers had met nearly half of their 2006 financing needs by the end of January 2006.

... and primary balances are up

The trend in primary balances (which exclude interest payments) is perhaps a better guide for assessing the durability of recent fiscal developments (Graph III.6, centre panel). The primary surplus has increased sharply among oil exporters, but has also risen in other regions. To illustrate, in Russia and Saudi Arabia the primary balance over 2004–05 averaged around 8% and 16% of GDP respectively. Primary balances were also large (ranging from around 2 to 7% of GDP) in Argentina, Brazil, Chile and Turkey. In contrast, a primary deficit can still be observed in India, although this too has been falling over time.

Issues in revenue and expenditure adjustment

Some of the recent improvement in primary balances reflects temporary or cyclical factors, raising concerns that a significant reversal in fiscal positions might occur once unusually favourable global economic and financial conditions end. While reliable and comparable estimates of structural balances in emerging market economies are not widely available, a sense of the durability of fiscal adjustment in some heavily indebted emerging market economies can be obtained by reviewing the extent to which measures are being adopted to permanently reduce expenditures and raise revenues. Ideally, such measures would be designed to minimise distortions that could reduce economic welfare and growth potential.

Expenditure reduction is hard

Many emerging economies find it very difficult to reduce expenditures. One problem is fixed claims on budgetary resources, including interest payments on debt, high government wage or pension bills or generous social security benefits. These are challenges confronting Brazil and Turkey, among others. In countries like China and India, and also in oil-exporting countries, increases in revenue associated with rapid economic growth or oil price windfalls have created pressures to increase wage bills or social spending. Apart from hampering expenditure reduction, this limits the scope for needed spending to improve the quality of the civil service or to support priority sectors such as health, education and infrastructure. As can be seen in Graph III.7, there has been some tendency for expenditures to rise recently in the emerging market economies.

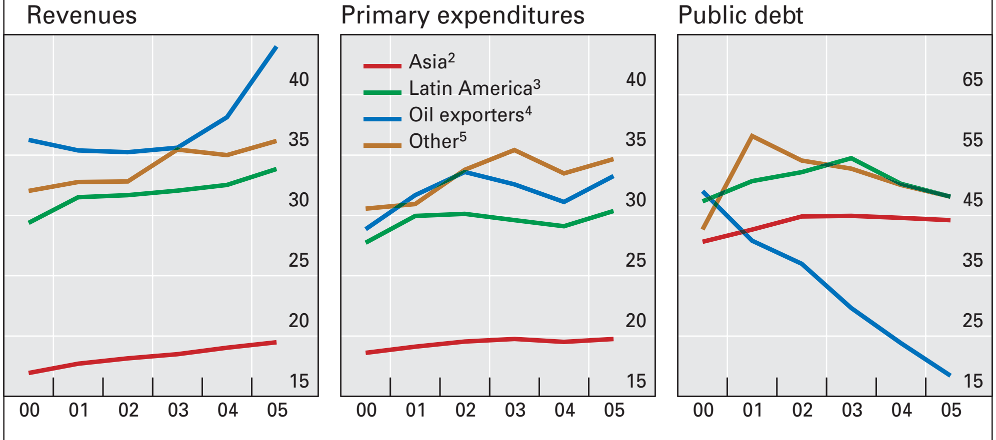
Rising revenue ratios have helped …

The fiscal impact of increases in spending has recently been partly alleviated by the higher revenue/GDP ratios that are apparent in all regions, particularly, of course, among oil exporters (Graph III.7, left-hand panel). The median revenue ratio has risen about 2 percentage points this decade, to 27.1% of GDP in 2005 (compared to a median ratio of 38% in a set of developed countries). These revenue gains have in many cases not been matched by increases in primary expenditures.

… but in some cases ratios are still low …

One concern is that, despite recent increases, government revenue ratios are still comparatively low in a number of emerging economies. For example, revenues are about 18–20% of GDP in India and the Philippines, significantly

Government revenues, primary expenditures and public debt[1]



[1] As a percentage of GDP. Weighted average of the economies listed, based on 2000 GDP and PPP exchange rates. [2] China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. [3] Argentina, Brazil, Chile, Colombia, Mexico and Peru (except for public debt, which excludes Argentina). [4] Russia, Saudi Arabia and Venezuela. [5] The Czech Republic, Hungary, Poland, South Africa and Turkey.

Sources: IMF; OECD; Moody's. Graph III.7

below the average of 29% in the United States, where taxes are low compared to other developed countries.

... and structural reforms are needed

Another concern is that increases might be reversed in the event of a cyclical downturn, unless structural reforms are implemented that could bring about permanent improvements in the fiscal position. In this regard, progress has been mixed. In the Philippines, for example, a recent extension of the coverage of value added tax is expected to boost revenues significantly. Nonetheless, securing fiscal improvements will probably require limiting any subsequent growth in expenditures. In India, a Fiscal Responsibility and Budget Management Law enacted in 2003 has set the goal of balancing the current (excluding investment) budget by 2008. There has been some progress in broadening the services tax base. In Turkey, there is a recognised need to expand the tax base to include the large informal sector and to widen the coverage of personal and corporate income taxes. These measures, however, will also take time. In some countries, relatively large revenue/GDP ratios have been achieved. However, this has often involved the use of highly distortionary taxes, such as those on financial transactions. A recent study of the use of such taxes in Brazil reveals that shifting to a less distortionary system could enhance economic growth without reducing revenues.

Issues raised by commodity price increases

Since 2003, sharp increases in commodity prices have posed two major fiscal challenges. First, a number of oil-importing countries, particularly in Asia, have had to decide what to do about subsidies designed to reduce the cost of energy. Rising oil prices have increased the cost of such subsidies and have exacerbated the distortions that arise from shielding consumers (and sometimes firms) from price changes. In some cases, subsidy costs have largely been shifted to public oil companies which are not allowed to raise retail prices. Such artificially low prices have led to shortages, tempted local oil companies to sell abroad and encouraged smuggling. Countries have responded by lifting these subsidies. For example, Thailand ended fuel subsidies in 2005, while India and Indonesia reduced them significantly, causing a jump in fuel prices. As discussed below, the rising costs of fiscal subsidies and efforts to reduce them have complicated the conduct of monetary policy by sharply increasing headline inflation.

Revenue windfalls must be saved

Second, producers should respond with prudence to the fiscal impact of commodity price windfalls that cannot be sustained. Because high prices are likely to be temporary, efforts have to be made to limit expenditure increases in response since these are more likely to be of a permanent nature. This would also mitigate undesirable procyclicality in government spending. Moreover, in the case of oil and other non-renewable commodities, the non-commodity primary deficit should be set so that part of the earnings from commodities can be invested in financial assets. The return on these assets can then fund spending once the commodity has been exhausted. Stabilisation funds taking in the revenue from commodity price windfalls operate in a number of countries, including Chile and Russia. In 2005, Mexico also enacted legislation that would use oil price windfalls to fund investment spending by state-owned enterprises, particularly the oil company, Pemex, and to enlarge substantially an oil stabilisation fund. However, efforts to establish or operate such funds have posed challenges in a number of countries. For example, in Venezuela a macroeconomic stabilisation fund was significantly depleted after a major oil production strike in 2002. While oil revenue windfalls have partly been used to accumulate reserves and pay down debt, the fund has not been recently replenished. Instead, significant amounts of resources are being allocated to finance current spending.

Russia has lowered its debt

The fiscal issues raised by such windfalls are illustrated by the recent experience of Russia, which has dramatically improved its net financial asset position. Russia's gross public debt has fallen sharply, from 96% of GDP in 1999 to a projected 14% in 2005. In part, this reflected prepayment of debt, notably to the IMF and the Paris Club last year. In addition, an oil stabilisation fund, established in 2004, had accumulated $43 billion by the end of 2005. Primary surpluses have also risen, from 2.7% of GDP in 2002 to close to 8.7% in 2005. While large primary surpluses have alleviated pressures on aggregate demand arising from the windfall, fiscal policy has recently eased considerably. Proposals for spending a higher proportion of the oil windfall, including through public sector wage and pension increases, and more infrastructure spending, raise concerns about exacerbating inflationary pressures. High oil prices could also weaken the drive for microeconomic reforms, including improvements to tax administration.

Debt reduction and sustainability

Emerging market economies have generally experienced declines in public debt ratios in recent years (Graph III.7, right-hand panel). Debt reductions have been particularly significant in Indonesia, Russia, Turkey and Brazil, and also in Argentina following the 2005 debt exchange. In contrast, public debt ratios have remained flat or stable in Asia.

Public debt ratios are down but still high …

Nevertheless, public debt/GDP ratios in emerging market economies still have a median value of around 46%, which is high enough to raise concerns about debt sustainability. Debt ratios are significantly above that median in India, Argentina, the Philippines, Brazil and Turkey, but below in a number of Asian economies (eg Korea and Thailand), oil exporters and Chile. Reported debt ratios are comparatively low in China but fiscal consolidation remains a priority. Moreover, there are potentially large contingent liabilities in the financial system and agreed social and development goals will prove costly.

… posing special challenges

The cases of Turkey and Brazil illustrate some of the challenges posed by high public debt ratios. In both these countries, economic growth and policy developments have contributed to large primary surpluses (7% and nearly 5% of GDP respectively in 2005), while lower interest rates and exchange rate appreciation have contributed to significant reductions in debt service payments and debt ratios in this decade. The debt ratio in Turkey fell from a recent peak of 107% to 73% of GDP in 2005, while in Brazil it fell from 65% to 52%. In both countries, projections indicate that further debt ratio reductions could occur if the recent fiscal stance is maintained, assuming there are no sharp slowdowns in growth or increases in interest rates. But under different assumptions, say if economic growth and interest rates were set at their historical averages, then the debt dynamics would become less favourable. The public debt positions of both Turkey and Brazil are sensitive to shocks to interest rates because the proportion of short-maturity or interest rate-linked debt remains significant. In both countries, economic resilience could thus be enhanced by maintaining policies that have already contributed to debt reduction and strengthened credibility.

Fiscal deficits in India are lower

In India, achieving long-run debt sustainability also poses challenges, although the risks are attenuated by the fact that the government does not borrow in foreign currency and that banks hold a large proportion of the public debt without trading it. While there have been significant reductions in the headline general fiscal deficit in recent years, a projected rate of 7.7% of GDP in 2005/06 (from 10% of GDP in 2002/03) remains too high.

Monetary and exchange rate policy

Risks of higher inflation

In the context of robust global demand, the two main shocks affecting emerging market economies in this period – a further broadly based rise in commodity prices and an increased demand for emerging market assets – were supportive of growth. However, both of these developments shift the balance of risks towards higher inflation, posing challenges for monetary policy. Higher commodity prices tend to boost inflation directly, for both commodity exporters and importers, and exporters also receive a large boost to income. Increased foreign demand for emerging market assets also tends to stimulate aggregate demand and could be inflationary by loosening financial constraints. The margin of spare capacity has narrowed; in some cases, labour markets have tightened. Although inflation has generally remained low, sharp rises have been recorded in some countries and inflation risks have become increasingly apparent.

Implications of relative price shocks

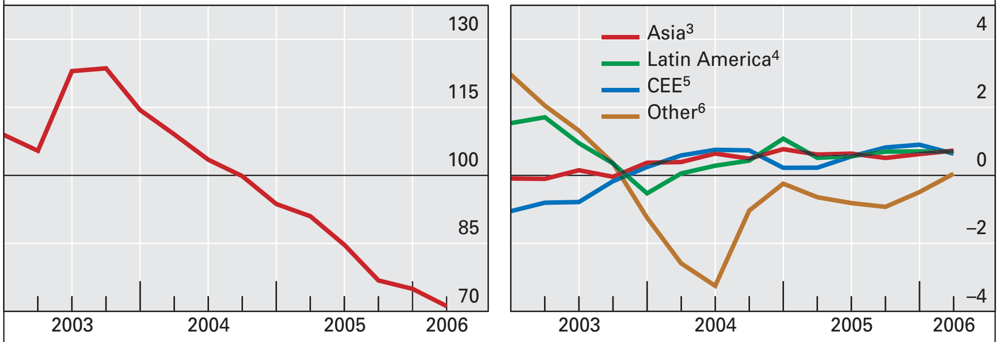
Relative price shocks complicate policy

The first issue complicating the conduct of monetary policy is the assessment of relative price shocks. Commodity prices have risen at the same time that international prices of manufactures have strengthened only modestly (Graph III.8, left-hand panel). If the commodity shock was expected to reverse, it would not generally be seen as a major threat to underlying inflation. But longer-lasting relative price changes are more of a problem, as is well illustrated by recent experience. The rise in commodity prices has created a gap between core and headline inflation that has persisted over an extended period (Graph III.8, right-hand panel). This raises the question of whether monetary authorities should assign greater weight to movements in core or headline inflation in assessing inflation risks and formulating policy.

High commodity prices but stable expectations

Two contrasting points need to be considered. First, higher commodity prices are proving to be remarkably durable (apparently reflecting a continued strengthening in demand), have already raised headline inflation and could at some point affect inflation expectations. Second, in spite of this, there are still no clear signs of higher inflation expectations and associated wage pressures

Changing relative prices and inflation



[1] 2003–05 = 100; world trade prices of manufactures relative to world trade prices of primary commodities. [2] Headline minus core CPI inflation; median of countries in group; annual changes, in percentage points. [3] China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [4] Chile, Colombia, Mexico and Peru. [5] The Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia. [6] Russia, South Africa and Turkey.

Sources: IMF; Bloomberg; Datastream; national data; BIS calculations. Graph III.8

in a significant number of emerging market economies. There appear to be structural changes in pricing behaviour in emerging market economies similar to those observed in developed economies (see Chapter II). In effect, the prices of goods and services (including wages) seem to have become less prone to disturbances from specific price shocks, or even swings in capacity utilisation.

Whether headline inflation will rise or fall …

These considerations have conflicting implications for policy. On the one hand, persistent commodity price increases would seem to argue for leaning against expectations by focusing on headline inflation. On the other hand, if behaviour has changed significantly, this argues for a more restrained policy response based on the presumption that headline inflation will in fact fall back to core levels.

… depends on drivers of the pricing process

Assessing whether core inflation will rise to headline or headline will fall to core is complicated. A judgment must be made about the permanent nature of the commodity price shock, as well as of the changes in the pricing process that seem to have anchored core prices to date. Concerning this second issue, China is key, as its inflation is very low even though growth is high enough to put pressure on global commodity prices. One explanation could be substantial productivity growth in the manufacturing sector. This could well be a longer-lasting phenomenon that will have persistent effects on wages and prices both in China and elsewhere.

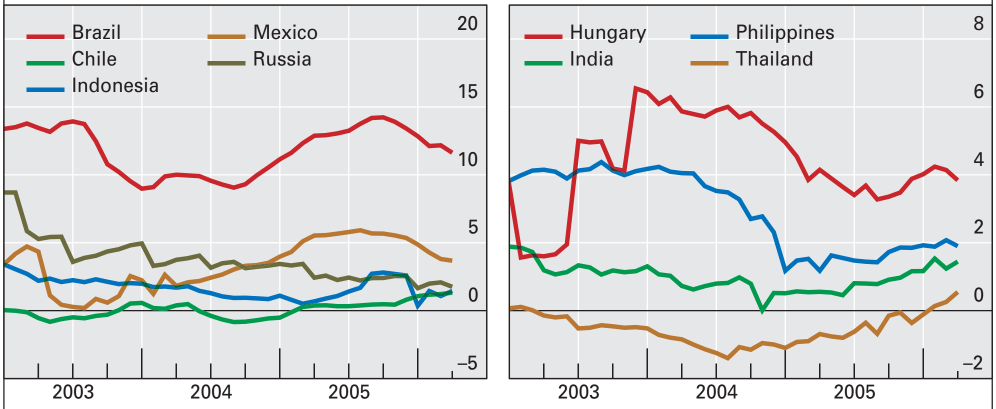
Inflation still a risk

However, China has in the past experienced bouts of inflation after long periods of rapid growth. Moreover, it may be that inflation in China is actually rising already but this is masked because the measured price index takes insufficient account of inflation in services. Finally, inflation pressures already appear to be significant in a number of emerging market economies.

Early responders have benefited

Against this background of uncertainty, relative price shocks over the past few years have elicited different policy responses, with a broad tendency towards tightening. Some commodity producers have focused on headline rather than core inflation. Policy interest rates in Brazil, Chile and Mexico were

Real policy rates[1]



[1] Forward-looking, deflated by one-year-ahead consensus forecasts of consumer price inflation, interpolated.

Sources: Bloomberg; © Consensus Economics; Datastream; national data. Graph III.9

increased comparatively early in the process, preventing erosion in (ex ante) real interest rates as inflation forecasts edged up (Graph III.9). In contrast, the real interest rate in Russia has drifted downwards.

In some Asian countries, monetary policy initially focused on core rather than headline inflation, because policymakers assumed that commodity price shocks were temporary with little risk of spillover into expectations. However, policy rates were subsequently raised sharply as the shocks began to look longer-lasting. In a number of oil-importing countries (eg India, Indonesia, Malaysia and Thailand), subsidies for energy consumers initially weakened the effects of higher oil prices on the domestic price. However, with commodity price shocks lasting longer than anticipated, drastic cuts in energy subsidies were forced in a number of countries by mounting costs (up to 3½% of GDP in 2005 in Indonesia's case). Interest rates were also increased in response to the risk that inflation expectations might otherwise be affected.

Lifting subsidies raised prices …

… but reactions differed

In Indonesia, interest rates were rising ahead of the jump in inflation associated with the more recent cuts in energy subsidies, but the sharp rise in measured inflation fed into expectations regardless. A bout of instability occurred in the currency and domestic bond markets as higher policy rates triggered withdrawals from mutual funds holding government bonds. Conditions then stabilised, and the rupiah has since recovered. In Thailand, where the real rate was negative but inflation had been low, the authorities increased interest rates rapidly as the spillover to expectations became evident and inflation rose. In the Philippines, where the real interest rate was higher, the monetary authorities took longer to raise policy rates in spite of rising inflation in 2004 due to the influence of supply side factors; inflation stabilised with increases in the policy rates in 2005 but rose again in 2006.

Responding to exchange rate appreciation pressures

Appreciation pressures pose dilemma

The exchange rate often comes under strong upward pressure in countries where demand is growing strongly, the current account is in surplus (thanks to terms-of-trade gains) and capital inflows are buoyant. This creates a dilemma for the monetary authorities, who have the option of either allowing the exchange rate to appreciate, or of trying to prevent appreciation by easing monetary policy or through intervening in the foreign exchange market. Allowing the exchange rate to appreciate could mitigate inflation risks, attenuate the price and income effects of higher commodity prices for exporters, and reduce pressures on capacity for countries experiencing strong demand. It could also alleviate the tendency for financial conditions to loosen in countries experiencing large capital inflows. However, very large or rapid exchange rate appreciation can raise concerns about the adverse effects on competitiveness.

Easing is sometimes appropriate

Preventing appreciation by easing monetary policy or by intervening in the foreign exchange market can pose other challenges. For inflation targeting regimes, an easier monetary policy would only be appropriate if exchange rate appreciation were expected to lower inflation below target. But this is less likely to be true if the appreciation is an equilibrating response to expansionary capital inflows and positive terms-of-trade shocks. Monetary easing under such conditions could exacerbate inflation risks.

Forex intervention can prevent misalignment

If the exchange rate pressure is judged temporary (eg because certain capital inflows are expected to reverse or the terms of trade subsequently to revert to lower levels), sterilised forex intervention might be preferable to easier monetary policy as a way of preventing an appreciation. Problems build up, however, the longer intervention is sustained because it then becomes harder to sterilise, again resulting in an unwanted easing of domestic financial conditions and a thrust to higher inflation. Moreover, even when fully sterilised, large-scale intervention could distort domestic financial markets given the size of the debt issuance required for full sterilisation.

Policy responses and regimes

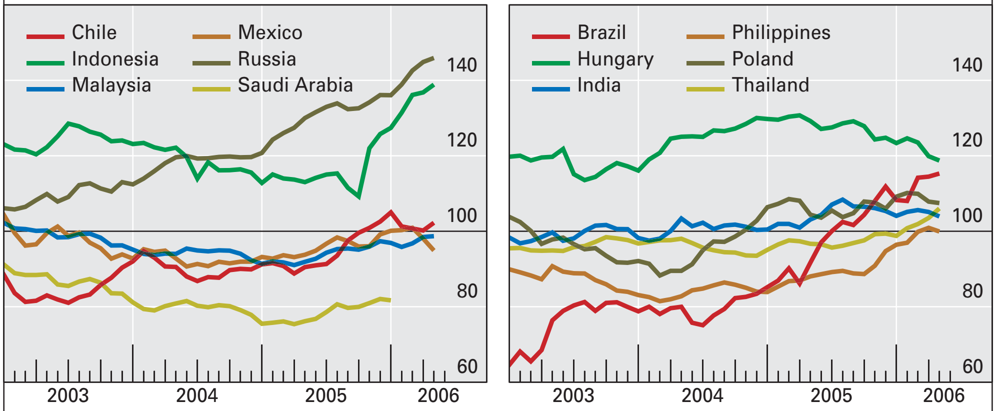
Some countries have allowed appreciation

The resolution of the policy dilemma cited above has varied considerably across countries and to some extent has depended on how each country's monetary policy regime has influenced responses to nominal exchange rate movements. Some countries, typically those with inflation targeting regimes, have opted for greater exchange rate flexibility. For example, among commodity exporters where appreciation pressures would be anticipated due to terms-of-trade gains, Brazil and Chile experienced significant nominal exchange rate appreciation between the beginning of 2005 and early 2006. This has been reflected in significant real effective exchange rate appreciation (Graph III.10). In contrast, other countries have opted for greater stability in nominal exchange rates, including Argentina and Russia, which maintain what might be described as hybrid monetary regimes, and Saudi Arabia and Venezuela, which have pegged exchange rates. However, except for Saudi Arabia, real exchange rates have still appreciated in these countries because of higher inflation. In Russia, the authorities have acknowledged the need to allow further nominal exchange rate appreciation in order to counter growing liquidity and to dampen excess demand.

Large-scale intervention in Asia

The authorities in China, and in much of the rest of Asia, have intervened on a massive scale for several years to moderate appreciation. Continued

Real effective exchange rates[1]



[1] 1998–2002 = 100; in terms of relative consumer prices. An increase indicates an appreciation.

Sources: National data; BIS. Graph III.10

heavy intervention took China's reserves to $875 billion by the end of April 2006. Oil exporters have added substantially to the stock of foreign financial assets held as official reserves (Table III.5). Elsewhere, the rate of accumulation of international reserves appears to have slowed from the heady pace recorded in 2003 and 2004. The extent of sterilisation has varied, but one way of gauging its potential impact on local financial markets is to measure reserves against outstanding public debt securities. Where this ratio is large, as in Asia, the possible distorting effects on domestic financial intermediation deserve close examination.

Efforts to curb excess liquidity

A number of countries have begun to use other instruments to help resolve the policy dilemma cited above. In the Baltic and southeastern European states, the authorities have resorted to direct instruments, such as increased reserve requirements and tighter prudential limits. In order to meet the

Foreign exchange reserves

	Outstanding position[1]				In relation to public debt securities[2]		
	2000	2004	2005	Apr 2006[3]	2000	2004	2005
Total emerging markets	973	2,094	2,487	2,679	39	59	64
Oil exporters[4]	110	282	386	443	26	61	78
China	166	610	819	875	–7	104	152
Other Asia[5]	529	962	1,003	1,060	103	100	93
Latin America[6]	88	111	121	124	12	13	10
Other emerging markets[7]	80	129	159	177	28	15	19

[1] At end of period; in billions of US dollars. [2] In per cent. Calculated as the ratio of foreign exchange reserves net of currency in circulation to outstanding government international and domestic debt securities. For Algeria, Egypt, Nigeria, Oman, Qatar and Venezuela, includes only international securities; for India, only domestic securities. [3] Or latest available. [4] Algeria, Egypt, Mexico, Nigeria, Oman, Qatar, Russia and Venezuela. [5] India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [6] Argentina, Brazil, Chile, Colombia and Peru. [7] The Czech Republic, Hungary, Poland, South Africa and Turkey.

Sources: IMF; BIS. Table III.5

Maastricht criteria and adhere to ERM II protocols, these countries are attempting to control inflation and maintain exchange rate stability. However, the use of direct instruments in these countries raises questions about possible inefficiencies and costs to the financial system.

Depreciation pressures

While the foregoing has focused on responses to appreciation pressures, some countries experienced episodes of significant pressures for depreciation in 2005 or the first quarter of 2006. For example, the Indonesian rupiah depreciated by 11% against the US dollar in August 2005 due to uncertainty about the fiscal burden of energy subsidies in the light of higher oil prices; the rupiah subsequently recovered. The Hungarian forint depreciated between February and early April 2006, also due to concerns about the fiscal and current account positions.

Consequences of policy responses

One question of interest is whether differences in monetary policy regimes, and in the attention paid to the exchange rate, can be shown to matter in terms of inflationary outcomes.

Inflation was moderate with inflation targeting …

As summarised in Table III.6, the answer is mixed. Inflation targeting regimes, in which the exchange rate has been allowed to float relatively freely, have typically delivered a moderate rate of inflation. Within this group, Korea shows few signs of consumer price inflation, while previously high inflation rates in Brazil and Turkey have successfully been lowered towards target. Inflation has fallen to within the target range for the first time since it was introduced in Mexico, and is in the target range in Chile. Both countries allowed the exchange rate to adjust and increased policy rates early. Similar outcomes have been observed in Colombia and Peru, which are also inflation targeting commodity producers.

Policy indicators under different policy regimes

Median of country data for 2004–05, except where indicated

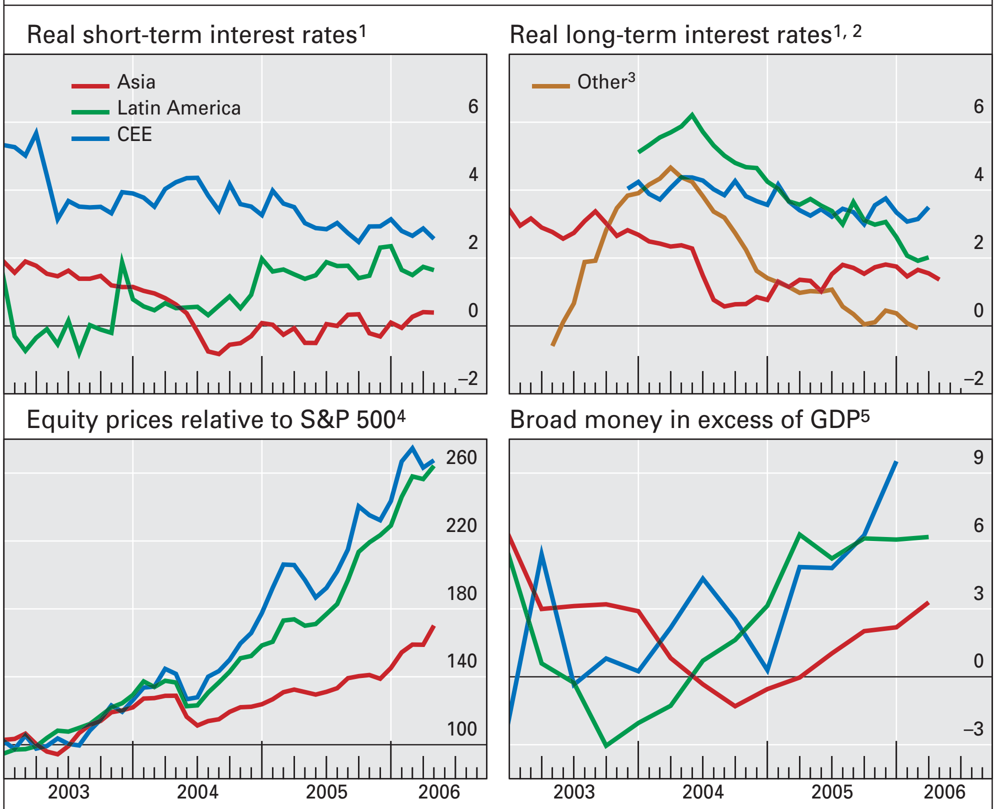
	Countries with:		
	Inflation targets[1]	Hybrid regimes[2]	Exchange rate targets[3]
Headline consumer price index[4]	3.9	7.0	2.9
Inflation relative to target/partner[5]	0.2	.	1.0
Real interest rate[6]	2.4	0.7	1.1
Nominal effective exchange rate[4]	3.8	0.2	–2.3
Foreign exchange reserves[4]	12.5	16.4	18.5
Private sector credit[4]	15.2	24.8	29.4

[1] Brazil, Chile, Colombia, the Czech Republic, Hungary, Korea, Mexico, Peru, the Philippines, Poland, South Africa, Thailand and Turkey. [2] Argentina, India, Indonesia, Romania, Russia, Singapore and Taiwan (China). [3] China, Estonia, Hong Kong SAR, Latvia, Lithuania, Malaysia, Saudi Arabia, Slovakia, Slovenia and Venezuela. [4] Annual changes, in per cent. [5] Divergence from the centre of inflation target ranges or from main partner's implicit target (1.8 for the euro area, 2.0 for the United States), in percentage points. [6] Central bank rate or short-term money market rate, deflated by one-year-ahead CPI inflation consensus forecasts, interpolated.

Sources: IMF; Bloomberg; © Consensus Economics; Datastream; national data; BIS calculations.

Table III.6

Financial market conditions



Note: Country groupings for Asia and Latin America differ between panels.

[1] Deflated by consumer prices; simple averages. [2] Government bonds with maturities close to 10 years, except for Brazil and Turkey (two to six years; primary issues) and Chile (central bank issues). [3] Israel, Russia and South Africa. [4] 1998–2002 = 100, in US dollar terms. Weighted averages based on 1998–2002 equity market capitalisation in US dollars. [5] Annualised rate of growth of broad money relative to GDP, in per cent. Weighted averages based on 2000 GDP and PPP exchange rates.

Sources: ECB; IMF; Bloomberg; Datastream; MSCI; national data; BIS calculations. Graph III.11

… even lower with pegged regimes …

However, median inflation for countries with fixed exchange rate regimes was even lower than for inflation targeting regimes. Both China and Saudi Arabia present interesting puzzles because consumer price inflation in both economies has remained very low in spite of rapid growth and signs of ample liquidity. Nevertheless, pegging does not always guarantee low inflation; a case in point is Venezuela, which maintains a fixed exchange rate and has experienced double digit inflation.

… and highest with hybrid regimes

Inflation was highest in countries with hybrid regimes which have not fully adopted inflation targeting or have no explicit nominal anchor. Some of these countries appear to attach a high weight to exchange rate stability, judging by the small change in the median nominal exchange rate. Compared to inflation targeters, countries with hybrid regimes have also experienced greater liquidity.

Among the countries in the hybrid group, inflation was in double digits in Argentina and Russia, where the nominal exchange rate was relatively stable. Their experience suggests that there are indeed risks associated with resisting appreciation in response to external shocks. In these countries, producer price inflation measures also show significant inflation rates in the pipeline. Administrative price agreements or controls mask a potentially more serious inflation problem.

Financial conditions have been easy

In spite of the steps towards tightening taken lately in some countries, recent external shocks and policy responses have been associated with generally easy financial conditions in emerging market economies. This can be seen in continued low real interest rates notwithstanding robust economic activity and significant increases in broad money (Graph III.11). But equity prices, which had risen sharply, fell steeply in May 2006 in several countries.

Inflation risks have increased

The main conclusion is that inflation risks in the emerging markets, while hard to read at present, have increased. Recent experience has also underlined how monetary policy can have implications for the financial system. Prolonged large-scale intervention or monetary easing to hold the exchange rate down can affect the structure of balance sheets in the private sector (especially banks), lower real interest rates, raise credit growth and encourage debt accumulation. The effects of the resulting imbalances, whether on inflation or growth, will take time to unfold fully but will become more significant the longer monetary stimulus is allowed to continue.