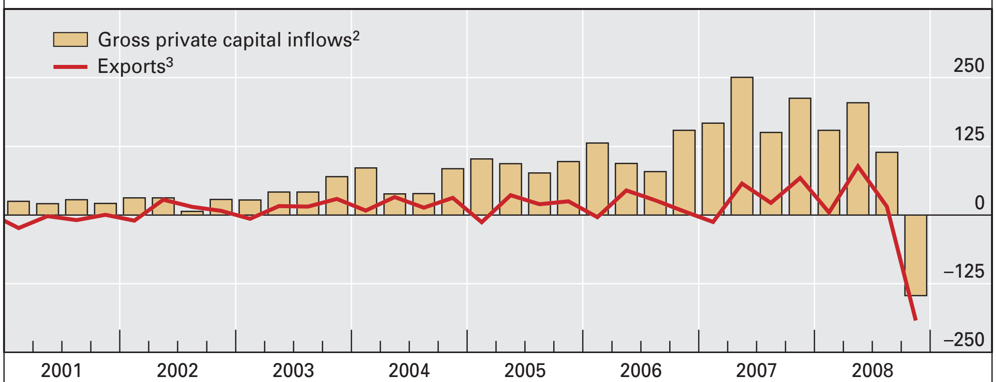
V. Fallout for the emerging market economies

The unfolding financial and economic crisis hit emerging market economies (EMEs) with full force in the final quarter of 2008. The bankruptcy of Lehman Brothers in September 2008 was followed by an unprecedented drop in export demand that coincided with a significant reversal in international bank lending and foreign portfolio investment. Exchange rates in many countries depreciated, equity prices declined and the cost of external financing rose sharply. Depressed consumer and investor spending in the advanced economies led to a slump in demand for EME exports, which reinforced the capital inflow reversal. An extended period of export-led growth supported by capital inflows thus came to an end (Graph V.1).

In examining these events, this chapter first sets the context by reviewing the pre-crisis period. Export-to-GDP ratios rose and investment – funded to a significant extent by foreign capital inflows – shifted to the tradable goods sector. In some major EMEs, notably China, this development was associated with very high saving that exceeded investment, resulting in large current account surpluses and reserve accumulation. In other EME regions, however, particularly in central and eastern Europe (CEE), current account deficits were large in spite of rapid export growth. Second, the chapter discusses some features of the recent downturn in economic activity in EMEs, and the difficulties encountered in boosting domestic demand. Third, drawing on BIS statistics, it discusses the sharp reversal in capital inflows, noting new vulnerabilities that arose because private sector external borrowing in EMEs remained high even when public sector external borrowing had declined.

Private capital inflows and exports[1]

In billions of US dollars



[1] Brazil, Chile, Chinese Taipei, the Czech Republic, India, Indonesia, Korea, Mexico, the Philippines, Poland, Russia, South Africa, Thailand, Turkey and Venezuela. [2] Foreign direct investment, portfolio investment and other investments in the respective economies. [3] Merchandise exports (fob), change over previous quarter.

Sources: IMF; CEIC; Datastream; national data. Graph V.1

Finally, it discusses two elements that have supported EME economic activity since the start of the crisis: foreign currency liquidity and resilient domestic credit.

Before the crisis

Strong but unbalanced growth

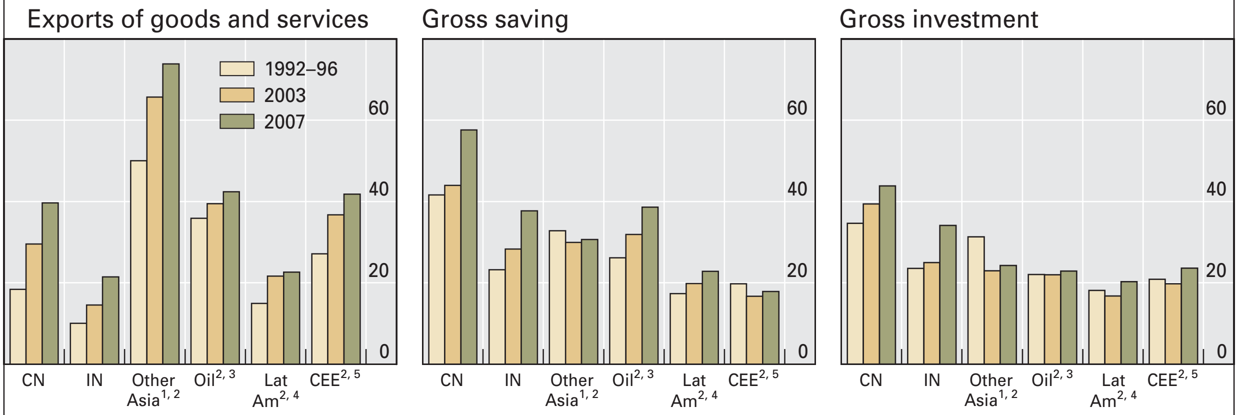
Before the onset of the crisis, EME growth had been very strong, but the structure of that growth planted some of the seeds of the recent downturn. From 2003 until mid-2008, most emerging economies experienced robust, export-led growth that was associated with increased gross saving and attracted large capital inflows. Foreign exchange reserves accumulated on an unprecedented scale, and economic and financial integration with the advanced economies proceeded rapidly and became more complex. In particular, the global integration of production chains made many EMEs more dependent on exports than they had been a decade or so earlier. In addition, the EMEs' financial sectors became more closely integrated with those of the advanced economies and dependent on them as a source of investment opportunities or, in some cases, net external finance.

Exports became more important

For the emerging markets as a group, real GDP growth accelerated to an average of 7.4% per year during 2003–07 from 6.0% during 1992–96, the period leading up to the Asian crisis. Much of this acceleration in growth came from improvements in production efficiency that reflected greater competition and the technological spillovers associated with increased exports. In China and India in particular, the ratio of exports to GDP was as much as 100% higher in 2007 than the average for 1992–96 (Graph V.2, left-hand panel). In other economies in emerging Asia, exports rose from already high levels to about 75% of GDP in 2007, and in CEE to more than 40% of GDP.

Exports, saving and investment

As a percentage of GDP



CEE = central and eastern Europe; CN = China; IN = India; LatAm = Latin America; Oil = oil exporters.

[1] Chinese Taipei, Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. [2] Weighted average of the economies listed, based on 2005 GDP and PPP exchange rates. [3] Algeria, Azerbaijan, Iran, Kazakhstan, Kuwait, Libya, Nigeria, Oman, Qatar, Russia, Saudi Arabia, the United Arab Emirates and Uzbekistan. [4] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [5] Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Turkey.

Source: IMF, *World Economic Outlook*. Graph V.2

The growing importance of exports for EMEs led to a significant shift in the structure of fixed investment. In Brazil, China, India, Korea and Poland, the average per-country investment in gross fixed capital in the tradable sectors (agriculture, mining and manufacturing) increased by 3.2 percentage points between 2003 and 2007, to 39% of total fixed investment. By comparison, in the first half of the 1990s tradable industries had accounted for about 28% of total fixed investment in China (vs 36% in 2003–07) and about 19% in Brazil (vs 56% in 2003–06).

Greater share of global gross saving …

While the EMEs were becoming much more important in global trade, they were also becoming a key source of global saving (see Chapter IV). In gross terms, the share of EMEs in global saving rose from 25% in 1992–96 to 30% in 2003 and 40% in 2007. In comparison, the EME share of world GDP did not rise quite so rapidly, moving from 21% in 1992–96 to 31% in 2007.

… but large differences across regions

Saving-investment balances differed notably across EME regions in the 2003–07 period. In China, gross saving exceeded gross investment by a large margin: the saving rate reached 58% of GDP in 2007 even though China also maintained one of the highest investment rates in the world (44% of GDP in 2007; Graph V.2). Enterprises kept a growing portion of after-tax profits, and households upped their saving partly as a precaution against the diminishing social safety net. India saw a sharp rise in the saving rate as well, but the gain was more than matched by the increase in the investment rate. Other Asian emerging economies saw only a modest rise in saving and investment rates between 2003 and 2007, with both remaining below the levels preceding the Asian crisis (Graph V.2).

In contrast, in CEE (as well as in South Africa), gross investment exceeded gross saving by a wide margin, resulting in current account deficits of 5–7% of GDP for the region as a whole. These deficits were financed by relatively large private capital inflows – in this respect, CEE was similar to emerging Asia before the 1997 crisis. Another similarity between CEE and emerging Asia was the widespread use of foreign currency loans by borrowers without foreign currency income. However, there were also some important differences between the two regions. In particular, CEE countries opened their banking systems to foreign ownership and as EU members or candidates aligned their institutions, laws and governance practices with those of the European Union. CEE thus entered the current crisis with a legal, regulatory and supervisory framework that was stronger than emerging Asia's in 1997.

Large two-way capital flows

Finally, as a complement to EMEs' increased role in global trade and saving, their financial sectors rapidly integrated with those in the advanced economies. Foreign private portfolio investment in emerging market financial assets and cross-border lending by banks from advanced economies both increased significantly in the period preceding the current crisis. Gross private capital inflows to EMEs thus rose from 4% of their combined GDP in 2003 to 10.7% in 2007 (Table V.1), compared with an increase from 4.7% to 5.7% of GDP between 1992 and 1996. At the same time, companies from Brazil, China, India, Korea, Russia and several other EMEs became major direct investors in many advanced and developing countries. In addition, China, the oil-exporting countries and several other EMEs invested part of their official reserves

Gross private capital flows to and from emerging markets[1]

As a percentage of total GDP

	Annual average		2003	2007	2008
	1992–96	2003–07			
Total inflows	5.1	6.6	3.9	10.7	3.5
Direct investment	1.6	2.7	1.9	3.4	3.3
Portfolio investment	2.9	1.8	1.1	2.6	–0.3
Other investment	0.6	2.0	1.0	4.8	0.5
Total outflows	2.0	4.8	2.3	7.3	3.7
Direct investment	0.3	0.9	0.3	1.5	1.2
Portfolio investment	1.2	2.0	1.0	2.6	0.8
Other investment	0.6	1.8	1.1	3.2	1.7
Memo: Current account balance	*–1.7*	*3.9*	*2.3*	*4.6*	*4.4*
Change in reserves[2]	*–1.2*	*–5.5*	*–3.9*	*–7.8*	*–4.3*

[1] Algeria, Argentina, Azerbaijan, Brazil, Bulgaria, Chile, China, Colombia, Croatia, the Czech Republic, Estonia, Hungary, India, Indonesia, Iran, Kazakhstan, Korea, Kuwait, Latvia, Libya, Lithuania, Malaysia, Mexico, Nigeria, Oman, Peru, the Philippines, Poland, Qatar, Romania, Russia, Saudi Arabia, South Africa, Thailand, Turkey, the United Arab Emirates and Venezuela. [2] A minus sign indicates an increase.

Source: IMF, *World Economic Outlook*. Table V.1

(including through investment vehicles such as sovereign wealth funds) in the bonds and equities of advanced economies. Gross private capital outflows from EMEs thus rose from 2.3% to 7.3% of GDP between 2003 and 2007 (Table V.1), compared with an increase from 1.5% to 2.5% of GDP between 1992 and 1996.

Foreign reserves accumulated

The large capital inflows together with large current account surpluses led to strong appreciation pressures on many emerging market currencies. Until about 2007, concerns about appreciation had also led to substantial and prolonged intervention in foreign exchange markets, which resulted in large increases in foreign reserves. Foreign reserve growth in the larger EMEs accelerated from $0.3 trillion in 2003 to over $1 trillion in 2007, an unprecedented amount, but then slowed considerably in 2008 to $0.4 trillion, most of which was in China. However, as discussed below, foreign reserve holdings declined sharply in a number of EMEs after reaching peaks in 2008. Foreign reserves in EMEs stood at over $4.3 trillion in January 2009.

Domestic liquidity increased

Until the first half of 2008, very large foreign reserve accumulation was associated with increases in liquidity that were to varying degrees offset by sterilisation or the sale of government securities to the public. On balance, monetary conditions eased significantly, as reflected in low real interest rates and rapid growth in bank credit to the private sector. Real interest rates in Asia and Latin America fell between 2001 and 2005, to close to zero or lower, although they subsequently rose. Growth in domestic bank credit to the private sector in EMEs averaged over 23% per year in 2006 and 2007, with particularly rapid increases observed in Latin America (over 30%), CEE (24%) and Russia (nearly 50%). While credit growth had slowed significantly by the end of 2008, it remained close to 20% or higher in Latin America, India, Indonesia, CEE and Russia. One factor behind the increased liquidity was low interest rates in the advanced economies. In particular, many EMEs were reluctant to raise policy rates when inflation was rising in 2007 and 2008, because of worries that higher policy rates would attract greater capital inflows and accentuate appreciation pressures.

Severe shock to the real economy

Partly protected by their relatively robust financial positions, including large foreign reserves (see below), EMEs were generally not severely affected by the global financial crisis between August 2007 and mid-2008. However, they have since been increasingly affected by two developments in the real economy: the fall in demand from industrial countries for consumer durables and the sharp decline in commodity prices.

Contracting economic activity

Collapsing growth in advanced economies led to a sharp contraction in economic activity in EMEs in the fourth quarter of 2008, with double digit declines in exports and industrial production and marked slowdowns in retail sales (Graph V.3). The synchronised fall in exports intensified in the first quarter of 2009 with an average year-on-year decrease of around 25% in a set of larger EMEs. In some commodity-exporting countries, notably Chile and Russia, exports fell by more than 40% in the first quarter of 2009.

Falling demand for consumer durables …

The decline in spending on consumer durables in advanced countries over the second half of 2008 (see Chapter IV) has sharply reduced EME exports of automobile and information technology (IT) products. The automobile sector accounts for a significant share of GDP in a number of EMEs (3% in Turkey, 6% in Mexico, 8% in Korea and Thailand, and more than 10% in central Europe) and exports have declined rapidly, eg by 45% in Mexico in February 2009 and 54% in Turkey in the first quarter of 2009. The IT sector is especially important for East Asia and was largely responsible for the slowdown in the region during the 2001 US recession. In the current downturn the inventory-to-sales ratio of electronic goods has risen sharply in East Asia, and exports and production have decreased. For example, Korean IT export growth fell for six consecutive months, and the year-on-year decline for March 2009 was about 27%. The inventory-to-sales ratio for Korean IT products rose from 104% in September 2008 to a peak of 129% in December 2008 before falling to 93% in February 2009.

… and declining commodity prices

Turning to commodities, prices fell sharply as world growth slowed. Between July 2008 and March 2009, oil prices dropped by 65% and non-oil commodity prices by 34%. This has benefited commodity importers by increasing disposable income and reducing costs. However, commodity exporters have experienced declining incomes, which would tend to reduce demand and growth. For example, commodities make up more than 40% of total exports in Latin America (over 20% in Mexico). Recent IMF estimates imply that the 30% drop in commodity prices between July and December 2008 could reduce regional growth in Latin America by over 2 percentage points. The recent rebound in commodity prices (roughly 19% since the trough in December) may, however, help cushion any further declines in growth.

Economic activity

Annual changes, in per cent

[1] Merchandise exports (fob) in current US dollars. [2] For Indonesia and Venezuela, oil production. [3] In volume terms (for China, Mexico, Russia and Thailand, value data deflated by the consumer price index (CPI)); India, Malaysia, Peru, the Philippines and Turkey are excluded from the regional aggregates. [4] Weighted average of the economies listed, based on 2005 GDP and PPP exchange rates. [5] Chinese Taipei, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. [6] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [7] The Czech Republic, Hungary, Poland, Russia, South Africa and Turkey.

Sources: International Energy Agency; IMF; Bloomberg; CEIC; Datastream; national data. Graph V.3

Inflation fell

The plunge in commodity prices and the increased economic slack resulting from the sharp slowdown in growth have reduced the high rate of EME inflation, which is forecast to decline from 6.0% in 2008 to less than 5% in 2009. Headline and core inflation have fallen abruptly in Asia (Graph V.4), and underlying inflation in China and Thailand has exhibited deflationary tendencies in recent months. In China, the loss of foreign export markets has created overcapacity that has added to the downward pressure on prices. By contrast, inflation showed more persistence until early 2009 in Latin America and Russia. In some countries (eg Mexico and Russia), inflation concerns have been accentuated by depreciation pressures, a combination that poses a dilemma for monetary policy.

Prospects for recovery

Export dependence could slow recovery

The experience of the 20th century indicates that trade expansion will be needed to bring about a robust global economic recovery. In particular, export growth played an important role in recoveries from the emerging market crises of the 1990s, and research suggests that increased trade boosts economic growth over the medium term.[1] However, the heavy reliance of EMEs on external demand could delay recovery this time. One reason is the unprecedented severity of the import decline in advanced economies. For example, US imports are forecast to fall at double digit rates in 2009 (compared to 3% during the 2001 US recession). The corresponding forecast declines for the euro area and Japan are also in double digits. Another reason is that the scale of borrowing in advanced economies that had supported imports

[1] See J Frankel and D Romer, "Does trade cause growth?", *American Economic Review*, vol 89, no 3, June 1999, pp 379–99.

Inflation[1]

Headline Core[5]

[1] Annual change in consumer prices, in per cent; median of the economies listed. [2] China, Chinese Taipei, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand; for India, wholesale prices. [3] Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [4] The Czech Republic, Hungary, Poland, Russia, South Africa and Turkey. [5] CPI excluding food and energy.

Sources: IMF; OECD; CEIC; Datastream; national data. Graph V.4

from EMEs in the past proved unsustainable. In the future, increases in developed country imports may need to be associated with higher exports to EMEs. More generally, deleveraging and the correction of global current account imbalances imply that saving has to rise or investment spending to fall in some advanced economies, and the reverse in some EMEs. This kind of adjustment may take time.

Limited ability to boost domestic demand

The outlook for recovery in EMEs also depends to a large extent on whether domestic demand is sufficiently resilient to offset the slowdown in demand from advanced economies. As noted in last year's Annual Report (Chapter III), there are a number of issues in this regard. In spite of robust growth and efforts by some EMEs to boost real consumption or investment spending, their share of GDP has generally not risen in this decade. During the current downturn, the ability to support consumption and investment spending will depend in part on the scope for countercyclical monetary and fiscal policies (see Chapter VI), which is limited in many EMEs. Furthermore, lower exports will tend to constrain investment and consumption spending by reducing prospective returns and incomes. So far, indicators of consumer and business sentiment in EMEs have declined sharply and retail sales have fallen in most EMEs.

What role for China?

China's apparent success in boosting domestic demand through fiscal stimulus measures and rapid domestic credit growth could help support the demand for exports in other countries. During the 2000s, the emergence of China as a global manufacturing hub has generated very large imports of intermediate and capital goods from other EMEs to produce final goods for export. However, the fall in demand for China's exports from the advanced economies has reduced China's demand for such imports. Other Asian EMEs are particularly affected, as China accounts for 20% of their exports on average. The extent to which China could offset this reduction by increasing its imports for domestic consumption appears to be limited. On the one hand, in response to the significant stimulus provided, China's growth is expected to remain relatively high in 2009. In spite of a double digit decline in export revenues, industrial production growth has remained positive, retail sales growth has been robust (Graph V.3) and growth in credit has accelerated. On the other hand, some research suggests that China's propensity to import for its own domestic demand is small. Indeed, China's imports other than for export processing fell sharply in the last quarter of 2008, and have shown no recovery to date.

Looking ahead, considerable uncertainty surrounds the outlook for EMEs. Consensus forecasts for GDP growth in 2009 are negative for most of the larger EMEs, with the exception of China and India. Growth is forecast to be positive in most EMEs only in 2010. However, early signs of recovery are already apparent in some EMEs, including a pickup in China's exports to the European Union and the United States in March 2009 and increases in China's imports from Chinese Taipei and Korea in February and March 2009. These increases in trade reversed declines that had been observed for about half a year, but whether they indicate a sustained recovery remains unclear. The path of recovery will also depend on the rate at which international capital flows, which have played such a large role in supporting growth, recover from the sharp reversals experienced in 2008.

More difficult external financing

Most emerging market crises of the 1980s and 1990s were associated with reversals in gross private capital inflows that reflected a loss of confidence in emerging market policies. Developments in capital flows during the current crisis are somewhat different. With the notable exception of some CEE countries, many emerging market economies adopted sound policies before the crisis and thus were more resilient to reversals in capital flows, at least initially. But as the crisis progressed, some developments in capital flows followed a pattern similar to that of past crises. As described below, countries with larger current account and fiscal deficits, and sectors with significant foreign exchange exposures on their balance sheets, were more affected by the tightening of external financing conditions and withdrawals of capital.

Initial resilience in capital flows ...

During the first half of 2008, gross capital inflows to EMEs held up remarkably well, in many cases reaching 60–70% of the record high inflows in 2007. Capital inflow reversals were felt for the most part in equity markets, where prices began to slide after reaching historical peaks in the last quarter of 2007. The fact that other investors (banks and bondholders) maintained their positions in EMEs may be attributed to a number of factors cited earlier, including much larger official foreign exchange reserves and more robust banking systems in many cases. Better developed local bond markets also played a role in some countries.

International banks started to withdraw funding from some emerging markets in the third quarter of 2008. At first, countries with sound and relatively liquid banking systems were affected. For instance, cross-border loans to banks and the non-bank sector in China, Chinese Taipei, the Czech Republic, Malaysia and Poland decreased by $30 billion in the third quarter. Central banks and market commentary at the time suggested that some international banks may have reduced loans to these EMEs in order to overcome severe liquidity shortages in their home markets.

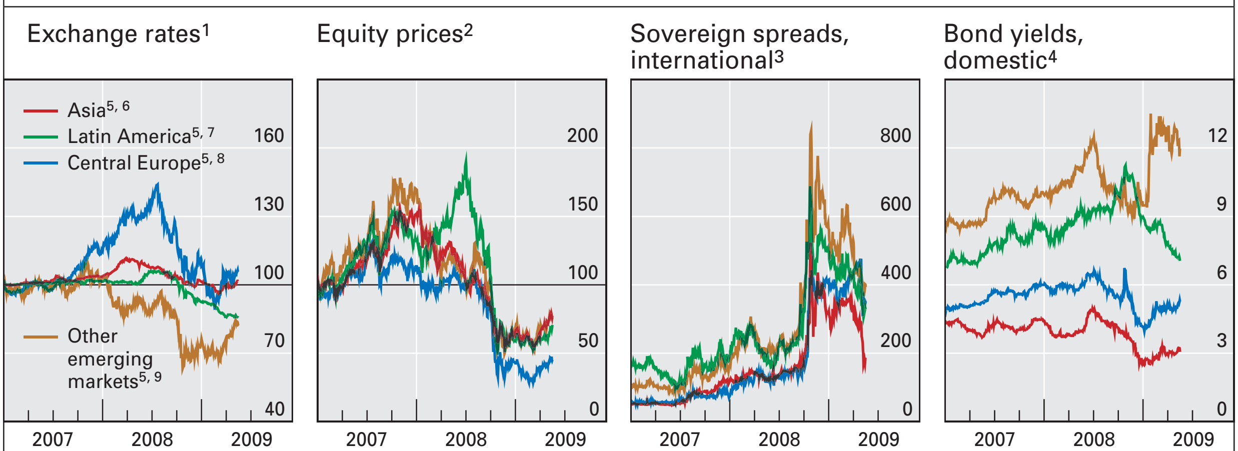
... followed by disruptions

Disruptions in emerging market finance became more widespread following the 15 September 2008 collapse of Lehman Brothers and the resulting interruptions in financing in global interbank markets (see Chapter II). Reversals of portfolio equity inflows accelerated, emerging market currencies weakened substantially, spreads on international sovereign bonds widened sharply and domestic bond yields rose in many EMEs (Graph V.5). Among the first to be affected by the rising cost and reduced availability of external finance were countries with large current account deficits (eg CEE countries and South Africa), and those where surpluses decreased due to the slump in oil and commodity prices (eg Argentina, Russia and Venezuela).

Exposures in the corporate sector

In the EMEs with more robust external positions, the initial impact on capital flows came via the corporate sector. As exchange rates depreciated sharply against the major international currencies, corporations that had borrowed heavily in international debt and credit markets to finance investment (eg Russian energy companies) encountered difficulties rolling over that debt. In addition, the turmoil in September 2008 had revealed some types of vulnerabilities of which the authorities and markets previously seemed to have been unaware. In particular, many corporations in Brazil, Korea, Mexico and Poland had entered into derivative contracts with foreign or domestic banks during 2007 and 2008 to protect export earnings against a sharp appreciation of local currencies and, in some cases, to speculate on a continuing appreciation. These positions were typically held off corporate balance sheets.

Financial market developments



[1] In terms of US dollars per unit of local currency; 31 December 2006 = 100. [2] Morgan Stanley Capital International equity indices, in US dollar terms; 31 December 2006 = 100. [3] JPMorgan EMBI Global (EMBIG) sovereign spreads over US Treasury yields (for Korea and Thailand, CMA five-year credit default swap premia), in basis points. Chinese Taipei, the Czech Republic, India and Singapore are excluded from the regional aggregates. [4] Five-year bond yields (for the Philippines, 10-year; for Turkey, two-year), in per cent. [5] Median of the economies listed. [6] China, Chinese Taipei, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. [7] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [8] The Czech Republic, Hungary and Poland. [9] Russia, South Africa and Turkey.

Sources: Bloomberg; Datastream; JPMorgan Chase; MSCI; national data. Graph V.5

When local exchange rates fell against the dollar or the euro, the corporations suffered heavy losses, currently estimated at about 0.8% of GDP in Korea and more than 1% of GDP in Poland.

Flows to emerging bond markets evaporated

In international debt markets, primary issuance froze and secondary trading of emerging market bonds was greatly reduced in September and October, even for highly rated corporations and sovereigns with relatively sound fiscal positions (eg Brazil, Malaysia and South Africa). After net borrowing of $28 billion during the first three quarters of 2008, the last quarter saw net repayments by EMEs of $27 billion (Table V.2), as many emerging market corporate borrowers lost their access to international capital markets. Net repayments were especially large in Korea, Latin America and oil-exporting countries (Graph V.6). Syndicated loan issuance in the fourth quarter decreased by a total of $65 billion compared with the third quarter, with Hong Kong SAR, Singapore and countries in the Middle East being affected in particular. In addition, non-resident holdings of local EME currency bonds declined, reflecting not only increased demand for cash by foreign investors but also their risk aversion, as local bond markets in many EMEs (including Hungary, Indonesia, Mexico and Turkey) had become highly volatile.

More severe reversal of cross-border loans

The reversal in cross-border banking flows also became more severe in the last quarter of 2008. According to the latest BIS international banking statistics, banks from advanced economies reduced cross-border loans to developing countries by $205 billion during the fourth quarter (1% of the combined GDP of EMEs), reversing more than 60% of the inflows recorded during the previous three quarters (Table V.2). Brazil, China, Korea, Turkey and oil-exporting countries, including Russia, were particularly affected (Graph V.7). Loans to banks declined more sharply than loans to the non-bank sector. At the same time, residents of many EMEs (especially in central Europe and oil-exporting countries, including Russia) withdrew part of their deposits and other foreign assets held in BIS reporting banks. This provided an important cushion to the emerging markets that had been unavailable in the past. However, some deposit withdrawals may have reflected official foreign exchange intervention rather than the autonomous response of emerging market banks to the reduced availability of cross-border finance.

Does foreign bank ownership matter?

One question of interest is whether the presence of foreign banks in EMEs has had any visible impact on banking flows. This question can be addressed by assessing whether cross-border loans and local currency loans

International bank flows and bond issuance

In billions of US dollars

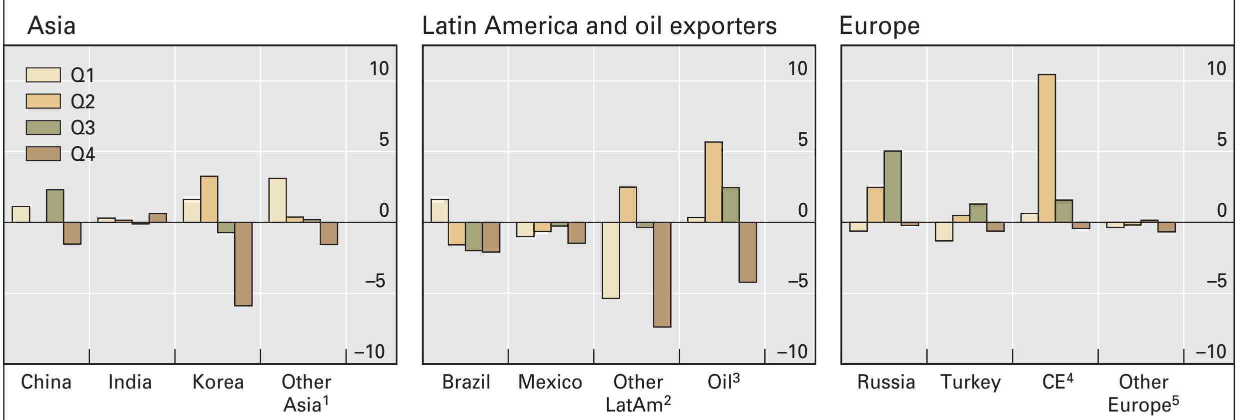
	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Q1 2009
Cross-border loans[1]	168	105	47	–205	…
International bonds, net issuance	–1	23	6	–27	4

[1] External loans of BIS reporting banks vis-à-vis EMEs; estimated exchange rate adjusted changes.

Source: BIS. Table V.2

International debt securities

Net issuance by residence in 2008, in billions of US dollars



[1] Indonesia, Malaysia, the Philippines and Thailand. [2] Argentina, Chile, Colombia, Peru and Venezuela. [3] Algeria, Iran, Kazakhstan, Kuwait, Nigeria, Oman, Qatar, Saudi Arabia and the United Arab Emirates. [4] The Czech Republic, Hungary, Poland and Slovakia. [5] Bulgaria, Croatia, Estonia, Latvia, Lithuania and Romania.

Source: BIS. Graph V.6

of foreign bank affiliates in EMEs have been more stable in countries with a larger foreign bank presence.

Temporary resilience of cross-border loans ...

Cross-border loans appear to have been temporarily more stable in some smaller countries with a larger foreign bank presence. In particular, smaller economies in CEE (the Baltic states and countries in southeastern Europe), whose banking systems are almost fully foreign-owned, were less affected by the decline in cross-border loans to banks in the fourth quarter of 2008 than were the larger CEE economies (the Czech Republic, Poland, Russia and Turkey), where foreign bank ownership is not dominant (with the exception of the Czech Republic) (Graph V.7, right-hand panel).

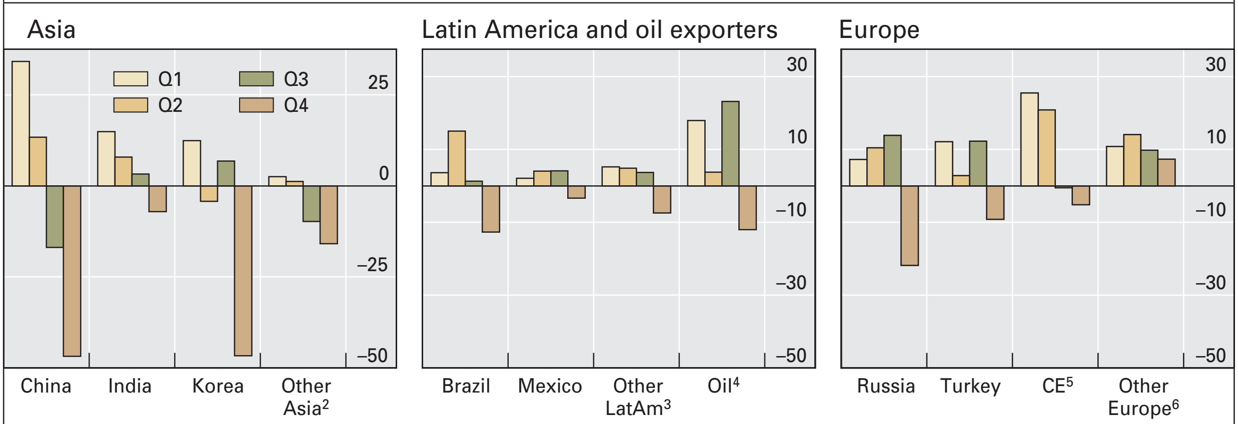
The resilience of cross-border loans in smaller CEE countries is surprising because many of them have sizeable external deficits. However, in February 2009 it became clear that the state of these economies was deteriorating faster than expected. Many borrowers faced challenges repaying or rolling over their loans. The loss of investor confidence suddenly exposed long-standing vulnerabilities, such as the widespread practice of foreign currency borrowing by households and by small and medium-sized enterprises. Whether parent banks from western Europe have maintained support for their subsidiaries in these smaller countries will become clearer after the release of data for the first quarter of 2009 in early July.

... and mixed performance of local claims

As for local currency loans, whether such loans have been more stable in countries where foreign-owned banks have a larger presence remains unclear. Adjusting for exchange rate changes, local currency claims of foreign bank affiliates have exhibited resilience in a number of EMEs; for example, in the fourth quarter of 2008 these claims increased in Brazil, China, Poland and Turkey, and remained stable in smaller CEE economies with a large foreign bank presence. However, they decreased in some other countries (eg Korea and South Africa).

Cross-border loans[1]

2008, in billions of US dollars



[1] Estimated exchange rate adjusted changes in external loans of BIS reporting banks vis-à-vis all sectors. [2] Indonesia, Malaysia, the Philippines and Thailand. [3] Argentina, Chile, Colombia, Peru and Venezuela. [4] Algeria, Azerbaijan, Iran, Kazakhstan, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia and the United Arab Emirates. [5] The Czech Republic, Hungary, Poland and Slovakia. [6] Bulgaria, Croatia, Estonia, Latvia, Lithuania, Romania and Serbia.

Source: BIS locational banking statistics. Graph V.7

Do local bond markets matter?

Another question of interest is whether countries with more developed local bond markets have fared better in the face of capital outflows. EMEs had in recent years sought to reduce their vulnerability to capital inflow reversals by increasing issuance in domestic debt markets. However, the crisis appears to have prompted investors (particularly foreign ones) to attempt to withdraw from local bond markets in EMEs and switch to more liquid foreign currency assets. These attempts affected local bond markets in Hungary, Indonesia, Mexico and Turkey, among others, and exacerbated depreciation pressures in many cases, given the severe impairment of the operation of international currency swap markets at the time (Graph II.4, centre panel). For example, in Hungary there were no bidders at government bond auctions in mid-October. Non-resident holdings of local currency bonds declined as well, reflecting increased demand for foreign currency by foreign investors. At the same time, international banks were not prepared to swap euros for forints, triggering a sharp depreciation with contagion effects throughout CEE (eg the Czech koruna fell by 9% against the euro during the fourth quarter despite much sounder fundamentals).

Problems in trade finance emerged

In late 2008 and early 2009, the severe contraction in external demand compounded the negative effects of the global financial crisis on emerging market capital flows. The effects were especially evident in the case of trade finance. In Latin America, for instance, leading international banks were reportedly renewing just 50–60% of the previous year's trade credit lines in the first quarter of 2009. A major part of this decrease reflected lower trade volumes and commodity prices. But the decrease was also due to the drying-up of the secondary market for trade finance and reduced credit lines from banks specialising in the provision of such finance. Although it has also affected some Asian exporting economies, the lack of trade credit may be most serious for African nations because of their underdeveloped financial systems and the inability of governments to increase the supply of such credit.

FDI less affected so far ...

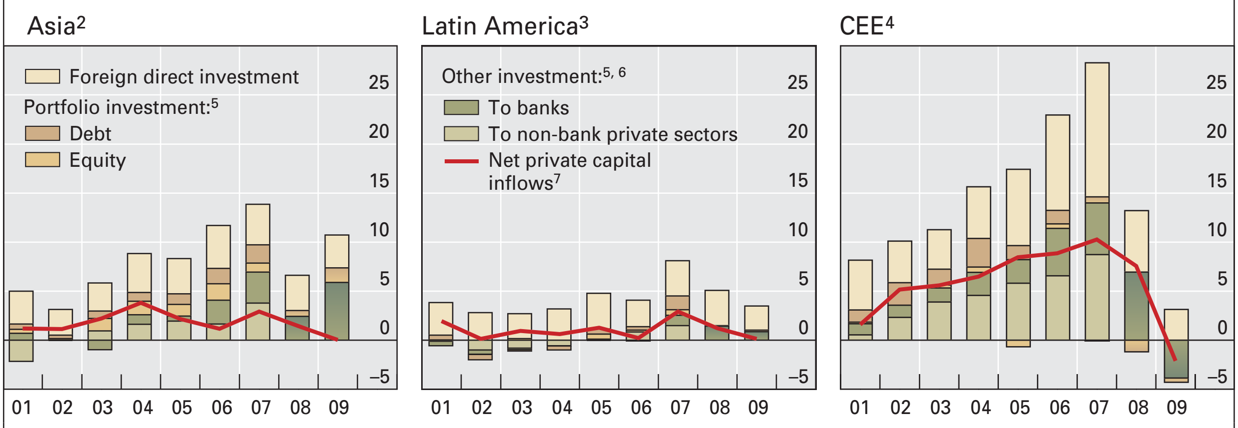
The behaviour of foreign direct investment (FDI) flows, which have been more stable than other capital flows in previous crises, also raises concerns. Gross FDI inflows held up fairly well in 2008 compared with 2006–07, especially in emerging Asia and Latin America (Graph V.8). However, recent reports indicate that FDI inflows were lower in a number of countries in early 2009. One reason is that roughly one third of recent FDI inflows were related to mergers and acquisitions, which are typically financed by international bank loans. Significantly lower issuance of syndicated loans in the fourth quarter of 2008 and the first quarter of 2009 provides some support for this view. In addition, profit remittances from some EMEs increased sharply, as many multinational enterprises, in the same way as international banks, needed liquid funds in their home markets. According to the OECD Development Centre, reinvested earnings and intracompany loans are also being sharply curtailed as companies repatriate financial resources to their parents.

... but the outlook is highly uncertain

Since the current crisis is associated with an unprecedented contraction in global economic activity, it is extremely uncertain when and how far private capital inflows to emerging markets might recover. Equity markets have rebounded strongly since March 2009. In addition, international bond issuance resumed in the first quarter of 2009 (Table V.2), but only for high-grade sovereigns and top-rated corporates, and even then at much higher premia than in early 2008. Furthermore, because the crisis originated in the financial systems of advanced economies, the standard remedy in the past – reforming policies in emerging market economies – is not likely to restart the flow of capital to EMEs on its own. Moreover, it is not clear how global current account imbalances – which were an important factor in the surge of capital flows to and from emerging markets in the period before the crisis – will eventually be resolved.

Composition of gross private capital inflows[1]

As a percentage of GDP



[1] Gross inflows are simple averages of the economies listed; for 2008 and 2009, estimates from *World Economic Outlook*. [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 and Turkey. [5] For 2008 and 2009, 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 V.8

Factors supporting economic activity

Apart from the scope for countercyclical policies discussed in Chapter VI, two factors will influence the extent to which activity in EMEs can be maintained in the face of declining exports and capital inflow reversals. One is the degree of success in stabilising foreign exchange markets and maintaining the flow of foreign currency financing, through the provision of foreign currency liquidity by authorities. The other is the stability and lending capacity of the domestic banking system, which are related to the financial condition of banks and recent measures to support the financial sector.

Provision of foreign currency liquidity

Central banks intervened

As noted earlier, an important feature of the current crisis is that many sovereigns had reduced or stabilised their external debt in the pre-crisis period, but private external debt had remained high or increased. As capital inflows reversed, central banks took steps to ensure the availability of foreign currency so that the private sector could meet its payment obligations. They intervened in foreign exchange markets to stabilise them and dampen exchange rate volatility. They also used their foreign reserves to smooth the flow of external financing to the private sector, seeking in particular to reduce rollover risks and cover shortfalls in trade financing by providing funding or guarantees.

While conditions in EME foreign exchange and funding markets appear to have stabilised relative to the period of extreme financial stress around October and November 2008, markets remain comparatively unsettled, and there has been no full recovery (Graph V.5).

Concerns about reserve adequacy

One concern is that intervention in foreign exchange markets has in some cases entailed a very large depletion of foreign reserves. For example, in the first quarter of 2009, foreign reserves were at 80% of their June 2008 levels in Korea and India, around 75% in Poland and 65% in Russia. Given the possibility that external shocks could persist, such depletions raise questions about reserve adequacy, although conventional indicators suggest that reserve holdings are still ample. In spite of significant interventions in the fourth quarter of 2008, many EMEs still had larger foreign reserves at the end of 2008 than they did in 2007 (Table V.3). Furthermore, a well known rule of thumb (the so-called Guidotti-Greenspan rule) is that foreign reserves should cover 100% of external debt coming due within one year. In 2008, almost all EMEs far exceeded this threshold – coverage was more than 400% in Asia and Russia and around 300% in Latin America. Another rule of thumb, that foreign reserves should cover three to six months of imports (ie 25–50% of annual imports) was also typically exceeded at the end of 2008. These figures suggest that many EME central banks could meet the foreign currency financing requirements of the private sector for well over one year. However, a severe economic downturn and a delayed recovery in capital inflows could produce future episodes of market instability that could lead to a much faster draining of reserves than suggested by these indicators. Under these conditions, the withdrawal of financing to EMEs could severely impair the pace of economic recovery.

Foreign reserve adequacy[1]

Outstanding year-end reserves position

	In billions of US dollars				As a percentage of:								
					GDP	Short-term external debt[2]				Imports			
	96	07	08	09	08	96	07	08	09	96	07	08	09
Asia[3]	477	2,907	3,320	3,355	45	170	449	589	595	49	84	74	83
China	105	1,528	1,946	1,954	44	376	1,249	1,865	1,873	76	160	172	186
India	20	267	247	242	20	260	339	333	324	55	123	85	88
Korea	33	262	200	212	21	45	176	173	177	22	73	46	55
Other Asia[4]	319	850	927	948	52	145	389	502	511	48	69	62	72
Latin America[5]	142	397	440	410	13	145	238	369	300	89	82	71	69
Brazil	58	179	193	186	12	111	292	342	329	109	149	111	115
Chile	16	17	23	24	14	201	86	113	114	89	38	40	47
Mexico	19	86	94	84	9	60	256	241	218	21	31	30	29
CEE[6]	53	227	233	211	17	504	114	107	92	36	51	43	…
Middle East[7]	17	58	54	47	9	111	98	112	90	34	51	41	…
Russia	11	467	413	368	25	42	486	509	446	16	209	141	143
Memo:													
Net oil exporters[8]	*93*	*883*	*885*	…	*21*	*200*	*1,050*	*1,862*	…	*42*	*98*	*87*	…

[1] Regional aggregates are the sum of the economies listed; for percentages, simple averages. For 2009, latest available data. [2] Consolidated cross-border claims of all BIS reporting banks on countries outside the reporting area with a maturity of up to one year plus international debt securities outstanding with a remaining maturity of up to one year. [3] Countries listed. [4] Chinese Taipei, Hong Kong SAR, Indonesia, Malaysia, the Philippines, Singapore and Thailand. [5] Countries listed plus Argentina, Colombia, Peru and Venezuela. [6] Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. [7] Kuwait, Qatar and Saudi Arabia. For Saudi Arabia, excluding investment in foreign securities. [8] Algeria, Angola, Kazakhstan, Mexico, Nigeria, Norway, Russia, Venezuela and the Middle East.

Sources: IMF; Datastream; national data. Table V.3

A further consideration is that foreign reserve adequacy also depends on other characteristics of the economy not captured by conventional indicators. For example, Chile's foreign reserve holdings have been comparatively low relative to its short-term external debt and its export revenues have fallen sharply; however, its foreign reserves have been remarkably stable and the Chilean peso rebounded earlier than other Latin American currencies. One reason is that the government (through its sovereign wealth fund) and households (through pension funds) have large holdings of foreign assets. In spite of lower returns on international investments that may have temporarily influenced the exchange rate, the robustness of the financial and corporate sectors has on balance helped to limit calls on these foreign reserves. By the same token, countries with much larger foreign reserve holdings but less robust financial systems might be less resilient.

Alternatives to foreign reserves

In this setting, an important issue is how much EMEs might rely on external resources or reserve pooling arrangements rather than costly foreign reserve holdings to improve resilience. The crisis has led to three unprecedented measures that could eventually reduce the need for large foreign reserve holdings. First, in October 2008 four EME central banks each entered into a $30 billion reciprocal currency arrangement with the US Federal Reserve. Second, a $120 billion multilateral facility, drawing on international reserves, was recently established in East Asia. This significantly extends the scope of existing bilateral currency swap facilities set up under the so-called Chiang Mai initiative. Third, recent G20 initiatives have called for large increases in resources for international financial institutions, supporting steps taken by these institutions to enhance the scope and effectiveness of their crisis-related operations. An important development in this context is the decision of some EMEs (Colombia, Mexico and Poland) to seek access to the IMF's recently created Flexible Credit Line, which targets countries with sound macroeconomic fundamentals.

Resilience of banking systems and credit

Increased demand for domestic credit

The sharp reversal in cross-border bank financing cited earlier (Graph V.7) has affected both the non-bank and banking sectors in EMEs. Corporate borrowers facing reduced access to external funding have sought to borrow in the domestic market instead. One indicator of how much domestic credit would have to rise if all external borrowing shifted to domestic banks is the ratio of non-bank external borrowing to bank domestic credit. Data for the third quarter of 2008, before cross-border bank flows fell sharply, show that this ratio was around 45% in Mexico and Turkey, and about 30% in central Europe, the Baltic states and southeastern Europe.

Bank lending capacity could be limited

Meeting this increased demand for credit could help support continued economic activity. But domestic banks' ability to do so may be limited, in particular, by reductions in their own access to external financing. The extent of vulnerability varies considerably across countries: the ratio of loans to deposits is above unity (indicating a possible reliance on external financing) in Hungary, Korea and Russia, countries that have experienced significant pressure in foreign exchange markets, but also in Colombia and South Africa, where such pressures have been much lower. Another indicator of reliance on external financing – the share of foreign liabilities in the total liabilities of the banking system – has ranged from about 15 to 30% in Hungary, Korea, Poland, Russia and South Africa.

Bank credit resilient

However, in spite of sharp declines in cross-border bank lending to non-banks and banks in the fourth quarter of 2008, credit growth, while slowing, remained in double digits (over year-earlier levels) in many EMEs well into the first quarter of 2009. Indeed, in a number of EMEs, domestic bank credit has remained stable or been on an upward trend (Graph V.9).

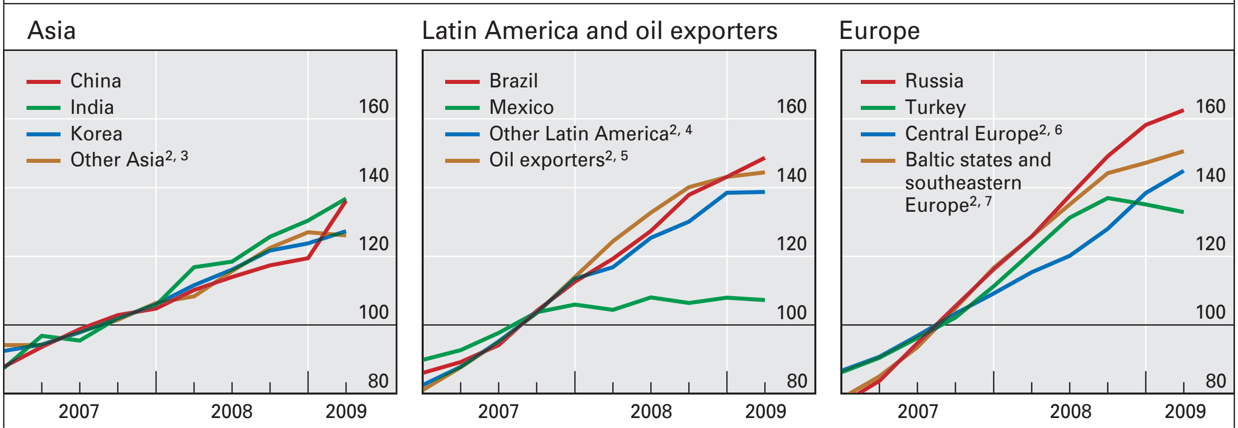
Banking strength has played a role …

One factor that may have supported domestic credit growth is the strength of EME banking systems, which has improved considerably in the course of this decade. Profitability (as measured by the median[2] return on assets across countries for a group of 23 larger EMEs) rose from less than 1% at the beginning of the decade to 1.5% in 2007. By 2007, the larger EMEs typically had regulatory capital ratios well in excess of the minimum Basel threshold of 8%, with median ratios of around 13%. In some countries (eg Brazil, Indonesia, Turkey) regulatory capital ratios were around 19%. Median non-performing loan

[2] The median is more suitable as a measure of the central tendency if we want to know whether a representative (50%) share of the sample of countries has performed better over time. In contrast, a simple average would give more weight to unusually good or unusually poor performance, even if it applies only to a very few countries and is therefore not representative.

Domestic bank credit to the private sector[1]

2007 = 100



[1] In nominal and local currency terms. [2] Weighted average of the economies listed, based on 2005 GDP and PPP exchange rates. [3] Indonesia, Malaysia, the Philippines and Thailand. [4] Argentina, Chile, Colombia, Peru and Venezuela. [5] Algeria, Azerbaijan, Iran, Kazakhstan, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia and the United Arab Emirates. [6] The Czech Republic, Hungary, Poland and Slovakia. [7] Bulgaria, Croatia, Estonia, Latvia, Lithuania and Romania.

Sources: IMF; national data. Graph V.9

(NPL) ratios declined from around 10% at the beginning of the decade to less than 3% in 2007. However, these tend to be lagging indicators. An alternative indicator, Moody's Financial Strength Index, which rates banks according to their standalone (ie excluding external support) capacity, also shows significant improvement, although strength ratings tend to be low. Excluding two financial centres with relatively high strength ratings (Hong Kong SAR and Singapore), the median rating rose from 26 (out of a possible 100) in December 1998 to 34 in January 2008 and then fell to 33 by April 2009.

… as have efforts to support domestic banks

Another factor that may have supported credit growth is the move by EME authorities to provide domestic liquidity and to furnish support to domestic banking systems. As discussed further in Chapter VI, these measures have included provision of central bank liquidity through monetary operations, lower policy rates and reserve requirements. Deposit guarantees, support to banks (including, in some cases, bank recapitalisation), measures to stabilise money and capital markets, and steps to ensure financing to priority borrowers such as small and medium-sized enterprises have also contributed to lowering the cost of financing and maintaining the flow of bank credit in EMEs.

Risk that resilience will be temporary

However, there is a significant risk that this resilience will be temporary and domestic credit will decline sharply. One concern is that, as we know from past experience, the severity of the ongoing economic slowdown could worsen banks' balance sheets by sharply raising NPLs, even though a large increase is not currently forecast.

Conclusions

Two concerns arising from the global economic crisis may be highlighted. First, there is a significant risk that economic recovery in EMEs will be delayed. In particular, there is a risk of a destabilising negative feedback loop: the severity of the downturn could deter a recovery in capital flows to EMEs, which could in turn further impair growth. Economic recovery is also likely to require a rebound in trade with reduced global imbalances; but bringing about the needed adjustments in both EMEs and advanced economies could take time. In this setting, domestic credit, whose resilience has supported economic activity, could decline sharply given the depth of the economic downturn.

Second, in response to a sharp reversal in capital inflows, EMEs have relied on foreign exchange market intervention and other measures to provide foreign currency liquidity. This has helped stabilise economic activity by ensuring the continued functioning of foreign exchange markets and smoothing the flow of financing to EMEs. Looking ahead, an important question is whether available EME foreign reserves and new initiatives that have considerably enhanced the availability of foreign currency resources (eg bilateral foreign currency swaps involving EME central banks, reserve pooling arrangements and recent large increases in official financing for EMEs) will help bring about an early recovery in capital flows to EMEs. Over the medium term, these new initiatives could also help EMEs reduce their reliance on reserve accumulation, which in turn could contribute to reduced global imbalances.