III. Emerging market economies

Highlights

Uncertainties about the prospects for the emerging market economies (EMEs) deepened during the period under review. Although growth in EMEs last year once again significantly exceeded that in the rest of the world, the potential knock-on effects of financial market turmoil in the major centres increased the risk of a slowdown in EMEs. In line with this, equity prices in many emerging markets, which rose strongly for much of 2007, weakened in the early part of 2008, suggesting lower growth expectations. At the same time, further steep increases in oil and food prices added to inflationary pressures. As in the advanced industrial economies, these conflicting forces have created a major dilemma for monetary policy. A further complication is that many countries are still resisting currency appreciation. Moreover, with the fall in US rates, interest rate differentials over dollar rates have widened. This has attracted additional capital inflows, making the task of monetary tightening in the face of rising inflation more difficult.

Developments in the advanced industrial economies could also pose major challenges. First, a pronounced slowdown in the United States would hurt the EMEs, which, though remarkably resilient so far, still depend significantly on external demand. Second, tighter conditions in global financial markets could constrain EMEs with large current account deficits and those relying on cross-border bank borrowing.

Macroeconomic developments

Robust growth ...

Growth in the EMEs as a whole was 7.7% in 2007, above the already rapid average pace of 7% recorded during 2003–06 (Table III.1). Current projections envisage growth of around 6.7% in 2008, notwithstanding the sharp slowdown in the industrial world foreseen in the consensus forecast.

... with downside risks

Continuing the pattern of recent years, the key driver of economic growth in all EME regions continues to be domestic demand, reflecting strong private consumption and investment spending (Graph III.1). Net exports have also made positive contributions to growth in China and other emerging Asia, but negative contributions in Latin America. How far growth in the emerging economies will be supported by robust domestic demand in the context of a US slowdown is a key question that will be addressed later in the chapter. In brief, risks to growth for EMEs are on the downside.

Rising inflation in breach of targets

With growth strong, CPI inflation rose sharply in the course of the past year in all major EME regions (Graph III.2). The pickup in inflation, which was particularly apparent in the second half of 2007, was greatest in Asia (with

Output growth, inflation and current account balance

	Real GDP[1]			Consumer prices[1]			Current account balance[2]		
	2003–06	2007	2008	2003–06	2007	2008	2003–06	2007	2008
Total EMEs	7.0	7.7	6.7	5.4	5.5	7.0	439	788	803
Emerging Asia	8.4	9.2	7.9	3.3	4.2	5.8	238	522	457
China	10.5	11.9	10.0	2.1	4.8	6.3	131	372	348
India[3]	8.9	8.7	7.7	5.5	4.6	6.0	–2	–15	–23
Other Asia[4]	5.2	5.8	4.9	3.7	3.0	5.0	109	166	132
Latin America	4.5	5.6	4.5	6.3	6.1	6.6	32	27	–10
Brazil	3.4	5.4	4.8	6.4	4.5	5.1	11	3	–22
Mexico	3.4	3.2	2.6	4.1	3.8	4.2	–6	–7	–11
Other Latin America[5]	6.9	7.9	5.9	8.1	10.0	10.6	27	31	23
Emerging Europe	6.1	5.6	4.6	7.3	5.6	7.1	–64	–119	–146
Poland	4.8	6.5	5.3	1.9	2.4	4.2	–8	–16	–24
Turkey	7.5	4.5	4.0	14.0	8.8	9.7	–20	–38	–45
Other emerging Europe[6]	5.7	5.9	4.8	5.0	5.0	6.7	–37	–65	–78
Russia	7.1	8.1	7.3	11.7	9.0	12.3	69	80	81
Africa[7]	5.9	6.3	6.3	7.1	6.3	7.5	11	2	22
South Africa	4.6	5.1	4.1	3.8	7.1	8.5	–9	–21	–21
Middle East[7]	6.1	5.8	6.1	6.6	10.4	11.5	151	275	398
Memo: G7	*2.4*	*2.3*	*1.4*	*2.1*	*2.1*	*3.0*	*–478*	*–457*	*–433*

Estimates for 2008 are based mainly on May consensus forecasts, except for emerging Europe and Russia. Forecasts for Africa and the Middle East are from the IMF.

[1] Annual changes, in per cent. Total and regional figures are weighted averages based on 2005 GDP and PPP exchange rates. Average of period, except Latin American inflation figures: end of period. [2] In billions of US dollars. Total and regional figures are the sum of the economies listed. [3] Data are for fiscal years beginning in April; inflation figures refer to wholesale prices. [4] Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [5] Argentina, Chile, Colombia, Peru and Venezuela. [6] Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia (FYR), Romania, Slovakia and Slovenia. [7] IMF *World Economic Outlook* regional grouping.

Sources: IMF, *World Economic Outlook*; © Consensus Economics; national data. Table III.1

year-on-year inflation accelerating from less than 3% to over 6% between late 2006 and April 2008), followed by Latin America (from 4.1% to 5.7%). Recent increases have brought inflation above formal or informal 2008 targets in 15 out of the 17 largest EMEs that announce such targets, and indeed well above informal targets in China and India. In Korea and Mexico, inflation has recently remained above the inflation target or hovered close to it. Large increases in inflation have also been recorded in many other countries, including Chile, the Czech Republic, Indonesia, the Philippines, Russia, South Africa and Thailand. In Brazil, where inflation has been within the target range, sharp rises in headline inflation (actual and forecast) raised concerns that the midpoint of the target range would be exceeded at the end of 2008.

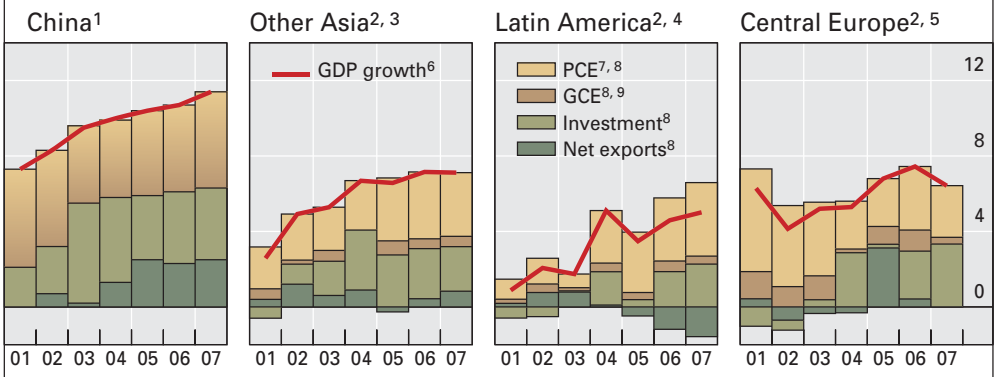
Higher inflation forecasts ...

Inflation forecasts for 2008 rose during 2007 in Asia, Latin America and other emerging markets (Graph III.2), ending an extended period in which such forecasts had generally remained stable. These higher forecasts probably reflect an interaction between rising wage inflation, expectations of further increases in the prices of food and energy, and demand pressures.

... could reflect wage increases ...

Wage trends in EMEs are hard to assess because of the lack of internationally comparable data. There are, however, signs of more rapid wage

Contributions to real GDP growth



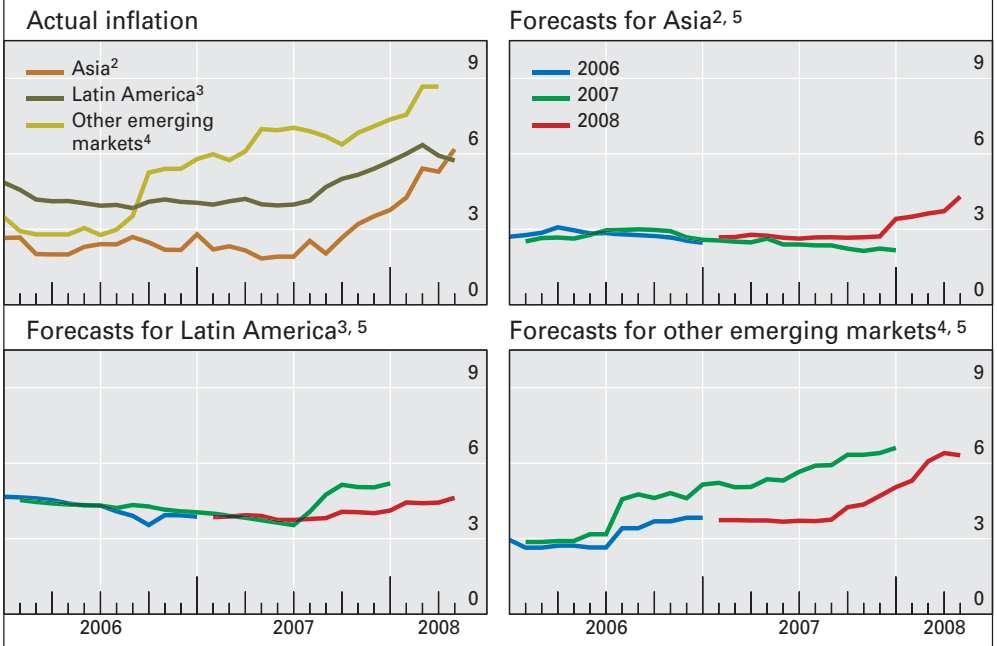
[1] A breakdown of consumption is not available. [2] Weighted average of the economies listed, based on 2005 GDP and PPP exchange rates. [3] Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [4] Brazil, Chile, Colombia, Mexico and Peru. [5] The Czech Republic, Hungary and Poland. [6] In per cent. [7] Private consumption expenditure. [8] In percentage points. [9] Government consumption expenditure.

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

increases in some of the largest EMEs. For example, annual wage growth has been in double digits in China, averaging 14.4% in 2001–06 and rising to 17.7% in the third quarter of 2007. This reflects not only demand pressures feeding into wage claims, but also structural changes, including rising minimum wages and new labour legislation that has strengthened contractual rights for

Consumer price inflation

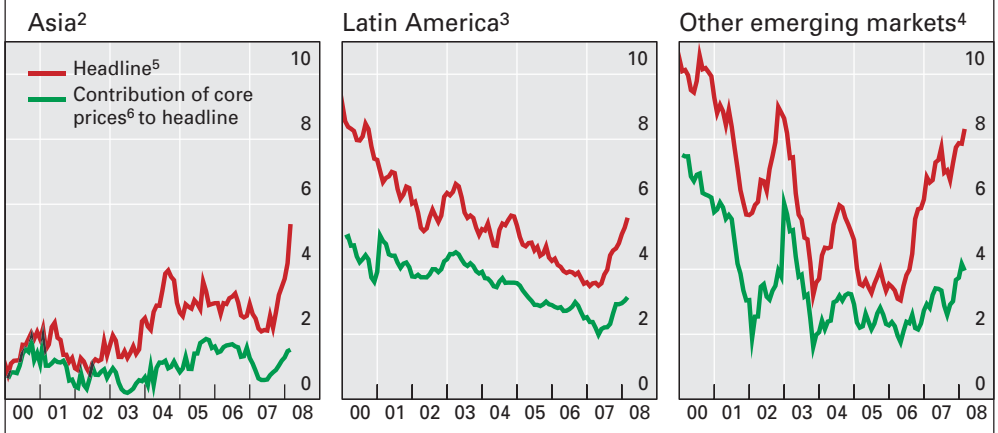
Annual changes, in per cent[1]



[1] Median of the economies in each group. [2] China, Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [3] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [4] The Czech Republic, Hungary, Poland, Russia, Saudi Arabia, South Africa and Turkey. [5] Consensus forecasts for year-average (for Latin America and Russia, year-end) inflation; observations are positioned in the month in which the forecast was made.

Sources: IMF; © Consensus Economics; national data. Graph III.2

Headline vs core inflation[1]



[1] Median of the economies in each group. [2] China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand; for India, wholesale prices. [3] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [4] The Czech Republic, Hungary, Poland, Russia, South Africa and Turkey. [5] In per cent. [6] CPI excluding food and fuel, in percentage points.

Sources: OECD; CEIC; Datastream; national data. Graph III.3

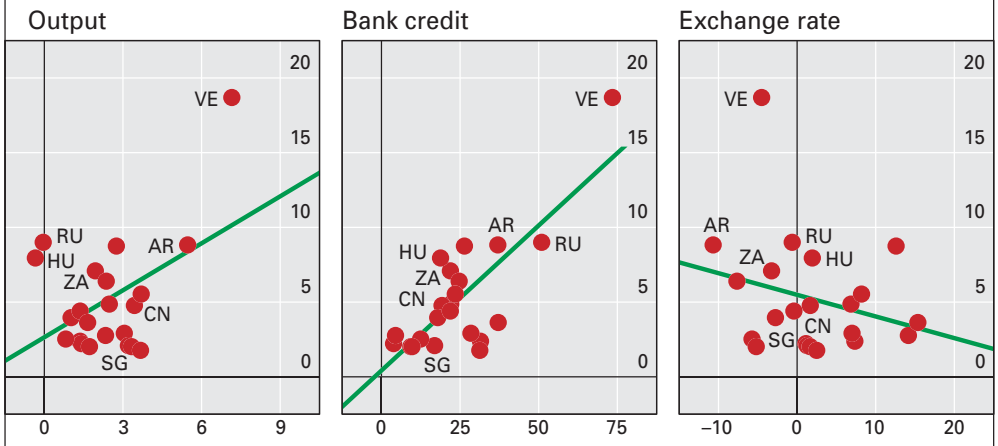
workers. In India, some private sector surveys indicate double digit increases in private sector salaries in recent years, and large adjustments to the salaries of government employees have also been proposed.

... expectations that inflation will persist ...

The upward trend in headline inflation may well be expected to persist. One reason is that increases in food and energy prices, which account for much of the rise in headline inflation in many countries, show no consistent signs of abating (see below). Another is that the underlying rate of inflation, as measured by core inflation, has also accelerated (Graph III.3). Core inflation

Inflation and possible drivers, 2007[1]

In per cent



AR = Argentina; CN = China; HU = Hungary; RU = Russia; SG = Singapore; VE = Venezuela; ZA = South Africa. The other economies shown are: Brazil, Chile, Colombia, the Czech Republic, Hong Kong SAR, India, Indonesia, Korea, Malaysia, Mexico, Peru, the Philippines, Poland, Thailand and Turkey.

[1] Horizontal axis: deviation of output from the Hodrick-Prescott trend, growth of bank credit and change in the nominal effective exchange rate (increase = appreciation) respectively; vertical axis: CPI (for India, wholesale price) inflation.

Sources: IMF, *International Financial Statistics*; national data; BIS calculations. Graph III.4

– that is, excluding food and energy prices – rose in all EME regions starting around the second half of 2007, with a median contribution to headline inflation of 2.5 percentage points early in 2008, against a headline inflation figure of 6.3%.

... and demand side pressures

A number of indicators suggest that demand pressures have also played an important role in EME inflation. While simple correlations need to be interpreted with caution, inflation has tended to be higher in countries where the level of real output has been above estimates of trend (Graph III.4, left-hand panel) or where GDP growth has been faster (not shown). Inflation has also tended to be higher in countries with rapid credit growth and where the exchange rate has appreciated by less (Graph III.4, centre and right-hand panels). As discussed below, an easy monetary policy stance and large-scale intervention in foreign exchange markets appear to have contributed to these outcomes.

Commodity price developments

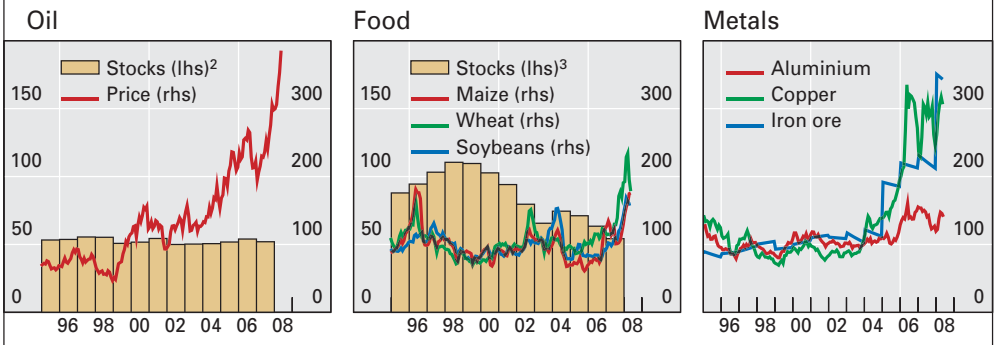
Rising commodity prices ...

Commodity prices have been on an upward trend since early this decade, showing particularly strong increases in the past two years. Rebounding from a temporary low in 2006, nominal US dollar oil prices rose 47% in 2007, and by early May 2008 had risen by a further 29%. Prices of food commodities, such as cereals and oilseeds (but also rice, which is not internationally traded in large volumes), have risen sharply since mid-2006. The performance of metal prices has been more mixed, but pronounced increases in copper and iron ore prices have also been observed (Graph III.5).

... reflecting strong global demand

The extended upswing in the prices of some major commodities in the present decade reflects persistent demand growth that has not been fully accommodated by increases in supply. On the demand side, relatively easy global monetary conditions have supported robust global economic growth. This effect has been reinforced by the US dollar depreciation in recent years, which has contributed to higher commodity prices measured in dollars.

Commodity prices[1]



[1] US dollar prices deflated by the export price of developed countries' manufactures in US dollars; 1994–2004 = 100. [2] Total stocks on land in OECD countries excluding government-owned stocks and stock holding organisation stocks held for emergency purposes; in days of forward demand. [3] Combined world grain stocks of maize, wheat and soybeans; in days of consumption.

Sources: International Energy Agency; IMF; BIS. Graph III.5

According to a recent IMF estimate, a 1% depreciation in nominal effective terms leads to an oil price increase in US dollars of more than 1% after one year. Another important driver of the demand for commodities has been the very rapid industrialisation of countries outside the OECD area, notably China and, more recently, India. On the supply side, a number of constraints, including delays in the expansion of production capacity and higher production costs, have also played a role.

Subsidies support oil demand ...

Some of these effects may be illustrated by developments in oil and food commodity markets. In the case of oil, global demand growth has averaged about 1.6% per year in this decade, but China's demand has grown at an annual average rate of 6.7%. As a result, the share of China in global oil demand now exceeds that of Japan and Korea combined and is approaching that of OECD Pacific countries (Table III.2). The demand for oil in EMEs has been supported by government subsidies, which shield the population from higher prices and encourage the development of certain manufacturing sectors (eg automobiles). In a number of EMEs, including China, India, Indonesia and Malaysia, and in Latin America and the Middle East, governments still subsidise energy consumption at the retail level.

... but oil supply is constrained

Even as demand has grown, supply constraints in some countries have boosted oil prices, despite increases in OPEC supply. According to current investment plans, Saudi Arabian production capacity is projected to increase from 10.5 million barrels per day (mb/d) in 2005 to 12.5 mb/d in 2009. By contrast, non-OPEC oil supply has been held back by the high costs of increasing capacity. For the four largest private sector oil companies outside OPEC, the cost of developing new oil reserves rose by between 45 and 70% over the period 2003–06. The costs of expanding production capacity for these oil companies are much higher than in Saudi Arabia or the United States. Overall spare capacity in the oil industry fell from around 5 mb/d in 2000 to a low of 1 mb/d in 2005, before recovering to 2.2 mb/d in 2007. Research indicates that low spare capacity contributes to higher oil prices. It limits the scope to increase production in order to offset rising demand pressures or disruptions to supply. It also means that larger oil stocks are required to smooth price fluctuations. However, global oil stocks have broadly remained

Global oil demand[1]

	World	North America[2]	OECD Europe[3]	OECD Pacific[4]	China	Rest of the world
1991–2000	1.4	1.4	0.9	1.8	7.6	0.5
		(30.5)	(20.2)	(11.6)	(6.3)	(31.3)
2001–07	1.6	1.3	–0.2	–1.1	6.7	2.8
		(29.8)	(17.8)	(9.6)	(8.8)	(34.0)

[1] Average annual percentage changes; the figures in parentheses indicate the percentage share of global oil demand at end of period. [2] Canada, Mexico and the United States. [3] Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey and the United Kingdom. [4] Australia, Japan, Korea and New Zealand.

Sources: International Energy Agency; OECD. Table III.2

stable since the early 1990s (Graph III.5, left-hand panel). The effects on prices have been exacerbated by geopolitical tensions and lower average oil inventories in some major oil-consuming countries.

Food demand boosted by rapid EME growth

In the case of food commodities, rapid GDP growth in EMEs in recent years has played a large role in boosting demand. This effect has been reinforced by structural changes, as rising per capita incomes, notably in China, have increased the demand for cereals, particularly for grain-fed livestock. According to Food and Agriculture Organization estimates, the consumption of cereals per person in developing countries rose by 20% between 1962 and 2003, while that of meat increased threefold. The demand effect on grain prices is amplified because, according to some estimates, two to five times more grain is required to produce the same amount of calories through livestock than through direct grain consumption. Around one third of global grain production was used to feed livestock in 2002. Government policies have also boosted demand for agricultural products. In particular, subsidies for biofuel production have increased the demand for maize and soybeans, which has in turn raised the prices of other food crops by diverting production away from them.

Policies limit food supply

On the supply side, urbanisation has reduced the acreage devoted to farming in some EMEs. Higher oil and gas prices have also raised the cost of both fertiliser and transport. Government policies in advanced industrial economies, including restrictions on agricultural land use to support prices, continue to limit production responses to increased demand. Finally, lower stocks have added to price pressures (Graph III.5, centre panel). Supply constraints have been particularly apparent for wheat, which experienced poor growing conditions in 2006–07, although conditions have recently improved.

Structural factors will support commodity prices

Are high commodity prices likely to persist? In the short run, slower growth in the United States will tend to reverse some of the recent spikes in commodity prices or at least dampen any further increases. However, commodity prices will be supported to the extent that the rapid growth in EMEs, and in particular China, can be sustained. The recent lowering of US interest rates also supports high commodity prices, and this effect will be reinforced if tight credit conditions in global markets eventually ease as expected. Over the medium term, some of the structural demand factors cited earlier, such as the continuing economic transformation of China and India, seem likely to persist. The above-mentioned supply factors and constraints (eg higher costs of agricultural and oil production) also appear likely to influence commodity price setting for some time to come.

External balances and capital flows

Current account surpluses, except in CEE and South Africa

The EMEs as a whole continued to run a current account surplus and receive net inflows of private capital in 2007. In emerging Asia, there was a further increase in the current account surplus to about 6½% of regional GDP, and in Latin America a slight decline in the surplus to about ¾% of GDP. The surplus of oil exporters in the Middle East remained at about 20% of GDP, while that of Russia fell to less than 6% of GDP. By contrast, in central and eastern Europe (CEE) and South Africa the deficit widened to 6½% and 7¼% of GDP

respectively. The major external surplus regions in EMEs in 2007 thus remained emerging Asia (with a surplus of $520 billion), the Middle East ($275 billion) and Russia ($80 billion), while the major deficit regions were CEE and South Africa, with a combined deficit of $140 billion (Table III.1).

Muted impact of turmoil

The effect on EME current account balances of the financial turmoil in advanced industrial economies and a slowing US economy has so far been muted by strong demand from other regions. Buoyant import demand in Europe and the Middle East supported growing surpluses in emerging Asia. Exports from Latin America, Russia and the Middle East benefited from the continued strength of commodity prices. In CEE, robust growth of consumption and investment, partly associated with solid growth in the euro area, boosted imports and helped build capacity for the future expansion of exports.

Net private inflows increased ...

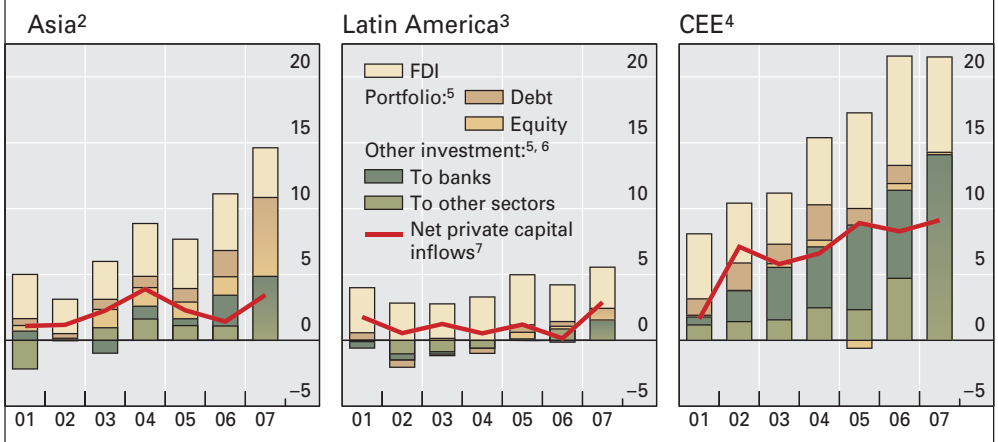
Global financial turbulence has not yet had any significant impact on private capital flows to EMEs either. *Net* private capital inflows (ie gross inflows minus gross outflows of private sector foreign direct investment (FDI), portfolio and other capital) increased by over 2 percentage points in emerging Asia for the whole of 2007 (to 3½% of regional GDP); by close to 2¾ percentage points in Latin America (to 2.9% of GDP); and by ¾ percentage point in CEE (to 9% of GDP) (Graph III.6). Thus, the overall macroeconomic pressures potentially stemming from capital inflows remained high in CEE, but more moderate in emerging Asia and Latin America.

... and gross private inflows remained strong

Trends in net private capital flows do not capture all information relevant for an analysis of macroeconomic and financial stability; therefore, it is also necessary to look at the size and composition of *gross* private capital inflows. These inflows continued to increase in 2007, albeit at a more moderate pace than in previous years. In emerging Asia, gross private capital inflows averaged

Composition of gross private capital inflows[1]

As a percentage of GDP



[1] Gross inflows are simple averages of the economies listed. [2] China, India, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. [3] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [4] Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia and Turkey. [5] For 2007, breakdowns of portfolio and other investment are not available. [6] Negative values indicate a decrease in foreign ownership of domestic assets classified under other investment inflows. [7] Regional totals as a percentage of regional GDP.

Sources: IMF, *International Financial Statistics*, *World Economic Outlook*. Graph III.6

nearly 15% of GDP in 2007 (Graph III.6, left-hand panel). This was close to levels seen before the 1997–98 crisis, even though the region is now running a large current account surplus. In Latin America, gross private inflows picked up from about 1% of GDP in 2002 to almost 6% on average in 2007 (Graph III.6, centre panel), close to the historical peaks of the early 1990s. In CEE, opportunities created by accession to the European Union have boosted gross private capital inflows to close to 20% of GDP on average (Graph III.6, right-hand panel), an unprecedented level for EMEs in recent history. As a result, this region now receives around 28% of gross private capital inflows to emerging markets (compared with around 10% in the mid-1990s); Latin America receives around 11% (against 25%); emerging Asia just under 50% (against 63%); and other emerging markets around 11% (against 2%).

FDI share fell while bank inflows boomed

The composition of gross private capital inflows to EMEs has changed over the past five years and now more closely resembles that prevailing in the mid-1990s. The share of FDI in gross inflows dropped to about 40% on average for all emerging market countries in 2007, from 90% in 2002, while the share of portfolio inflows doubled to around 20%. However, the fastest-rising category has been "other" investment inflows to banks and the non-bank private sector. Their share in gross private inflows increased from close to zero in 2002 to over 40% in 2007.

Cross-border bank claims on EMEs increased

For a better insight into these "other" investment inflows, it is useful to look at the BIS locational banking statistics. Cross-border claims of BIS reporting banks on EMEs were estimated at $2.6 trillion in 2007 (Table III.3), an increase of $1.6 trillion over the past five years. While emerging Asia and CEE secured the bulk of these inflows, relative to GDP they were much more important in the latter case, with the ratio of cross-border claims to GDP rising to 32%. The CEE countries are thus exposed to significant risks from a possible reversal in bank-intermediated capital flows.

Cross-border and domestic credit in emerging markets

	Cross-border claims of BIS reporting banks vis-à-vis emerging markets[1]				Domestic credit to the private sector[2]	
	In billions of US dollars		As a percentage of GDP			
	2002	2007	2002	2007	2002	2007
Emerging markets[3]	1,043	2,631	16.6	19.1	50.9	66.4
Claims on banks	647	1,604	10.3	11.6	.	.
Asia[4]	604	1,374	18.6	20.6	97.9	95.2
Claims on banks	486	1,010	14.9	15.1	.	.
Latin America[5]	233	350	15.1	11.1	32.2	39.5
Claims on banks	77	137	5.0	4.3	.	.
CEE[6]	121	599	16.5	32.2	25.7	54.7
Claims on banks	49	299	6.7	16.1	.	.

[1] External positions of reporting banks vis-à-vis individual countries on a residence basis; amounts outstanding. GDP data are IMF-WEO estimates. [2] The economies cited excluding Colombia, Israel, Peru and Venezuela. [3] The economies cited plus Israel, Russia, Saudi Arabia and South Africa. [4] China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. [5] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [6] Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia and Turkey.

Sources: IMF; national data; BIS locational banking statistics. Table III.3

At the same time as gross private inflows have risen, gross private *outflows* surpassed previous historical peaks in 2007, ranging from around 4½% of GDP on average in Latin America to over 14% of GDP in emerging Asia (Graph III.7). This surge in gross private capital outflows has been due mostly to purchases of foreign debt securities, particularly by emerging Asia, and outward FDI, which rose significantly in all three regions in 2007. Private capital outflows have also become more evenly distributed across categories. The share of FDI in gross outflows increased to 25% on average for all emerging market countries in 2007, from under 20% in 2002; that of portfolio outflows increased to over 40% (from 30%); and the share of other investment outflows decreased to 35% (from over 50%).

Gross private capital outflows surged ...

Gross private outflows from EMEs for the purchase of debt securities have increased by almost 1% of GDP per year on average since 2002. Private investors from Asia, and China in particular, accounted for about three quarters of these outflows. One notable feature is that a large share of these "private" investors are actually state-controlled entities. For example, in China such investors include large commercial banks which, while classified as private investors in official statistics, are majority state-owned.

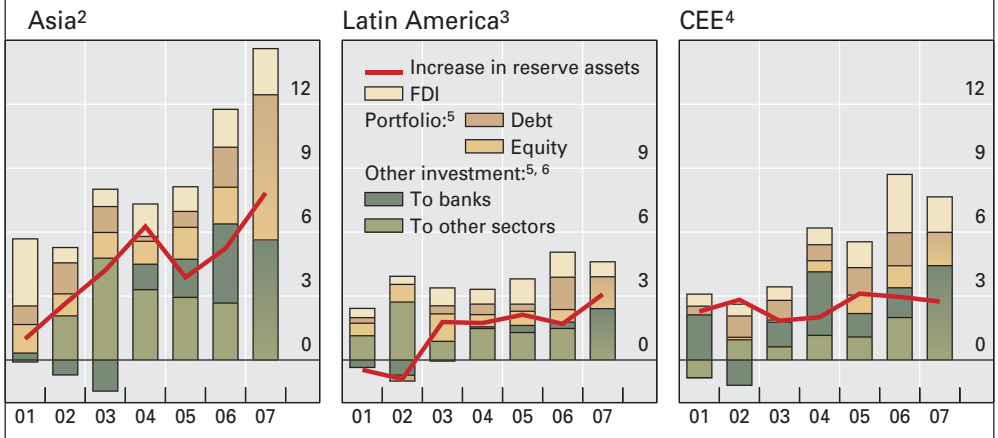
... particularly in Asia

In a number of EMEs, sovereign wealth funds are also large institutional investors abroad, and their importance has increased in the recent past. However, relatively little is known about some funds (especially the largest ones), and estimates of their growth and overall size vary widely. Moreover, it is not clear how these funds are classified in official statistics – as official or private investors. During 2007 and early 2008, sovereign wealth funds from China, Singapore and several Middle East countries made commitments to invest around $80 billion to recapitalise troubled financial institutions from Europe and the United States. If all sovereign wealth fund assets from

Sovereign wealth funds important

Gross private capital outflows and increase in official reserves[1]

As a percentage of GDP



[1] Simple averages of the economies listed. [2] China, India, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. [3] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [4] Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia and Turkey. [5] For 2007, breakdowns of portfolio and other investment are not available. [6] Negative values indicate a decrease in domestic ownership of foreign assets classified under other investment outflows.

Sources: IMF, *International Financial Statistics*, *World Economic Outlook*. Graph III.7

emerging markets – estimated at close to $2 trillion in 2007 – were invested abroad, they would account for almost 25% of foreign assets held by the public and private sectors (or 40% of foreign assets held by the private sector only) of emerging market countries in 2007.

Increase in foreign reserves

The increase in (notionally) *private* capital outflows into debt securities has come on top of substantial *official* capital outflows in the form of increases in foreign exchange reserves. In emerging Asia, official reserves have risen by an average of 4–6% of GDP annually in recent years (Graph III.7, left-hand panel), and in Latin America and CEE by 2–3% of GDP per year (centre and right-hand panels).

Policy responses

Faced with the conflicting risks of a global slowdown and rising inflation, as well as unwelcome pressure on exchange rates from large foreign currency inflows, policymakers in EMEs have had recourse to various policy instruments – adjusting interest rates, intervening in foreign exchange markets, changing capital account regulations, adjusting fiscal policy and tightening prudential regulations. Many of these choices have involved difficult trade-offs.

Moderate rise in policy rates ...

Reflecting these conflicting risks, the response of EME monetary authorities to higher inflation pressures has been quite diverse. Between mid-2007 and early 2008, median policy or short-term interbank rates rose in Latin America (by 50 basis points). Rates also rose in central Europe, South Africa and Russia, but fell in Turkey. In emerging Asia rates fell overall (Graph III.8, left-hand panel), as a result of lower policy or short-term rates in Hong Kong SAR, Indonesia and the Philippines. Furthermore, while the People's Bank of China raised one-year bank deposit and loan rates in 2007, short-term interbank rates remained relatively low. More recently, rising inflation pressures have led to rate increases in a number of EMEs.

... has led to declining real rates

There having been only limited increases in nominal policy rates, real policy or short-term rates have declined to around zero in Asia, and have also fallen in other emerging markets (Graph III.8, centre panel). The reluctance of many EMEs to raise policy interest rates more aggressively has been due in part to worries that higher policy rates would attract greater capital inflows and so accentuate pressures for currency appreciation. However, real exchange rates have appreciated significantly in many EMEs, countering the easing of monetary conditions caused by low real interest rates (Graph III.8, right-hand panel).

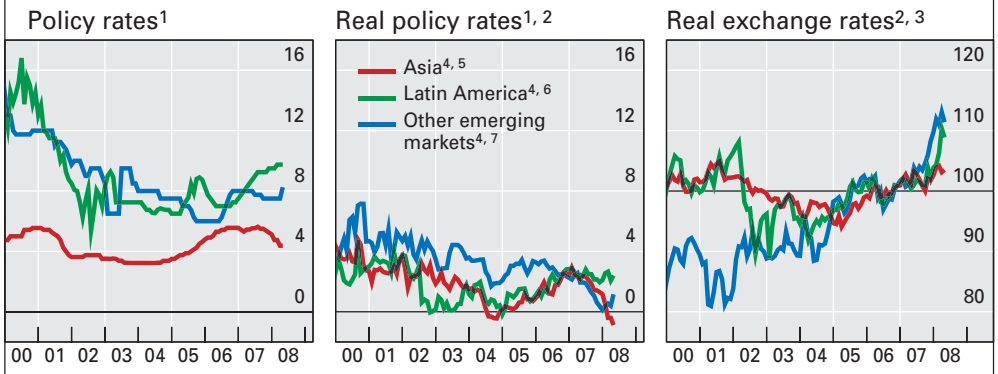
Large forex intervention ...

Concerns about appreciation pressures have also led to substantial and prolonged intervention in foreign exchange markets, as evidenced in rising foreign reserves. Foreign reserves of EMEs grew by over $1 trillion in 2007 (compared to $620 billion in 2006) to reach over $4 trillion at the end of the year, and they continued to rise rapidly in the early months of 2008. There were sizeable increases in foreign reserves in many EMEs, including Brazil, China, India and Russia among others (Graph III.9, left-hand panel; see also Chapter V).

... affects bank balance sheets ...

Other things equal, foreign reserve accumulation tends to increase the monetary base and ease monetary conditions. In order to prevent such easing, central banks take steps to limit or "sterilise" the monetary impact of foreign

Monetary conditions



[1] In per cent. For China, one-year lending rate; for Singapore and Venezuela, money market rates. [2] In terms of consumer prices. [3] In effective terms; 2006 = 100; an increase indicates an appreciation. [4] Median of the economies in the group. [5] China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [6] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [7] The Czech Republic, Hungary, Poland, Russia, Saudi Arabia, South Africa and Turkey.

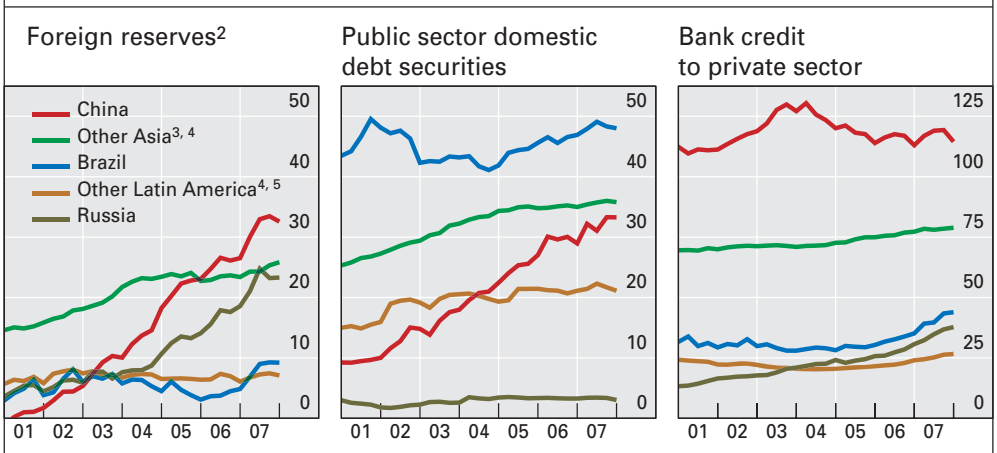
Sources: IMF; Bloomberg; BIS. Graph III.8

exchange intervention. Many EMEs have done this by issuing debt securities of various maturities (and in some cases, notably in China and India, by raising the reserve requirements on banks). Sterilisation is rarely complete, however, and some easing in money or credit conditions usually still occurs. The balance sheets of domestic commercial banks in some EMEs have in fact expanded dramatically, in some cases reflecting increases in reserve money that could be associated with the low interest rates cited earlier. In addition, the liquidity of bank balance sheets has increased as bank holdings of government paper have risen. These developments have contributed to the substantial growth of bank credit to the private sector, which has matched or exceeded rapid nominal GDP growth (Graph III.9, right-hand panel). For example, between 2005 and 2007, credit to the private sector grew at an annual rate of 29% in Latin America, 25% in India and 17% in China.

... exposing central banks to interest rate and exchange rate risks

Apart from affecting commercial bank portfolios, this massive expansion in foreign exchange reserves has increased the exposure of central banks (or governments) to losses associated with changes in differentials between domestic and foreign interest rates and in exchange rates. The substantial fall in the US federal funds rate since the second half of 2007 has widened the differential between domestic and US rates, implying that many central banks are facing running losses on foreign exchange reserve holdings financed by issuing domestic securities. As of April 2008, the median interest rate differential had risen to 1.1 percentage points in emerging Asia, 7.5 percentage points in Latin America and 6.6 percentage points in the other EMEs. In addition, the sharp depreciation of the US dollar against many EME currencies has led to valuation losses on foreign exchange reserves. Even assuming some diversification in the currency composition of foreign reserve holdings to include a strengthening euro, valuation effects since August last year must have been considerable. Losses on foreign reserve holdings can further complicate efforts to tighten monetary policy in response to rising inflation.

Reserves, debt and bank credit[1]



[1] As a percentage of GDP. [2] Net of currency. [3] Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [4] Weighted average of the economies listed, based on 2005 GDP and PPP exchange rates. [5] Argentina, Chile, Colombia, Mexico and Peru.

Sources: CEIC; Datastream; national data; BIS calculations. Graph III.9

More exchange rate flexibility

A number of EMEs have responded to pressures associated with large capital inflows by allowing greater exchange rate flexibility (Graph III.10). This approach has contributed to disinflation. In some cases, it also seems to have discouraged short-term speculative inflows (eg in Poland, South Africa and Turkey) by confronting market participants with two-way exchange rate risks. In contrast, in some other countries (including the Czech Republic, Indonesia and Slovakia), currency appreciation seems to have been associated with additional capital inflows, presumably on the expectation that the exchange rate would continue to appreciate.

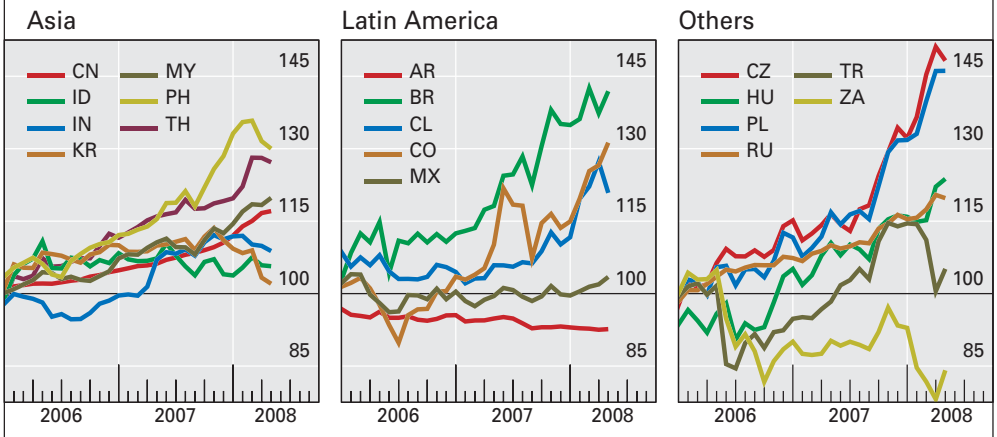
Controls on capital outflows ease, some controls on inflows

Several countries have resorted to capital account policies to cope with pressures associated with capital inflows. Some have eased controls on capital outflows: for example, China, India and Russia further liberalised their rules on residents' investment in foreign securities in 2007. The recent surge in China's private sector investments in foreign debt securities appears to be partly related to this move. In a few cases, countries have reintroduced selective controls on capital inflows (eg Brazil and Colombia). However, most countries have hesitated to do so because of the microeconomic distortions that such capital controls cause. Indeed, in March 2008 Thailand lifted the controls on capital inflows it had introduced in 2006.

Countercyclical fiscal policy

Another way to counter expansionary pressures arising from large capital inflows could be to tighten fiscal policy. However, such a move may produce two opposing effects on the exchange rate. On the one hand, as aggregate demand slows in response to fiscal consolidation, interest rates could fall, which would discourage capital inflows. On the other hand, in countries where the fundamentals are not particularly strong, fiscal tightening might reduce country risk premia, thus strengthening the currency and attracting further capital inflows. Possibly reflecting the relative importance of these effects, reliance on fiscal consolidation to curb appreciation pressures has varied from country to country. For example, in Chile public spending increases have

Exchange rate developments[1]



AR = Argentina; BR = Brazil; CL = Chile; CN = China; CO = Colombia; CZ = Czech Republic; HU = Hungary; ID = Indonesia; IN = India; KR = Korea; MX = Mexico; MY = Malaysia; PH = Philippines; PL = Poland; RU = Russia; TH = Thailand; TR = Turkey; ZA = South Africa.

[1] US dollars per unit of local currency; 2005 = 100.

Source: National data. Graph III.10

followed a fiscal rule which targets a structural fiscal surplus and requires that all surplus funds (which can be substantial when copper prices are high) be invested abroad. Similarly, several oil-exporting countries have relied on oil stabilisation funds to cope with rising oil revenues. Beyond the commodity-exporting countries, and some countries with fixed exchange rate regimes, fiscal tightening has not commonly been used in response to increasing capital inflows. Real government expenditure growth has actually accelerated over the past few years in Indonesia, Thailand, Latin America and central Europe.

Prudential measures to protect financial systems

In contrast, prudential and supervisory measures have been widely used to manage the impact of capital inflows on banking soundness and, more broadly, to offset the effects of rapid credit growth and rising asset prices (in particular house prices) on the domestic financial system. Several central banks in emerging Asia have used prudential instruments such as lower loan-to-value ratios (China, Korea), higher capital and provisioning requirements (India) and tighter lending criteria (Korea) to counteract the effects of capital inflows on the banking sector. CEE countries have, with some success, deployed an array of measures to mitigate the effects of bank-intermediated inflows, including raising risk weights on foreign currency loans, tightening foreign exchange liquidity requirements, lowering limits on open foreign exchange positions, and increasing reporting requirements and intensifying supervision of banks and other financial institutions. These measures have in some cases been combined with more traditional monetary policy tools, such as raising the level and broadening the coverage of reserve requirements.

Vulnerabilities of EMEs

The turmoil in the global financial system and the US slowdown are likely to hurt the economic prospects of the EMEs, but the question is how much.

So far so good: the experience to date

Growth forecasts are robust ...

As of May 2008, most forecasters were still optimistic about the near-term growth prospects for EMEs. While consensus forecasts for growth in the emerging markets in 2008 have declined in recent months, they still suggest that a marked degree of resilience is expected. The forecast for US growth in 2008 has fallen about 1 percentage point since September 2007, while the median forecast for emerging market growth has fallen only 0.2 percentage points over the same period (Graph III.11, left-hand panel). At 6.7%, the forecast for EME growth in 2008 is not far below the average for 2003–06. Regionally, forecasts for growth have declined in Asia and other emerging markets while remaining stable in Latin America.

... but should be treated with caution

Yet consensus forecasts tend to miss business cycle turning points, and by a larger margin when the downturns are particularly pronounced (eg during crises). Thus, if global developments were to cause a severe downturn in EMEs, it is possible that consensus forecasts would not predict it.

Equity prices give a mixed picture

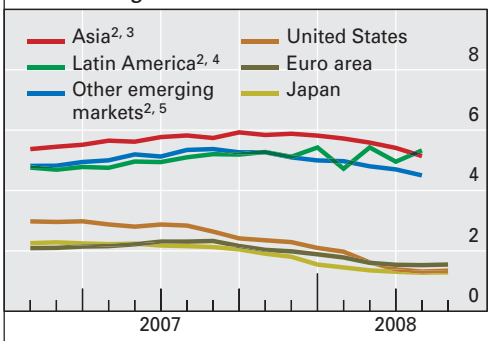
Equity markets provide mixed signals on the prospects for EMEs. In late 2007 or early 2008, equity markets weakened, even if high commodity prices supported individual regions, for example in Latin America (Graph III.11, right-hand panel).

In 2001, EME growth fell below average

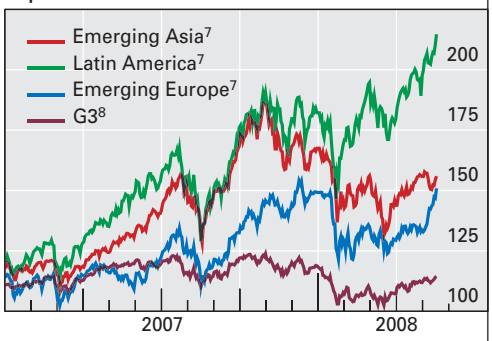
The historical experience of the US slowdown in 2001 suggests that downside risks for EME growth could be substantial. During that period, US growth declined to 2 percentage points below average as the high-tech boom collapsed. At the same time, US import growth fell to 15 percentage points below average. Exports of emerging markets were hard hit, especially those of East Asian economies whose exports were concentrated on the high-tech sector (Graph III.12, top panels). During the 2001 episode, a 1 percentage point below average growth rate in the United States was associated with a growth rate 0.6 percentage points below average in China, and even further

Growth forecasts and equity markets

Forecast growth in 2008[1]



Equities[6]



[1] Consensus forecasts; observations are positioned in the month in which the forecast was made; annual changes, in per cent. [2] Median of the economies in the group. [3] China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [4] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [5] The Czech Republic, Hungary, Poland, Russia, Saudi Arabia, South Africa and Turkey. [6] 2006 = 100, in US dollar terms. [7] Morgan Stanley Capital International equity indices; total return indices. [8] Weighted average of S&P 500, DJ EURO STOXX Broad and Nikkei 225, based on 2005 GDP and PPP exchange rates.

Sources: IMF; © Consensus Economics; Datastream. Graph III.11

below average in other Asian economies. In Latin America, the corresponding shortfalls ranged from 0.7 to 1.8 percentage points.

Growth today remains above average ...

However, the experience of 2001 appears thus far to differ from experience in the current episode. At the time of the US recession in 2001, the business cycle of emerging market economies appeared to be closely linked ("coupled") to that of the United States. In contrast, the recent US slowdown appears to date to have been associated with a much smaller decline in EME growth. Indeed, although slowing, EME growth has remained above average (Graph III.12, bottom left-hand panel) as US growth has faltered.

... supported by robust exports ...

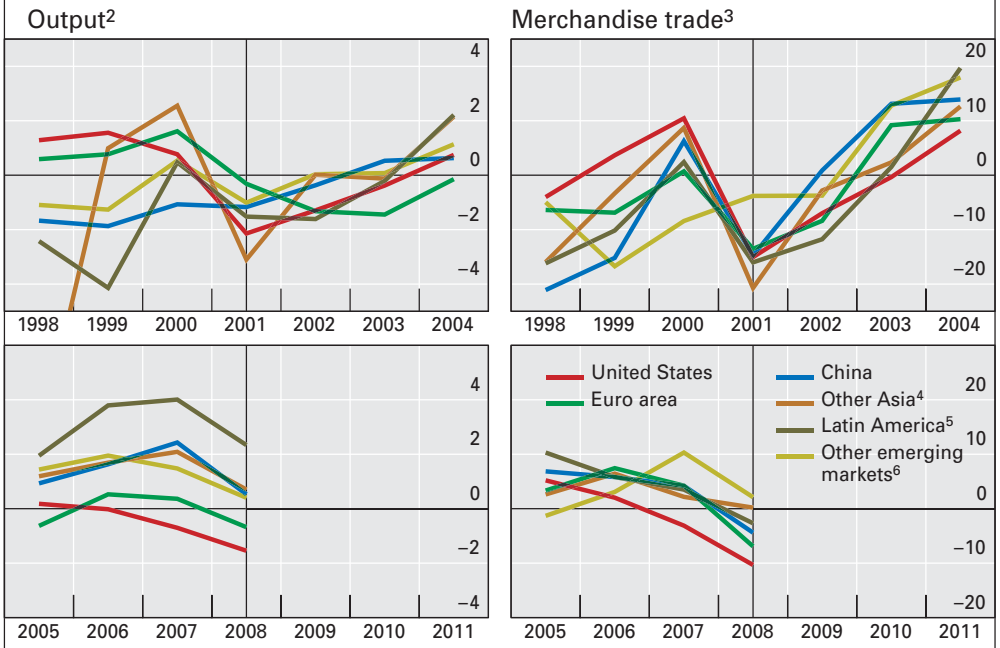
Two explanations can be offered for these differences in growth performance across the two periods. First, in contrast to 2001, emerging market exports continued to grow above their average rates in 2007 (Graph III.12, bottom right-hand panel), even if US import growth was below average. However, as discussed below, the risk of a more severe outcome nonetheless remains.

... and domestic demand

Second, EMEs have recently been able to counter the effects of any fall in demand for their exports by boosting their domestic demand more than in 2001 (Graph III.1). Compared to 2001, private consumption spending has risen more strongly in emerging Asia and Latin America. The contribution to growth of investment spending switched from negative in 2001 to a strong positive for Asia, Latin America and central Europe in 2007. Thus, there seems to be some growth momentum for domestic demand in most emerging market

Growth relative to trend[1]

In percentage points



[1] Deviation from average annual growth from 1998 to 2007; median of the economies in each group; estimates and consensus forecasts for 2008. [2] Real GDP growth. [3] Growth in nominal exports; for the United States and euro area, nominal imports. [4] Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [5] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [6] The Czech Republic, Hungary, Poland, South Africa and Turkey.

Sources: IMF; © Consensus Economics; national data; BIS calculations. Graph III.12

regions. This may partly explain why, in spite of increasing globalisation, research shows that the impact on EMEs of economic activity in advanced industrial economies has declined.

Three vulnerabilities can be identified

Although growth forecasts remain robust for EMEs for 2008, there are risks that this may not continue (see below). First, emerging market exports might weaken, possibly more than predicted by recent consensus forecasts. Second, there may be constraints on EMEs' ability to boost domestic demand to compensate for any weakening in exports. Third, EMEs with high current account deficits and high short-term debt, as well as those that rely heavily on cross-border bank financing, may be vulnerable to reversals of capital flows.

Resilience of EME export growth

Emerging market exports are vulnerable ...

Exports of EMEs could be significantly affected if the US economic slowdown deepens, for at least three reasons.

First, US markets remain important for emerging market exporters. For example, while the share of the United States in exports of Asian EMEs outside China has fallen, it remains sufficiently large – ranging from a low of 10% in Singapore to a high of 18% in Malaysia in 2007 – to ensure that total exports would be materially affected by a sharp reduction in US demand. The US share in China's exports is around 20%. As well as lowering direct demand for Chinese exports, a US slowdown could also reduce China's imports of intermediate goods and commodities from other EMEs that are used as inputs for export production. While China could offset the contractionary impact of a US slowdown by boosting its own domestic demand (see below), a concern raised in last year's *Annual Report* was that China has tended to import relatively little from other EMEs (notably in emerging Asia) for its own domestic demand. Thus, they would be little helped.

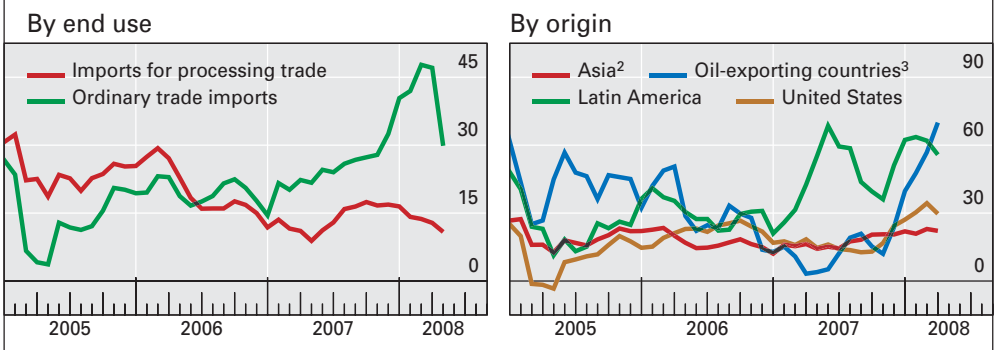
... and China might provide only partial support

Recent developments ease but do not fully dispel such concerns. For example, between September 2007 and February 2008, China's total import growth (in US dollars) accelerated from 16% to 35%, reflecting a steep rise in the growth of ordinary trade imports, which are more closely related to China's domestic demand. At the same time, the growth in imports for processing trade, which are directly linked to China's exports, fell (Graph III.13, left-hand panel). During this period, the growth in China's imports from Asia did rise, but at a much smaller rate than the growth in imports from oil-exporting countries or Latin America (Graph III.13, right-hand panel). As these figures refer to import values in US dollars, they should be interpreted with caution. However, they suggest that emerging Asian exporters could benefit relatively less from growth in China's imports outside the processing trade category. More generally, there is a risk that the growth in China's imports overall could slow down sharply should the US economy weaken further, with adverse consequences for its trading partners. This risk is highlighted by a distinct slowdown in China's imports in March.

Risks should growth in Europe slow

EME exports are also being supported by the greater resilience of EU imports and growth so far, compared to 2001. Any substantial deterioration in the growth outlook in Europe could adversely affect emerging markets (see Chapter II).

China's import developments[1]



[1] In US dollar value terms; three-month moving average of annual changes, in per cent. [2] Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [3] Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Russia, Saudi Arabia and the United Arab Emirates.

Source: Datastream. Graph III.13

Final goods exporters are vulnerable ...

Second, US demand could fall in those particular sectors in which EME exports are heavily concentrated, as occurred with Asian IT exports during the 2001 US recession. While to date the slowdown has been concentrated in the housing sector, falling US demand could yet reduce US imports of final goods produced by EMEs. A decline in US non-residential fixed investment in the first quarter of 2008 reinforces this concern. Admittedly, so far the overall data are favourable: the value of US total imports and those from EMEs increased up to the first quarter of 2008. However, US imports have fallen in some sectors that represent the top exports of EMEs. For example, the growth in imports of certain IT products that are important for a number of East Asian economies (eg Korea, Malaysia and Singapore) has declined. The growth in demand for consumer goods like toys and for certain heavy vehicles has also fallen, affecting producers in some EMEs, such as China and Mexico. As noted earlier, a more pronounced US slowdown, coupled with weaker growth in other advanced industrial economies, could also lead to weaker commodity prices, slowing growth in commodity-exporting countries in Latin America, Africa and the Middle East.

... and dollar depreciation poses risks

Third, dollar depreciation could reinforce the contractionary impact of a US slowdown on EME net exports. While US dollar appreciation against emerging market currencies in 2001 mitigated the impact of the US slowdown on EMEs, the dollar has depreciated considerably against many emerging market currencies since July 2007 and this could well continue. Moreover, a number of emerging market currencies have remained stable or depreciated on an effective basis (see Graph V.2 in Chapter V), suggesting that future appreciation might be warranted.

Resilience of domestic demand

Notwithstanding the increasing role of domestic demand in EME growth cited earlier, global conditions still pose some risks, as increases in consumption or investment spending to offset a slowdown could be constrained by a number of factors.

Lower exports could reduce domestic demand

One risk is that, by reducing prospective returns and incomes, lower demand for exports could reduce consumption and investment spending. In the case of households, the squeeze on incomes is being aggravated by higher inflation, particularly among commodity-importing countries. Furthermore, recent experience suggests that EMEs could find it difficult to raise investment to counter a slowdown in GDP growth. In some countries where investment spending has been strong, notably China, there are concerns about overinvestment. In other EMEs, investment growth has generally not exceeded the growth in GDP even during expansions. Since the late 1990s, investment-to-GDP ratios have risen only moderately in emerging Asia excluding China and India (recently averaging about 24% compared to over 40% in China) and in Latin America (averaging around 20%).

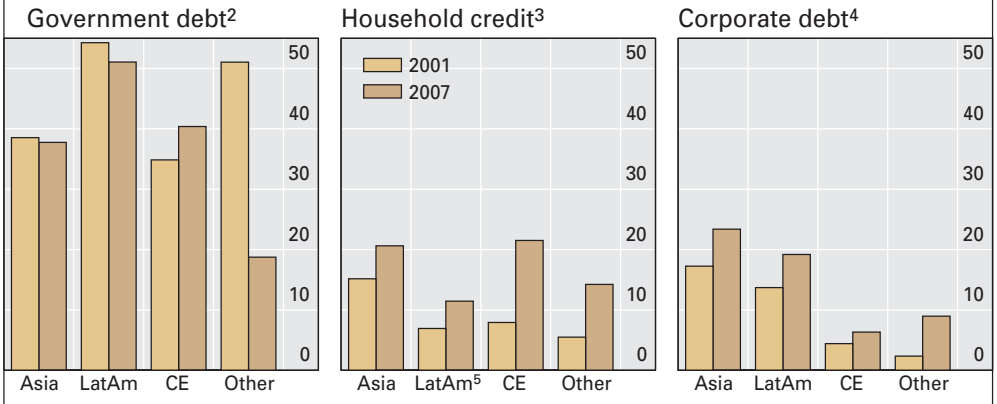
Scope for fiscal stimulus is sometimes limited ...

Another risk is that tighter financing conditions could constrain spending. While public debt as a percentage of GDP has generally fallen in this decade (Graph III.14, left-hand panel) and the fiscal balances of most EMEs have improved, fiscal positions would worsen in the event of a downturn, while the median public debt ratio in EMEs is still high at about 38% of GDP. Rising oil prices are also adversely affecting fiscal positions in a number of EMEs that subsidise energy. This could limit the scope to use countercyclical fiscal policy in the event of a sharp slowdown. In this setting, sovereign spreads remain well below the levels observed in past periods of financial turbulence, but are significantly higher than they were in the first half of 2007 (Chapter VI), highlighting the risks that financing constraints could become binding.

... and rising private debt could be a challenge

Household and corporate indebtedness has increased since 2001 (Graph III.14, centre and right-hand panels). While debt positions so far appear to be sustainable, tighter financing conditions could limit the scope for raising consumption or investment. In some countries, low debt ratios actually reflect a

Indebtedness[1]



Asia = China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand; CE = the Czech Republic, Hungary and Poland; LatAm = Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela; Other = Russia, South Africa and Turkey.

[1] As a percentage of GDP; weighted average of the economies listed, based on 2005 GDP and PPP exchange rates. [2] Gross (for China, net) debt. [3] Bank credit to households. [4] Debt securities issued by financial and other corporate issuers. [5] Argentina, Brazil, Chile and Mexico.

Sources: IMF; CEIC; national data. Graph III.14

lack of financial development and of household access to credit, so the ability to borrow to increase spending would be limited in any case. In other countries where household access to credit has improved, the rapid growth in credit in recent years poses risks (see below). As for the corporate sector, corporate bond spreads have recently widened more than sovereign spreads in a number of EMEs, indicating that some borrowers are starting to face tighter financing conditions after many years of easy borrowing.

Vulnerability to capital flow reversals

Some vulnerability to capital flow reversals

Despite some tightening of external financing conditions, the EMEs as a whole – with improved fundamentals, abundant reserves and large current account surpluses – appear to be less vulnerable to reversals in capital flows today than they were in the past. Nevertheless, two types of vulnerabilities to such reversals can be highlighted. First, EMEs with large current account deficits and a high proportion of short-term foreign debt could find it difficult to secure foreign funding if global financing conditions were to tighten more severely. Second, emerging market countries that depend heavily on cross-border bank financing are vulnerable to a withdrawal of such financing due to problems in banks both in advanced industrial economies and at home (see Chapter VII).

Countries that might find it particularly difficult to secure foreign funding if global financing conditions were to tighten further can be identified in the Baltic and southeastern European regions. These countries have very large current account deficits, only around half of which are covered by FDI, usually considered the most stable form of foreign financing (Table III.4). They are also burdened with a high proportion of short-term external debt (120% of foreign

Selected external vulnerability indicators, 2007

	Current account balance[1]	Net FDI inflows[1]	Net portfolio investment inflows[1]	Net other investment inflows[1, 2]	Short-term foreign debt[3]	Cross-border claims[4]
China	11.1	1.7	0.4	0.6	8.0	4.1
India	–1.8	1.1	2.9	5.3	29.3	21.1
Other emerging Asia[5, 6]	8.6	1.7	–1.7	1.4	44.3	72.8
Brazil	0.3	2.1	2.9	1.0	34.5	11.6
Colombia	–3.8	5.0	0.2	1.3	49.3	17.7
Mexico	–0.8	2.0	0.7	–0.4	38.4	27.2
Other Latin America[6, 7]	4.1	2.0	–2.0	–0.3	56.4	32.1
Central Europe[6, 8]	–4.4	2.3	–1.3	6.2	61.6	55.0
Other emerging Europe[6, 9]	–14.6	7.6	–0.9	11.8	119.2	75.8
Russia	5.9	0.3	–0.2	7.0	20.5	55.0
Middle East[6, 10]	14.9	0.9	–3.8	–1.8	52.6	61.4
South Africa	–7.3	0.9	4.2	2.6	55.1	14.8

[1] As a percentage of GDP. [2] Banks and other sectors. [3] As a percentage of foreign exchange reserves. [4] External positions of reporting banks vis-à-vis individual countries on a residence basis; amounts outstanding as a percentage of domestic credit. [5] Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. [6] Simple averages of the ratios of the economies listed. [7] Argentina, Chile, Peru and Venezuela. [8] The Czech Republic, Hungary, Poland, Slovakia and Slovenia. [9] Bulgaria, Croatia, Estonia, Latvia, Lithuania, Romania and Turkey. [10] Israel and Saudi Arabia.

Sources: IMF; BIS locational banking and securities statistics. Table III.4

exchange reserves on average). Furthermore, cross-border loans in these countries account on average for 76% of domestic credit. South Africa, with a current account deficit of more than 7% of GDP and a high reliance on portfolio inflows, is also in a relatively vulnerable position.

Bank inflows could reverse ...

In view of the turmoil engulfing banks in advanced industrial economies, the second major vulnerability in some EMEs concerns the sustainability of bank-intermediated capital inflows. Historically, bank flows have periodically been subject to sharp reversals, such as during the early 1980s in Latin America and during 1997–98 in emerging Asia. While the extent of foreign funding of domestic credit is fairly large in many emerging markets, it is considerably lower today than in the past. This is partly because of foreign-owned bank subsidiaries that increasingly fund themselves locally, rather than relying on "pure" cross-border credit as they did earlier.

One exception, as noted above, is central and eastern Europe. This region differs markedly from most other emerging markets in that external borrowing is rising in line with rapid economic and financial integration with the euro area and its banking systems are mostly foreign-owned (which is also true of Mexico). Most western European parent banks seem to have plans to sustain cross-border financing of their CEE subsidiaries, while gradually slowing credit to those economies that seem to be overheating. Moreover, Swedish, Austrian and Italian banks with a large presence in the region tend to take a long-term view of the growth opportunities in CEE, and have consistently sought to protect their franchises.

... if parent banks faced funding problems

Nevertheless, potential problems in either parent banks' home markets or the emerging economy host markets pose risks of capital inflows declining or even reversing. For instance, although the main parent banks in CEE have so far not experienced major losses on US subprime mortgages or structured products, they obtain a substantial part of their funding in foreign currencies in international wholesale markets. Thus, Swedish banks borrow euros and onlend these funds to their subsidiaries in the Baltic states, while Austrian and Italian banks borrow in Swiss francs and onlend these funds to their subsidiaries in central and southeastern Europe. If these wholesale markets dried up, the main suppliers of external financing to emerging Europe would come under funding pressure. Alternative sources of bank funding in emerging Europe are scarce. Moreover, domestically owned banks have limited capacity to raise funds externally, and even those that do (eg Russian banks) have seen their funding sharply reduced since August 2007. Locally, the growth of the deposit base has lagged behind credit growth in most countries in CEE for several years now, which was why CEE banks started to seek external funding in the first place.

Large multinational banks in small countries

Risks to banking flows in CEE countries are accentuated by the fact that the exposure of a parent institution to a host country is typically a much smaller fraction of its worldwide loan portfolio than is the exposure of the host country to a particular parent bank. Changes in lending policies that are modest from the perspective of the parent institution can thus have a major impact on macroeconomic and financial stability in the host country (see Chapter VII in last year's *Annual Report*).

Credit risk possibly underestimated

Bank-intermediated capital inflows could also come under pressure via another route in a number of emerging market regions as well as CEE. Bank credit to the private sector has expanded tremendously over the past five years – in Latin America by a cumulative 7 percentage points of GDP and in CEE by 30 percentage points. Such rapid credit growth could have overstretched the capacity of institutions to assess and monitor credit effectively, for instance due to shortages of qualified bank officers and institutional weaknesses that make it difficult for banks reliably to estimate credit risk or risk-adjusted returns, or to recover collateral. If so, banks will have to increase their provisioning when the underestimation of risk is finally recognised. This could lead the management of banks to conclude that return-on-equity targets (which are often quite ambitious in emerging markets) cannot be met and to curtail lending growth, possibly very suddenly.

Risks from rising house prices ...

Banks operating in emerging markets also face risks from exposure to the property market. House prices in several Asian EMEs (including China, Hong Kong SAR, India and Singapore), and in particular in emerging Europe, have increased rapidly in recent years. If asset quality deteriorates significantly, internal risk controls at banks could force a sharp reduction in credit to protect bank capital.

... and currency mismatches

A sudden drying-up of capital inflows could lead to major exchange rate corrections. This might have substantial balance sheet and wealth effects in countries with sizeable unhedged foreign currency liabilities. Most vulnerable in this respect are again countries in CEE, which have borrowed heavily abroad and where a large proportion of the recent credit growth has been denominated in foreign currencies. This exposure is suggested by the positive correlation between the change in the cost of insurance against a credit event in emerging markets (as measured by the increase in credit default swap spreads for sovereign debt since end-July 2007) and the degree of reliance on cross-border financing (as measured by the share of foreign liabilities in total liabilities of the banking sector at end-2007) (Graph III.15).

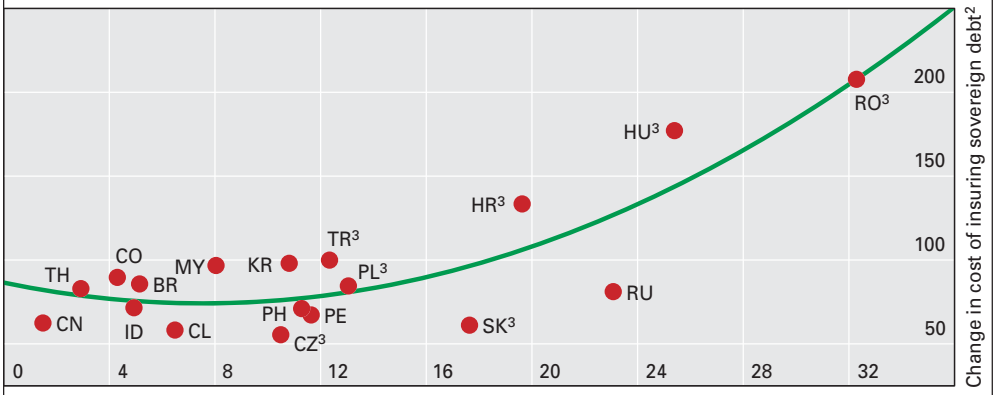
No broad retreat from EMEs yet ...

There are still no clear signs of a change in the behaviour of banks lending to emerging markets. Credit growth was sustained at a relatively brisk – though slowing – pace into early 2008. Nor is there any strong evidence of a dwindling in cross-border bank flows. In emerging Asia and Latin America, external funding pressures remained modest through the first quarter of 2008, partly because much of the financing for domestic credit growth has come from an expanding domestic deposit base. The resilience of domestic banking systems despite the global turmoil is reflected in the general stability of domestic currency interbank markets. Although backward-looking, prudential indicators such as capital adequacy, non-performing loan and provisioning ratios are mostly rather solid and stable in all three major emerging market regions, providing some buffer for their banking systems.

... although some EMEs have been affected

Developments have not been uniform, however. On the one hand, the performance of some market indicators (eg local currency bond spreads in Hungary, the exchange rates in Romania and South Africa) suggests that market participants are starting to take greater account of country-specific signs of vulnerability. The countries that have been affected most by the recent

Reliance on cross-border financing and cost of sovereign debt insurance



BR = Brazil; CL = Chile; CN = China; CO = Colombia; CZ = Czech Republic; HR = Croatia; HU = Hungary; ID = Indonesia; KR = Korea; MY = Malaysia; PE = Peru; PH = Philippines; PL = Poland; RO = Romania; RU = Russia; SK = Slovakia; TH = Thailand; TR = Turkey. Outlying observations (Argentina, Mexico, South Africa and Venezuela) are not shown.

[1] Foreign liabilities as a percentage of total liabilities of banking institutions at end-2007. [2] Increase in CMA five-year credit default swap premia (in US dollars except as noted) between end-July 2007 and mid-March 2008, in basis points. [3] Bonds denominated in euros.

Sources: IMF; Datastream; national data. Graph III.15

turmoil have been those with the largest internal and external imbalances and/or insufficient policy credibility, as well as those that had previously experienced strong capital inflows coupled with rapidly rising asset valuations and risks of overheating (eg Romania, Russia, South Africa and Turkey).

Other EMEs could experience further inflows ...

On the other hand, commodity prices and supply side factors continue to favour some emerging markets. Moreover, various supply side factors could also support further inflows. These include portfolio diversification by institutional investors in Europe and North America, the search for higher returns by retail investors in Japan and the recycling of oil-based surpluses by institutional or sovereign investors in the Middle East. In the short term, increasing concerns about asset quality in advanced industrial economies could even stimulate portfolio flows to some EMEs, in particular those with large external surpluses.

... but overall inflows to EMEs may fall

Nonetheless, a significant US-led economic slowdown would probably dampen most types of capital inflows to emerging markets. Sovereign and corporate bond issuance in global markets, and flows related to carry trades involving emerging markets, have already declined (see Chapter V). In addition to lower capital inflows, a slowdown in the advanced industrial economies would also lead to a decrease in workers' remittances. This could have particularly large effects in countries in Central America, Mexico, India and the Philippines, thus increasing their external financing needs relative to the more comfortable circumstances of the past few years.