

III. Emerging market economies

Highlights

Emerging market economies (EMEs) continued to record strong growth, moderate inflation and current account surpluses in 2006 and into the first quarter of 2007. Yet inflation pressures raised concerns in some countries, in part because of robust demand and in part due to uncertainties about the price of commodities. Despite moderate monetary tightening, credit growth has remained significant in a number of EMEs. At the same time, fiscal consolidation and improved debt management have enhanced economies' resilience.

Following a brief overview of recent developments and a discussion of inflation risks and fiscal developments, this chapter addresses two important topics. First, it explores the implications of a balance of payments shift towards large current account surpluses that exceed net capital inflows. Foreign investors' influence on domestic asset markets could be larger than implied by net capital flows, in part because these investors have boosted their holdings of emerging market assets. Furthermore, position-taking in emerging market assets via derivatives transactions might not be fully recorded. Asset prices in EMEs have surged, but it is not yet clear whether foreign influences have added to asset price volatility.

A second topic is the emergence of China in world trade. China's role at the centre of an integrated production network in East Asia has altered trading patterns. A significant amount of China's imports are intermediate goods to be processed by its export sector; imports of final goods for domestic demand are much smaller. Commodity exporters have tended to benefit from increased demand from China. However, the gains to its neighbours and other emerging market trading partners are not as clear-cut; some countries have lost market share to China in third markets but have been able to expand their exports of intermediate and capital goods to the country for use in its export sector. A rise in the relatively low level of China's demand for imports to satisfy domestic final demand would provide further opportunities to its trading partners, and would also increase the extent to which Chinese growth could offset any potential slowdown in US demand. Finally, China's emergence also has mixed implications for the exchange rate policies of its neighbours.

Economic developments

Growth in EMEs continued to surprise on the upside, rising to 7.4% in 2006 from 6.8% in 2003–05 (Table III.1), and remained strong in the first quarter of 2007. The latest consensus forecast is for growth to slow moderately in 2007 compared to 2006. A limited slowdown is also expected in some of the fastest-growing economies (eg China, India and Argentina). In Brazil, where persistently slow growth has been a medium-term concern, growth picked up

Strong growth and current account surpluses ...

last year to exceed its 2003–05 average, and is expected to rise further in 2007. Recent revisions to the national accounts revealed a larger contribution by the services sector, and consequently faster growth than previously estimated. Current account surpluses increased in Africa, Asia, Latin America, the Middle East and Russia. In contrast, current account deficits grew in India, Turkey and South Africa, and remained large in central Europe.

Turning to the components of aggregate demand, net exports continued to make positive contributions to growth in China and the rest of Asia. On the other hand, their contribution has fallen (although it remains positive) in central Europe and has been slightly negative in Latin America over the past two years. As in previous years, domestic demand once again played a key role in supporting growth. Consumption demand was important in most emerging market regions, while investment spending also drove growth in central Europe, China and Latin America.

Output growth, inflation and current account balance									
	Real GDP ¹			Consumer prices ¹			Current account balance ²		
	2003–05	2006	2007	2003–05	2006	2007	2003–05	2006	2007
Asia	7.9	8.8	8.2	3.4	3.4	3.5	193	357	355
China	9.6	10.7	10.3	2.3	1.5	2.8	92	239	243
India ³	8.2	9.2	8.1	5.5	5.4	5.1	-1	-14	-19
Indonesia	5.1	5.5	6.0	7.7	13.1	6.7	3	10	8
Korea	4.0	5.0	4.5	3.3	2.2	2.4	19	6	3
Thailand	6.0	5.0	4.0	3.0	4.6	2.4	0	3	5
Other Asia ⁴	5.3	5.6	5.0	2.0	2.7	2.2	80	114	114
Latin America	4.3	5.4	4.8	6.6	4.9	5.0	25	51	26
Argentina	9.0	8.5	7.6	7.3	9.8	9.1	6	8	7
Brazil	3.3	3.7	4.2	7.5	3.1	3.6	10	14	10
Chile	5.4	4.0	5.7	2.4	2.6	3.0	0	5	4
Mexico	2.8	4.8	3.1	4.2	4.1	3.6	-7	-1	-9
Venezuela	6.3	10.6	7.0	20.1	17.0	18.9	17	27	16
Other Latin America ⁵	4.8	7.2	6.1	4.6	3.4	3.9	-1	-1	-2
Central Europe	4.3	5.5	5.1	2.5	1.9	3.2	-20	-20	-23
Czech Republic	4.6	6.1	5.2	1.6	2.5	2.5	-5	-6	-6
Hungary	4.4	3.9	2.5	5.0	3.9	7.2	-8	-7	-6
Poland	4.2	5.8	6.0	2.1	1.0	2.2	-7	-7	-11
Russia	6.9	6.7	6.6	12.4	9.8	7.8	59	96	71
Turkey	7.4	6.1	4.7	12.6	9.6	8.9	-16	-31	-31
Africa ⁶	5.4	5.5	6.2	9.0	9.5	10.7	4	20	1
South Africa	4.3	5.0	5.0	3.5	4.6	5.3	-6	-16	-15
Middle East ⁶	5.8	5.7	5.5	6.8	7.9	10.6	116	212	153
Total	6.8	7.4	7.0	5.3	4.8	5.0	362	685	551
<i>Memo: G7</i>	2.4	2.8	2.2	2.0	2.3	1.9	-457	-675	-583

2007 and some 2006 data are based on May consensus forecasts and estimates and IMF.

¹ Annual changes, in per cent. Regional figures are weighted averages based on 2000 GDP and PPP exchange rates. Average of period; for Latin American inflation, end of period. ² In billions of US dollars. Regional figures are the sum of the economies listed. ³ Fiscal years beginning in April; inflation numbers refer to wholesale prices. ⁴ Hong Kong SAR, Malaysia, the Philippines, Singapore and Taiwan (China). ⁵ Colombia and Peru. ⁶ IMF *World Economic Outlook* regional grouping.

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

Median inflation in EMEs rose to 3.7% in 2006, up from 3.5% in 2005, and thus remained close to the median for the period 1999–2005. There was, however, significant regional variation. In Asia, median inflation was still well below that in other regions in 2006, but was clearly up from the near zero rates observed in 2002. It also picked up sharply in other EMEs, although it has tended to fall in Latin America. While inflation trends are hard to read, as discussed below, there are some significant upside inflation risks.

... and somewhat higher inflation

Outlook and policy challenges

There are two broad risks to the outlook for EMEs. One is that a marked slowdown in the US economy could significantly reduce growth. However, the present discussion will not focus on this risk except to note that the outlook is mixed. On the one hand, as discussed in Chapter II, the risk of a US slowdown cannot be entirely discounted, because the full effects of weakness in US housing markets remain unclear. On the other hand, consensus forecasts are for continued moderate growth in the United States in 2007. Furthermore, the risks to EMEs would be mitigated if other economies, including China, Japan and the European Union, were able to offset any slowdown in US demand with increases in their own domestic demand.

The focus of this section is rather on another risk, that of higher inflation. During the past year, concerns were expressed in a number of instances about elevated or rising inflation. In some countries (eg Argentina, Russia and Venezuela), the issue was the level of inflation. In other cases (including Mexico), inflation above the target range was the main concern. Finally, rising inflation was an issue in a number of countries. For example, in India, after falling in 2005 inflation rose significantly in 2006 (and now exceeds the Reserve Bank's medium-term comfort zone), and there were concerns about further increases in 2007. In China, headline inflation, which is low compared to other countries, has recently also picked up noticeably. Moreover, there is some uncertainty as to whether available measures of inflation in China accurately reflect underlying inflationary pressures. In contrast, inflation performance has improved in a number of cases, notably in Brazil, Indonesia, the Philippines and also in Thailand, where inflation last year was an important concern. Inflation has also fallen in Russia, although it remains high.

Inflation risks vary ...

How likely is it that inflation pressures will persist or even intensify in some countries? Output gaps, relative price changes and inflation expectations could all play a role.

Output gaps. Some recent estimates suggest that output gaps in EMEs have nearly closed or are positive. For example, in Brazil, which has recently experienced disinflation, capacity utilisation rates in manufacturing have been comparatively high, in the neighbourhood of 82%. In India, capacity utilisation is reportedly close to 100%. Moreover, in several countries, growth appears to be above potential. In part, the strong demand reflects positive terms-of-trade shocks (among commodity exporters) and favourable global conditions. In this setting, relatively easy monetary policies (see below) could raise the risks of future inflation in a number of EMEs.

... but are accentuated by closing output gaps ...

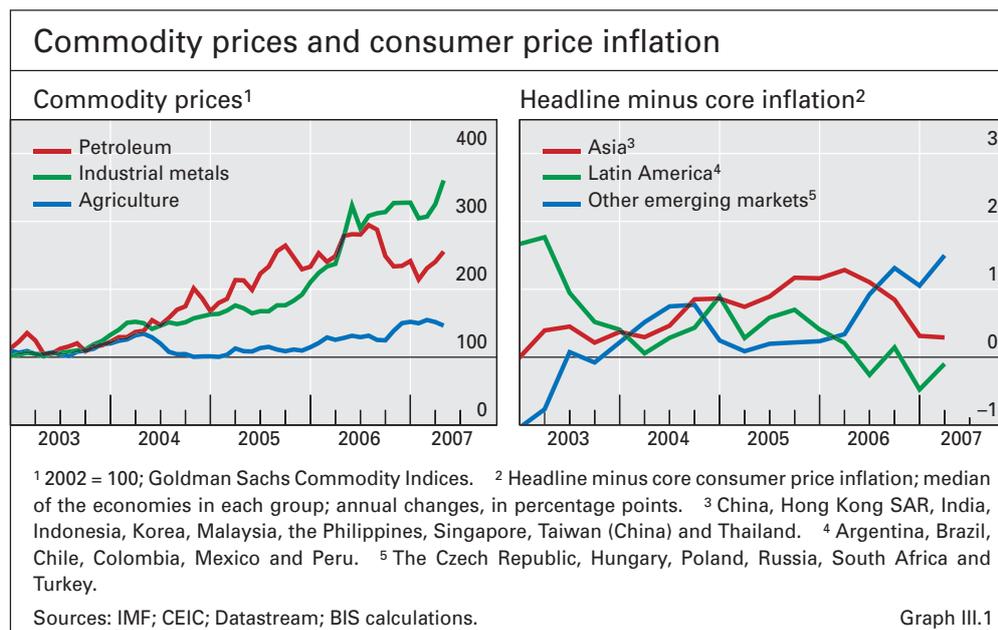
... and higher oil prices

Relative price changes. Oil and non-oil commodity prices have risen sharply in the last few years (Graph III.1). The oil sector illustrates some of the issues and potential inflation risks. While oil prices had fallen from their peaks (\$77 per barrel for West Texas Intermediate) of mid-July 2006, they have rebounded since January 2007 (to reach \$63 per barrel by mid-May). Although the growth in global demand for oil slowed from about 4% in 2004 to about 1% in 2006, the recent rebound in prices has partly reflected strong demand from non-OECD economies. More recently, and looking forward, supply side issues assume greater importance. For example, OPEC's decision to cut back production starting in November 2006 appears to have contributed to the recent buoyancy of oil prices.

The impact of oil price increases could be significant; a recent analysis estimates that a supply-induced doubling of prices would boost inflation in emerging Asia by as much as 1.4 percentage points above baseline. The inflation effects would be larger if oil importers had difficulty financing the resulting current account deficits, and also if subsidies that have hitherto limited energy price increases were assumed to be further reduced or eliminated. Subsidies have already been cut back to varying degrees in a number of Asian countries (eg India, Indonesia and Thailand).

Over the medium term, oil reserves are expected to be adequate to meet the strong demand anticipated from EMEs, as long as major producers maintain sufficient investment. However, investment to date has not eased production capacity constraints in some countries. This has added to concerns that non-OPEC oil production could soon peak, which would concentrate production in fewer countries. In the meantime, the short-run risks of sharp increases in oil prices remain substantial. OPEC spare capacity falls to low levels from time to time, and sudden shocks to supply or demand have therefore tended to have a large – and at times persistent – impact on prices.

Oil sector investment has lagged

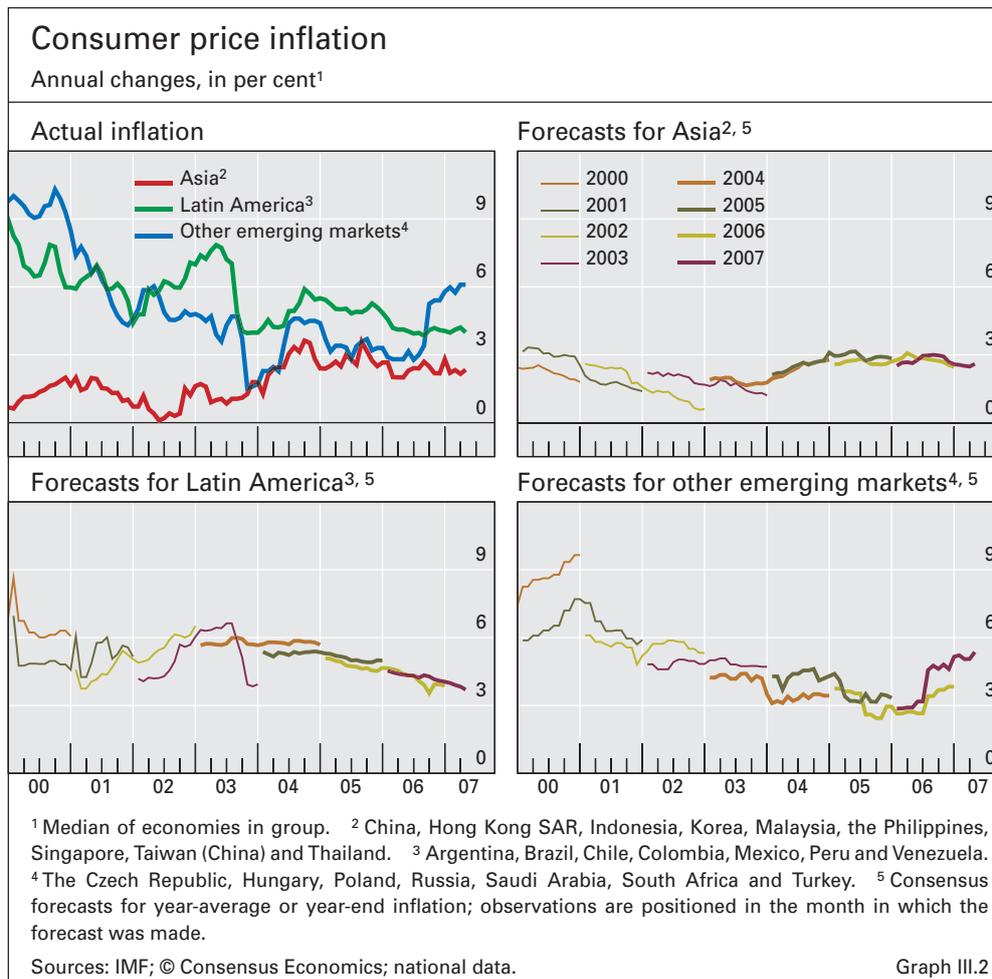


Over the past year, such shocks have included disruptions to Nigerian oil production and to US refinery capacity and the onset of unusually cold weather in the United States in February 2007, which significantly depleted US inventories. Continuing geopolitical risks, involving oil producers such as Iran and Iraq, accentuate the risk of price volatility.

Two additional points can be made regarding commodity prices. First, because of long lead times in building mining capacity, supply constraints in the metals sector will continue in the face of strong demand from China and other EMEs. Second, in a number of countries, such as China, Mexico and South Africa, higher agricultural goods prices have also played an important role in raising headline inflation. Such price increases have shown a certain degree of persistence, and there is particular concern in some of these countries that they could influence inflation expectations.

Inflation expectations. Using consensus forecasts as a proxy for expectations, Graph III.2 illustrates that Asian inflation in 2007 is expected to stay at less than 3%, still relatively low. Moreover, forecasts of inflation have recently been stable in Asia. In contrast, inflation forecasts have risen significantly in other emerging markets after an extended period of decline, while in Latin America forecasts have fallen in recent years.

Inflation forecasts point to a mixed picture ...



... but expectations could influence wage setting

One reason why inflation expectations are relevant is that they can lead to higher wage demands. It is generally believed that wage increases have been dampened due to large additions to the global labour force resulting from the growing integration of China and, increasingly, India into the global economy. This effect could be reinforced in countries with large supplies of labour from their own rural sectors. However, recent analysis finds that, while the wages of unskilled workers have indeed not risen in some major EMEs (Brazil, China and India), wages of skilled or non-production workers (white-collar and other workers involved in supervision or services often perceived as requiring more skills) have increased rapidly. For example, since the beginning of this decade, real manufacturing wages have grown at a compound annual rate of over 11% in China and Russia. Real wages of non-production workers also rose in India earlier this decade (by about 3.8% a year). The possibility that higher inflation expectations could feed into wage demands has been a particular concern in countries where food prices have risen significantly.

Expectations could change suddenly

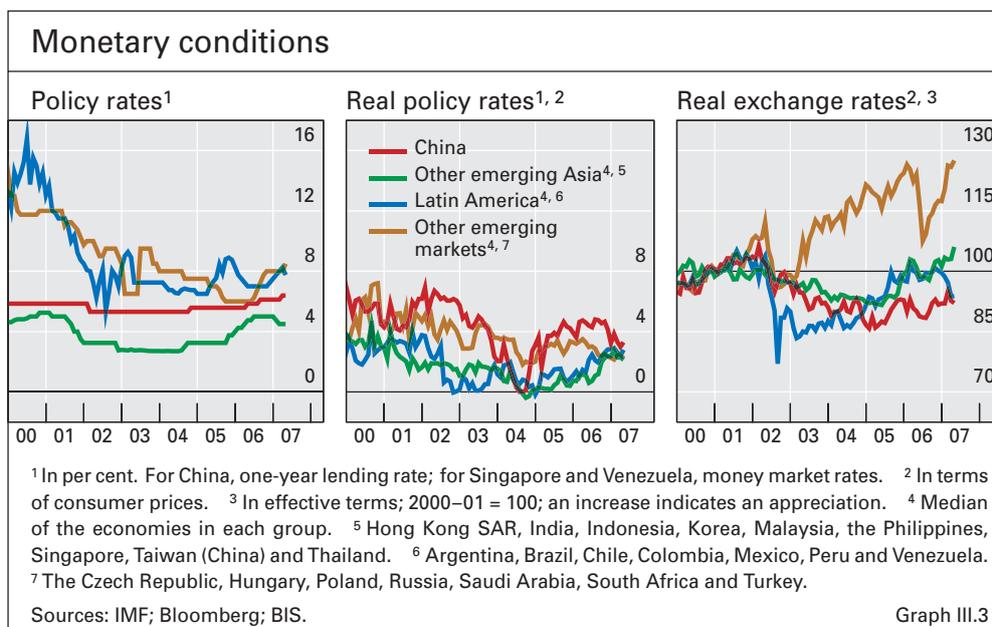
Could inflation expectations shift suddenly? An important lesson from the May–June 2006 episode of market volatility (see Chapter VI) and from recent run-ups in agricultural prices is that both inflation and inflation forecasts can suddenly spike upwards and breach targets; Turkey and Mexico are cases in point. In Turkey, market volatility in May–June 2006 triggered a sharp depreciation that is estimated to have added 3.5 percentage points to actual inflation and caused private sector forecasts to jump for both 2006 (to 10% from just over 7%) and 2007 (to 7.8% from 5.6%). In the case of Mexico, inflation at the end of 2006 unexpectedly breached the 4% ceiling of the inflation target ($3\% \pm 1\%$), in part because of a sharp increase in the price of maize. Global maize prices in US dollars rose 58% between July 2006 and April 2007, in part due to maize being diverted to the production of ethanol, a biofuel. Subsequently, inflation and inflation forecasts for Mexico remained close to or above the target ceiling.

To sum up, notwithstanding generally moderate inflation in EMEs at this time, there appear to be a number of risks. Capacity constraints are potentially an issue in a number of countries, and sharp increases in commodity prices are possible. Accordingly, sudden upward revisions in inflation and inflation expectations cannot be ruled out.

Monetary policy

Moderate monetary tightening ...

Against this backdrop, monetary policy has tended to tighten since 2004. However, there has been considerable cross-country variation, and in some EMEs the pace of tightening has slowed since the second half of 2006 (Graph III.3). A steady raising of policy rates has been observed in India (175 basis points since December 2004) and in China (81 basis points), supplemented by other tightening measures (see below). In other Asian countries, however, since around mid-2006 policy rates have either stopped increasing or fallen. In some cases, notably Indonesia, the Philippines and Thailand, this was in response to emerging signs of disinflation. Similar mixed policy outcomes are apparent in Latin America and other EMEs. Disinflation has led to falling rates in Brazil and, for a time, in Mexico. In contrast, three



countries with current account deficits that experienced depreciation pressures during the May–June 2006 episode of market volatility had to raise interest rates significantly: Turkey by 425 basis points, and Hungary and South Africa by 200 basis points each. In the case of Hungary, however, the interest rate rise also reflected concerns about fiscal deficits.

The implications of these policy actions for some common measures of monetary conditions have varied (Graph III.3, centre and right-hand panels). Real policy rates began to rise in China and other emerging markets a few years ago. Median real policy rates have converged to over 2% in other Asian EMEs and Latin America, and over 3% in China and other emerging markets. It should be noted that, in China, the real interest rate would be negative if an interbank rate rather than the bank lending rate were used as the proxy for monetary conditions. These real interest rates are much lower than the brisk rates of potential growth in many EMEs, suggesting that underlying monetary conditions have remained relatively expansionary.

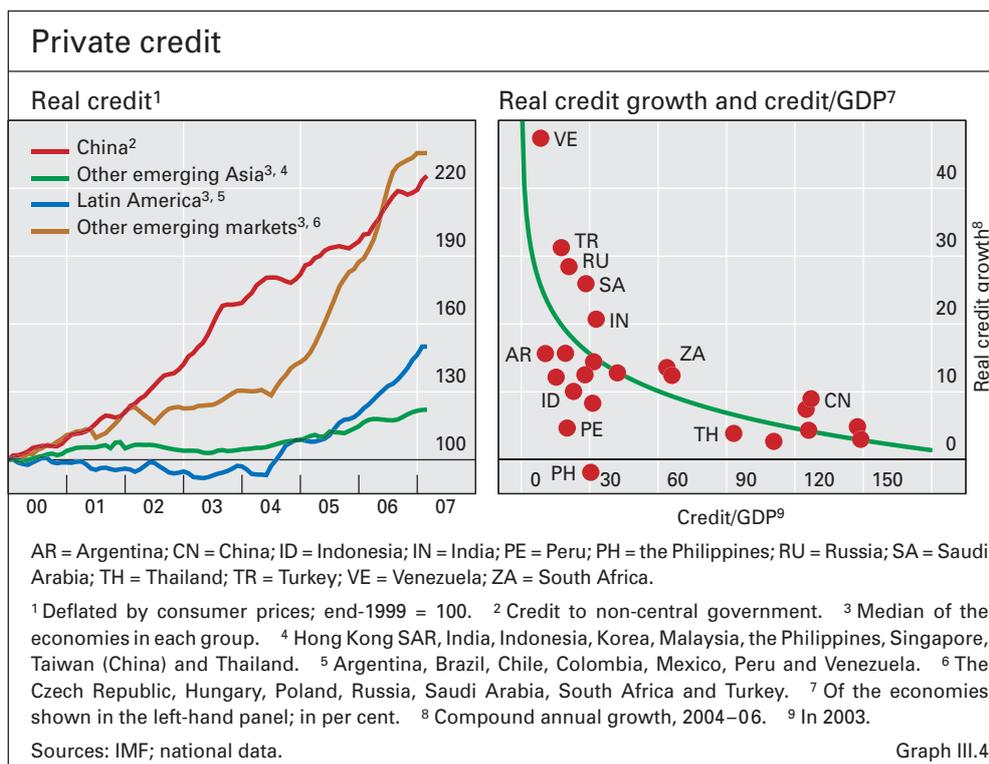
Rapid real private credit growth in a number of EMEs reinforces the impression of easy monetary conditions (Graph III.4). Since the end of 2003, when distinct increases in real private credit became apparent in all regions, the compound annual rate of growth in bank credit to the private sector has been nearly 9% in China, 5% in other Asian EMEs, 15% in Latin America and 21% in other emerging markets. The fastest rates of credit growth have been observed in Venezuela (47%) and in India, Russia, Saudi Arabia and Turkey (in ascending order, ranging from 21 to 31%). In some central and eastern European countries, rapid credit growth raises special concerns because household borrowing is in large part denominated in foreign currency.

Credit growth reflects both structural and short-run factors. Among the structural factors, financial deepening appears to be particularly important. Indeed, the more rapid rates of real private credit growth have been observed in countries with lower credit/GDP ratios (Graph III.4, right-hand panel). In

... but expansionary outcomes

Rapid growth in real private credit ...

... reflects structural and short-run factors



some regions, such as central Europe, increased competition in banking and financial integration have also played major roles in boosting credit growth. Short-run factors include strong economic performance and, as discussed below, efforts to contain appreciation pressures.

Appreciation
restrains demand ...

While policy rates and credit growth indicate relatively easy monetary conditions, significant real exchange rate appreciation in some countries suggests some complementary restraining of demand. Between December 2004 and March 2007, real appreciation was over 10% in Korea, Malaysia and Thailand and exceeded 20% in Indonesia. Outside Asia, cumulative real exchange rate appreciation over the same period reached 34% in Brazil. By contributing to disinflation and lowering aggregate demand, real exchange rate appreciation may have provided scope for a number of countries to lower policy rates or take other easing measures. In some countries these pressures appear to have been such as to induce the authorities to reduce interest rates to stem “unwanted” capital inflows.

While contributing to disinflation, however, appreciation pressures have raised concerns for at least three reasons. One is their adverse impact on competitiveness and the tradable goods sector. Another is that, by dampening interest rate increases, they can encourage non-tradable prices to rise, especially those related to housing. Finally, appreciation pressures can easily reverse, which can then require hikes in the policy rate. It is noteworthy that some of the largest nominal increases in policy rates since the beginning of 2006 were observed in Turkey and South Africa. These countries experienced significant depreciation pressures during the episode of market volatility in May–June 2006.

... but results in
heavy intervention

In addition to allowing policy rates to be set at lower levels than otherwise, appreciation pressures have been met by heavy intervention in foreign exchange

markets. This has resulted in very large and persistent foreign reserve accumulation (see Chapter V) and the concomitant need to sterilise the reserves thus created. In a number of countries, including China, sterilisation through increases in reserve requirements and sales of central bank securities has proved increasingly difficult or subject to unwanted side effects. Reserve requirements paying less than the market rate are effectively a tax on banks. In less than fully integrated markets, moreover, the sale of sterilisation instruments can actually push up their rate of return to levels that attract still more capital inflows.

A number of countries have also used prudential measures to dampen rapid credit growth and address sectoral or financial stability concerns. For example, in India risk weights were raised for housing loans (from 50% to 75%, subsequently reversed), commercial real estate (from 100% to 150%) and consumer credit (from 100% to 125%). The general provisioning requirement for loans in specific sectors was also raised.

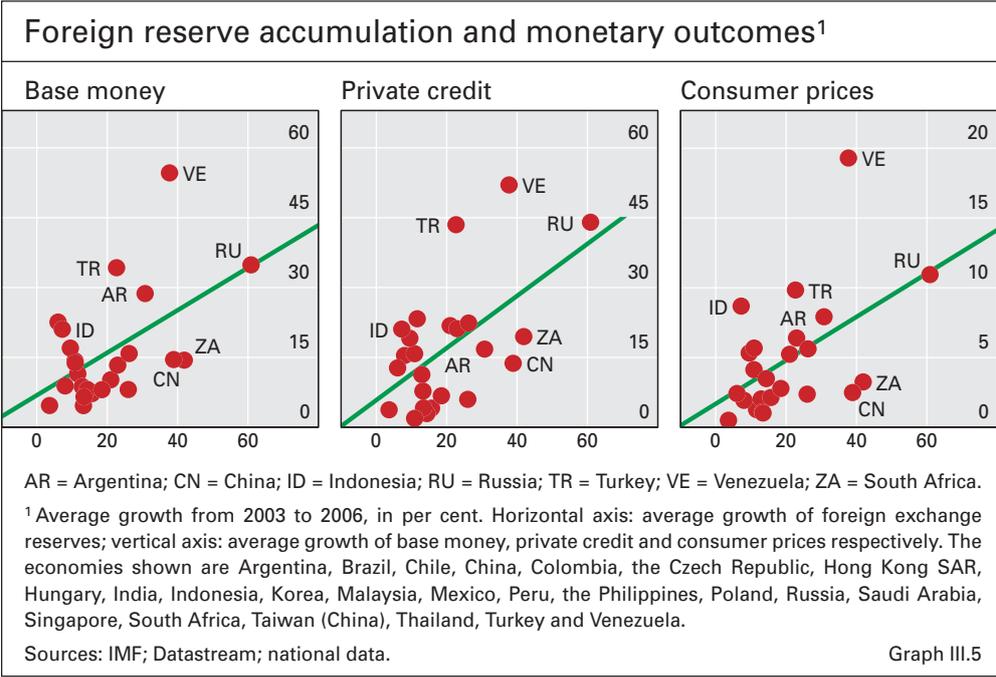
Countries have also sought to lessen the effect of capital inflows by encouraging capital outflows and by making it easier for domestic residents to acquire or hold foreign currency. Restrictions on foreign investment or foreign currency asset holdings were liberalised last year in China, India, Korea and Thailand. The measures taken included increasing the allowable foreign currency deposits of corporate residents (Thailand) or permitting larger purchases of foreign currency (China), providing incentives for residents to invest in foreign securities and real estate assets (Korea) and allowing more portfolio investment abroad (China and India). However, the extent to which these measures have dampened appreciation pressures to date remains unclear.

Difficulties in dealing with persistent appreciation pressures prompted Thailand to try to restrict capital inflows. Initially, this involved limits on non-resident holdings of securities and non-resident loans to domestic financial

Prudential measures also used ...

... as well as measures to encourage outflows ...

... or capital controls



institutions that had no underlying trade or investment function. In December 2006, unremunerated reserve requirements were imposed on short-term inflows along the lines seen earlier in Chile. While a number of these controls have since been reduced, in response to a strongly negative reaction in affected markets, the underlying upward pressure on the Thai baht apparently eased. More recently, Colombia imposed similar capital controls.

Is reserve accumulation expansionary?

Judging by central bank and market commentary, sterilisation and the supplementary measures cited above have not been fully effective in curbing the liquidity associated with the inflows of foreign currency. Indeed, in a cross section of countries since 2003, reserve accumulation seems to have been associated with rapid base money and credit growth, and higher inflation (Graph III.5). While such simple correlations need to be interpreted with caution, they reinforce the impression that relatively easy monetary conditions associated with upward pressure on the currency could still lead to higher inflation.

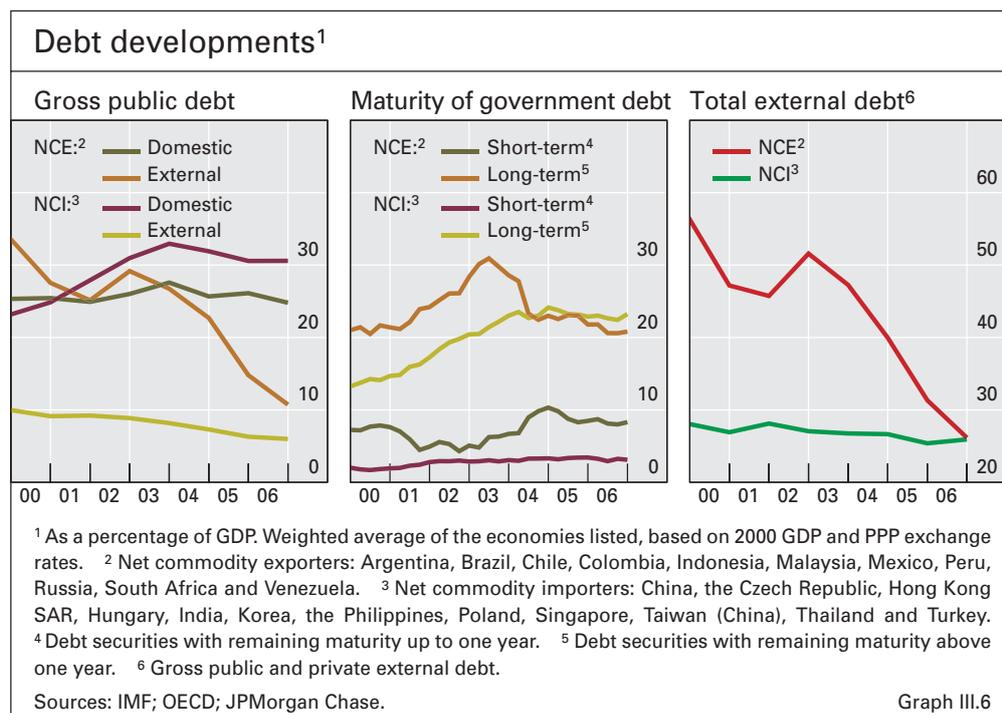
Medium-term fiscal adjustment and debt management

Debt stabilisation and reduction

The resilience of EMEs and their attractiveness to investors depend to a great extent on the government balance sheet position and the commitment to fiscal adjustment. Policymakers have actively sought to enhance macroeconomic stability through the stabilisation or reduction of public debt, and a variety of debt management operations geared towards improving financing conditions.

Gross public debt fell ...

Gross public debt (Graph III.6, left-hand panel, the sum of domestic and external) has fallen not only in EMEs that are net commodity exporters but also



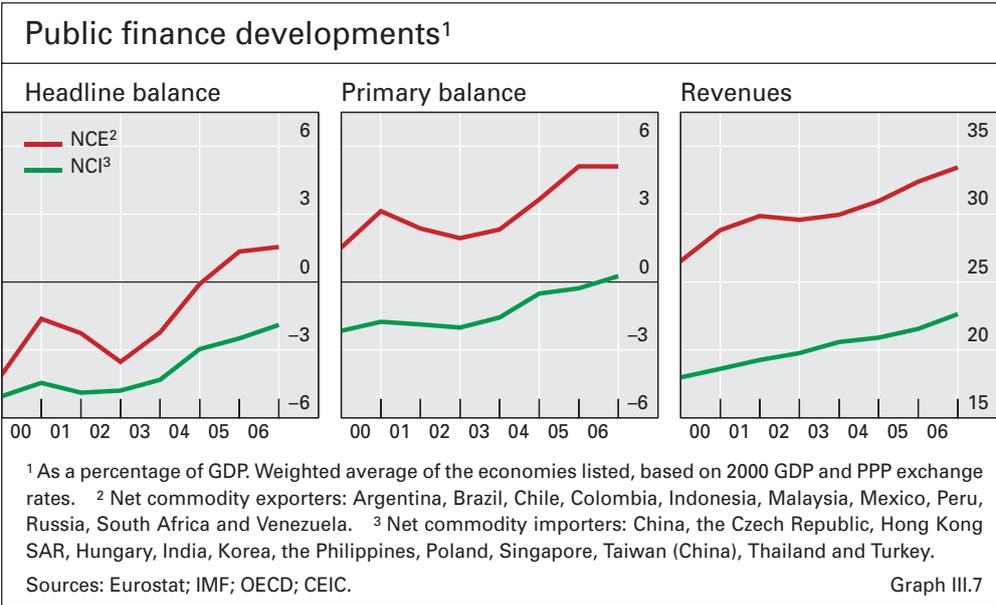
in those that are net commodity importers. The median debt/GDP ratio for all EMEs fell around 14 percentage points to 33% between 2003 and 2006, with Brazil, Chile, Colombia, Indonesia, Peru, the Philippines, Russia, Thailand, Turkey and Venezuela showing particularly large debt reductions (exceeding 10% of GDP).

The reductions in gross public debt ratios reflect in part the dynamics of robust growth and low interest rates and, in countries with significant debt denominated in foreign currency, the effects of domestic currency appreciation. However, a more sustainable foundation for the debt reduction is an underlying improvement in government fiscal balances. As illustrated in Graph III.7, budget deficits have fallen and public revenues have increased, particularly among net commodity exporters. These outcomes reflect marked improvements in fiscal discipline; primary balances (which exclude interest payments on debt) have risen considerably in recent years (Graph III.7, centre panel) and have played a role in debt reduction since 2000.

Primary balances are estimated to have increased moderately in 2006, and there are some grounds for confidence that the fiscal improvements seen to date can be sustained. For countries with large receipts from commodity exports or robust growth, the principal concern has been to ensure that cyclical expenditures do not rise commensurately. In a closely related vein, a number of countries have created stabilisation funds that would allow smoothing of government spending during bad times, using revenues accumulated during good times. Some countries have gone beyond the concept of a cyclical stabilisation fund to introduce wealth funds designed to support future generations when the country's non-renewable resources run out. For example, starting in February 2008, Russia's current oil stabilisation fund will be split into a reserve fund and a fund for future generations. In addition to taxes on crude oil (which are currently accumulating in the oil stabilisation fund), the two funds will receive the bulk of revenues from the mineral resource extraction tax for oil and gas, and export duties for oil, gas and oil

... with fiscal effort playing a role

Fiscal improvements may be sustained



products. The reserve fund will be maintained at a level equivalent to 10% of GDP. In Singapore, even in the absence of mineral resources, the Government Investment Corporation has for many years managed the equivalent of a wealth fund on behalf of the state. It invests accumulated surpluses from the government and from workers' contributions to a state-run Central Provident Fund.

Fiscal positions still raise concerns

Nevertheless, there are still concerns about fiscal positions. A number of countries have public debt exceeding 50% of GDP even though current conditions are unusually favourable. In the past, countries with such high debt ratios tended to fail tests of debt sustainability (that is, primary balances do not rise to counter rising debt levels). Even countries which currently pass such sustainability tests might fail them if economic growth or commodity prices were to fall sharply, or if interest rates were to rise significantly for an extended period.

Debt management

Debt sustainability depends on the composition as well as the size of debt. Short-duration debt exposes borrowers to interest rate and refinancing risks. A large share of foreign currency denominated debt creates exposures to currency depreciation.

Debt management operations to improve resilience ...

To reduce such risks, and to increase resilience to shocks, a number of EMEs have undertaken debt management operations. These operations, which are sometimes embodied in formal debt management principles (eg in Mexico), are aimed at improving the terms of financing, extending maturities, reducing currency mismatches and making greater use of domestic rather than international capital markets. For example, in September 2006 Turkey engaged in a maturity-extending transaction, launching a 10-year global bond in exchange for short-dated higher-coupon bonds and cash. Other transactions have focused on replacing external debt with domestic debt denominated in local currency. While such operations can raise the immediate interest costs of financing (domestic currency debt typically bears a higher rate than foreign currency debt), they reduce vulnerability to exchange rate depreciation. To this end, in August 2006 Mexico bought back \$12 billion in external loans and bonds for peso liabilities. At the same time, EMEs have sought to increase the issuance of fixed rate debt at longer maturities.

... lengthen maturities and lower foreign debt

Overall, these operations have served, first, to lengthen the average maturity of public debt, other than that used in sterilisation operations. This is reflected in the rise in longer-term debt compared to short-term debt among net commodity importers (Graph III.6, centre panel). Moreover, the classification shown does not capture lengthening maturities past one year, which have been observed in some countries, notably Mexico. Second, the share of foreign currency debt has fallen, reducing exposure to exchange rate fluctuations. In Brazil, the share of external or foreign currency-linked debt, net of reserves, fell from nearly 39% of GDP in 2002 to less than 10% in 2006. In Turkey, the corresponding ratios fell from 56% to 36%. Aggregate currency mismatches, a major cause of the crises in the 1980s and 1990s, have been reduced. With many EMEs running surpluses, both public and total external debt has

fallen (Graph III.6, left- and right-hand panels), increasing the resilience of these economies.

Foreign currency flows and asset prices in EMEs

One of the lessons of the 1990s crises is that capital flows can matter a great deal for macroeconomic outcomes. The Asian crisis of 1997 was preceded by appreciation pressures associated with capital inflows, and easy money which led in turn to higher asset prices. “Sudden stops” or reversals in capital inflows were then linked with sharp currency depreciation, collapsing asset prices and severe downturns. Previous current account deficits and losses associated with currency mismatches aggravated these problems, sometimes leading to banking crises.

Some similarities to pre-1997 crisis conditions are apparent in EMEs today, including appreciation pressures, easy money and higher asset prices. There are, however, also important differences compared with the earlier period. With some notable exceptions, appreciation pressures have been associated with current account surpluses. Moreover, foreign exchange reserves have reached record levels, exceeding conventional thresholds of reserve adequacy in most EMEs.

Stylised facts

Emerging markets are currently flush with foreign liquidity. One indicator of this is the sharp exchange rate appreciation in some countries; another is large foreign reserve accumulation. Foreign reserves in a set of EMEs have grown rapidly in recent years, to reach \$3 trillion, or about 27% of GDP in these economies by the end of 2006. China’s reserve accumulation accounted for a large proportion of the increase last year (nearly 44%), although the shares of Russia (21%), India, Korea and Brazil (5–7% each) have also been significant (Table III.2; see also Chapter V).

EMEs are flush with foreign liquidity ...

In contrast to the 1990s, the main source of foreign currency inflows in recent years has been current account surpluses rather than capital flows. The aggregate current account surplus of the EMEs rose to over \$600 billion in 2006. Net private capital inflows have amounted to less than half the value of current account surpluses on aggregate. Indeed, while net private capital flows to EMEs in US dollar terms are close to all-time highs, and above the peaks observed in the mid-1990s, as a proportion of GDP they have fallen considerably in some major regions. Foreign direct investment (FDI) and banking flows are now larger than portfolio investment flows (Graph III.8). Nevertheless, capital flows to some regions (eg the Commonwealth of Independent States, central and eastern Europe) have been particularly significant. Capital inflows have also continued to finance current account deficits in Hungary, India, South Africa and Turkey.

... from current account surpluses

This pattern of international balances has three implications. First, large current account surpluses imply that EMEs are less vulnerable to shocks and “sudden stops” in capital flows than in the past. During the 2006 episode of emerging financial market volatility, it was those countries with large current account deficits which proved most vulnerable to financial stress. In addition,

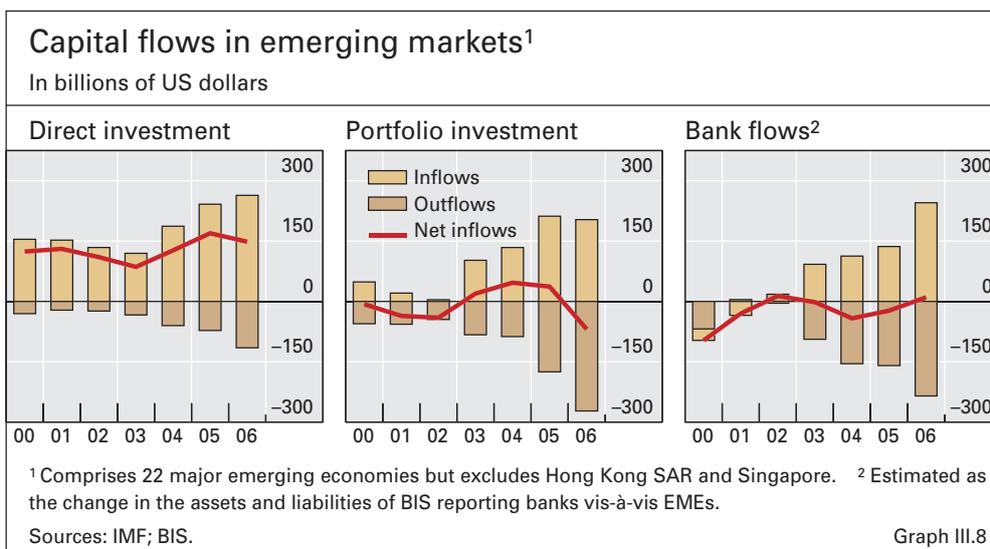
Less vulnerability to “sudden stops”

the large share of rather stable FDI in capital flows makes capital flow reversals less likely.

Policies reinforce appreciation pressures

Second, government policies in a number of countries imply that current account surpluses could lead to persistent appreciation pressures. Some EMEs still impose foreign currency surrender requirements on exporters while restricting capital outflows. This implies that large foreign currency inflows from current account surpluses, as well as from capital flows, enter the foreign exchange market. Many countries continue to resist the ensuing appreciation pressures, with the implications cited earlier.

Balance of payments					
In billions of US dollars					
	Annual average 1996–97	Annual average 1998–2003	2004	2005	2006
Emerging market economies¹					
Current account balance	-83	93	300	512	638
Private capital flows, net	208	88	239	257	256
Official flows, net	10	-1	-58	-123	-144
Change in reserves ²	-95	-156	-508	-590	-738
Asia					
Current account balance	-12	109	172	245	340
Private capital flows, net	82	11	143	70	54
Official flows, net	-1	-1	-7	-3	-10
Change in reserves ²	-41	-112	-339	-284	-366
Latin America					
Current account balance	-53	-43	20	35	49
Private capital flows, net	86	41	13	34	10
Official flows, net	1	10	-9	-30	-18
Change in reserves ²	-22	-3	-23	-33	-47
Central and eastern Europe					
Current account balance	-20	-25	-59	-63	-89
Private capital flows, net	28	37	75	118	121
Official flows, net	-1	-1	-7	-8	-5
Change in reserves ²	-9	-10	-14	-48	-21
Commonwealth of Independent States					
Current account balance	-1	27	63	88	99
Private capital flows, net	-4	-1	8	38	66
Official flows, net	-2	-5	-7	-22	-33
Change in reserves ²	1	-13	-54	-76	-127
Middle East					
Current account balance	13	31	99	189	212
Private capital flows, net	9	-4	-7	-11	-6
Official flows, net	1	-11	-34	-61	-81
Change in reserves ²	-10	-11	-45	-105	-126
Current account balances may differ from those in Table III.1 because of differences in geographical coverage.					
¹ Also includes Africa. ² A minus sign indicates an increase.					
Source: IMF, <i>World Economic Outlook</i> .					
					Table III.2



Third, net capital flows may understate the degree of foreign participation in EMEs, particularly as reflected in gross inflows and growing foreign holdings of emerging market assets. Gross portfolio investment inflows have been significant in recent years in a number of countries (Graph III.8). For example, according to one recent estimate, gross capital inflows to emerging Asian economies, at around 5–6% of GDP in 2006, were close to their mid-1990s highs (prior to the Asian and Russian crises). As a result, foreign holdings of local currency debt instruments have risen sharply in a set of EMEs (Brazil, the Czech Republic, Hungary, Indonesia, Malaysia, Mexico, Russia, South Africa and Turkey), although outside central Europe the foreign shares are still comparatively small. Furthermore, the share of emerging equity markets that is open to foreign investors, based on market capitalisation, is comparatively high, at around 34% of the total in December 2006 (based on the IFC index). However, it is hard to detect a trend in foreign access because of the volatility of equity market indices and the investable (to foreigners) components.

Significant gross inflows

Large funds and institutional investors from developed markets, as well as hedge funds, account for the bulk of gross portfolio inflows into EMEs. Pension funds and fixed income funds are gradually diversifying their portfolios internationally to include emerging markets, while the assets under management of hedge funds that follow an emerging markets strategy are estimated to have risen sharply in recent years (see Chapter VI). Moreover, foreign investors can increasingly take positions in emerging market assets without this necessarily being reflected in the capital flow data. One way is through the active use of derivatives, specifically non-deliverable forward contracts in emerging market currencies.

Foreign participation in emerging asset markets has risen ...

A number of economic factors appear to be driving increased foreign participation in the asset markets of EMEs. These include push factors such as greater risk appetite, continuing low relative returns in developed financial markets and the recycling of petrodollars to non-oil-producing EMEs. At the same time, pull factors, such as improved fundamentals, have played a major role. For example, reduced external or public debt (see above) has been

... reflecting both push and pull factors

reflected in higher sovereign ratings, which have attracted foreign investors. Technological developments have also encouraged investment in emerging financial markets by making it much easier to monitor developments there.

Outflows have masked inflows

Growing capital inflows have been masked by large capital outflows, reflecting the rising stock of private financial assets in EMEs, government liberalisation of outward investment, and foreign investment by government entities (including the commodity stabilisation funds or wealth funds cited earlier). Over the past two years, gross portfolio outflows have been comparatively high (relative to other EMEs) in China, Korea, Malaysia, Russia and Saudi Arabia.

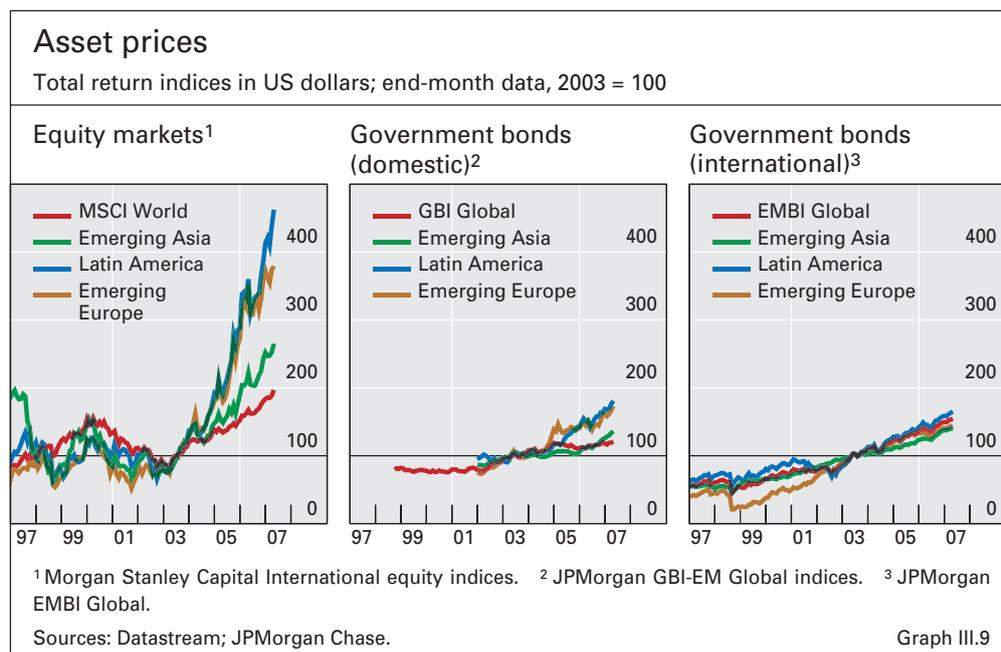
Implications for asset markets in EMEs

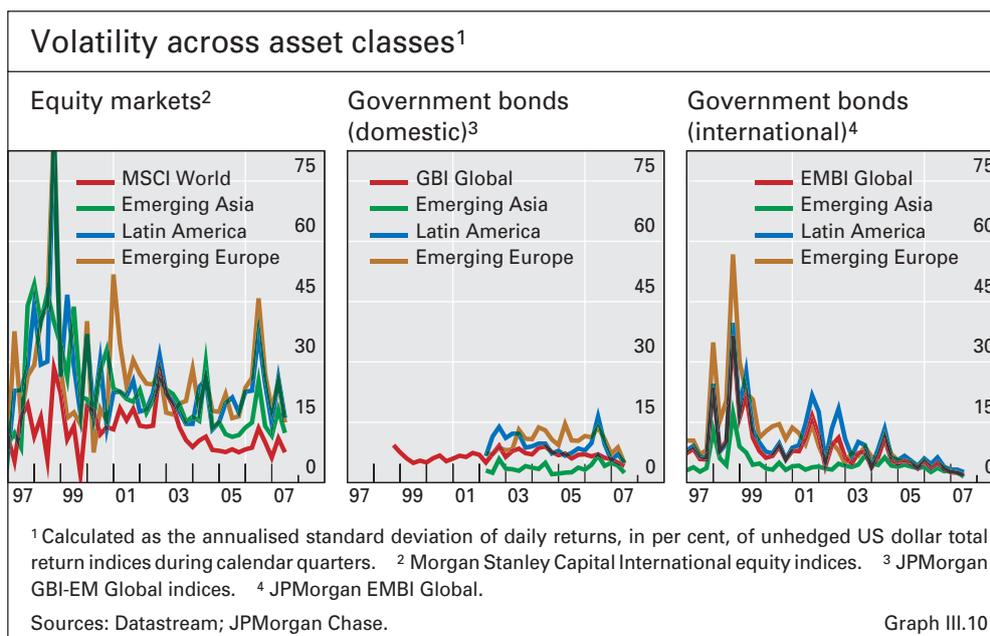
Returns on emerging market assets have risen

Growing integration with global financial markets appears to have been associated with a substantial increase in returns on emerging market assets (Graph III.9). Returns in emerging equity markets have been particularly high and, in spite of occasional episodes of volatility, they have significantly exceeded the return on bonds, whether domestic (centre panel) or international (right-hand panel). The extent to which equities are more volatile than bonds appears to be greater (Graph III.10). This can have macroeconomic implications. At the same time, rising asset prices have brought corresponding increases in financial wealth, raising the possibility that asset price fluctuations could have a bigger impact on aggregate demand than before.

Stock market capitalisation has also increased

To illustrate some orders of magnitude, stock market capitalisation ratios in EMEs have increased significantly in the course of this decade, and now average 79% of GDP in Asia (excluding Hong Kong SAR and Singapore), 47% in Latin America and 38% in central Europe. Even so, they remain below the percentages observed in the United States (124%) or Japan (108%). Recent research suggests that the long-run marginal propensity to consume out of a





change in the value of equity wealth is still relatively small in the United States: about 1 cent on the dollar in the short run and 4 cents in the long run (by way of comparison, the corresponding estimates are from 2 to 9 cents on the dollar for housing wealth).

Wealth effects in EMEs might, however, be smaller to the extent that equity market holdings are held mainly by the wealthier segments of the population and foreigners (rather than more broadly by households, as in the United States or Japan).

As noted above, wealth effects associated with other assets, notably real property, might also be important. The experience of the 1990s Asian crisis suggests that the creation of liquidity associated with foreign exchange market intervention can contribute to a sharp run-up in property prices and a “boom-bust” cycle capable of producing considerable economic and financial sector disruption. Today, this could apply to countries where credit to the private sector has grown rapidly. Data limitations make it difficult to evaluate risks, but in 2006 property prices rose significantly (eg at near double digit rates or higher) in Korea and South Africa as well as in the cities of Manila and Mumbai. Rapid credit growth suggests that there could also have been price increases in other markets for which property price data are not available. In some cases, there has been concern that foreign investors contribute directly to volatility in domestic property markets through their investments. In China this has prompted the government to restrict such investments, while in India the government has recently restricted foreign borrowing in the real estate sector.

There are, however, also reasons to believe that EMEs could be more resilient to property market shocks than before. First, as noted earlier, the most rapid growth in credit has been in countries with relatively low credit/GDP ratios. Second, property price increases in some cases are not widespread. For example, in Korea the fastest price rises appear to be confined to certain wealthy neighbourhoods, affecting a limited segment of the population. Third,

Property markets matter ...

... but EMEs appear resilient

many countries have absorbed the lessons of the crises of the 1990s and have strengthened their financial sectors with a view to containing risks.

Growing foreign participation in emerging financial markets contributes to greater financial market depth and efficiency. Nevertheless, two concerns have sometimes been raised. One is that a powerful foreign presence could increase volatility in small markets, by driving prices away from domestic fundamentals. The second is that domestic markets might become more exposed to spillovers or contagion from shocks abroad. As to the first concern, there is some evidence of “returns chasing” (investment in assets with already high returns) in Asian equity markets. This could mean that the high returns observed in those markets have been amplified by the participation of foreign investors. Furthermore, certain investment strategies, such as carry trades seeking to exploit higher EME asset yields, have implied persistently favourable excess returns, in apparent violation of the arbitrage or interest rate parity conditions implied by efficient markets. Either of these situations could pave the way for overshooting and prospective volatility. Moreover, and perhaps even more dangerous, foreign investors might possibly be more inclined to “cut and run” than domestic residents, introducing greater volatility in asset markets.

As for increased exposure to foreign shocks, the correlation between global and emerging market equity returns appears to have risen since mid-2004 (when the Federal Reserve began a cycle of tightening) compared to the 2001–04 period (Graph III.11).

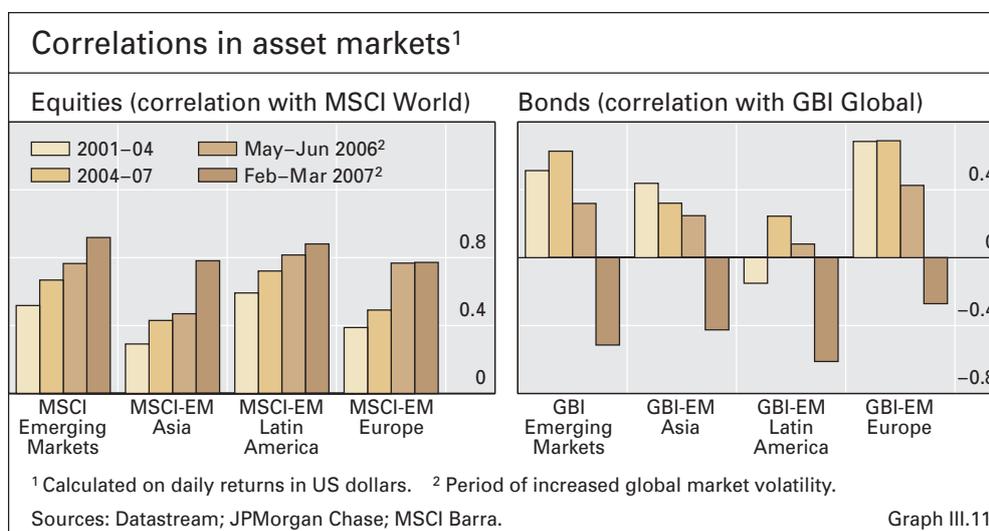
Furthermore, this correlation rose even higher during the most recent periods of global market volatility (May–June 2006 and February–March 2007). Although such correlations need to be interpreted with caution, they could indicate that emerging equity markets might now be more exposed to external shocks than in the past, particularly during periods of high market volatility.

Nevertheless, there is also some evidence supporting the view that greater integration with global markets has not been associated with higher

Growing foreign participation raises concerns

Rising equity return correlations ...

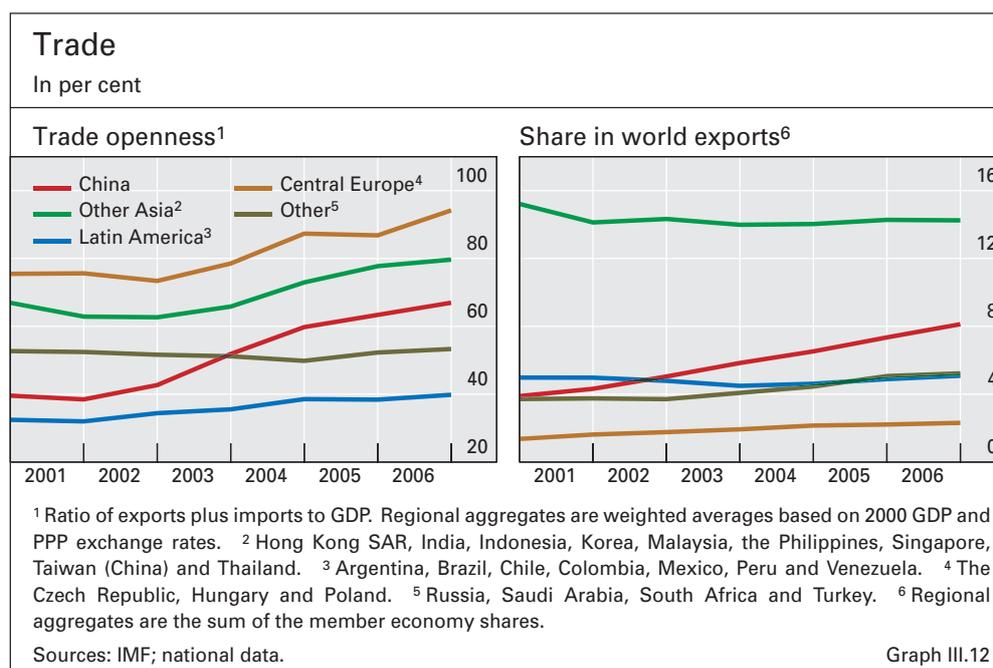
... but volatility remains moderate



volatility in emerging market financial asset prices. First, higher correlations between world and emerging market indices apply to equities but are less apparent for domestic bonds (Graph III.11). Second, price/earnings ratios in many EMEs do not appear high compared to developed markets. The median trailing price/earnings ratio in EMEs was recently around 15, about the same as in the euro area, but less than the US ratio of 18. It should be noted, however, that the cross-country dispersion in emerging market price/earnings ratios has recently risen considerably, nearly tripling since mid-2006. As a result, ratios are much higher in some EMEs, including China, where they rose to 34 by mid-May 2007. Third, as illustrated in Graph III.10, market volatility has generally fallen since the late 1990s, when foreign participation was smaller. While prima facie this might indicate that foreign participation has not heightened volatility, this conclusion must be tempered by the fact that lower volatility has also been seen in many other markets. This implies that an increase in global risk aversion might still have significant effects on EMEs.

China's international trade: stylised facts and implications

Since its accession to the WTO in December 2001, China's share in world exports has doubled to 8% (Graph III.12). At the same time, it has also become one of the top five destinations for emerging Asia's exports. Underlying these changes is the country's emergence as a global manufacturing hub that produces final goods by importing intermediate and capital goods. These developments raise three questions. First, how are the trade opportunities for China's trading partners being affected? Second, how has the exposure of these partners to external shocks changed? Third, what are the implications for regional exchange rate policies?



Changing trade patterns

China is an important market for Asia ...

China's emergence in global trade has been characterised by three features. First, it has displaced some other Asian EMEs in the markets of advanced industrial countries, but has also provided an important market for their goods. The share of advanced industrial economies (the United States, the European Union and Japan) in the exports of emerging Asia has tended to fall (Table III.3), while the share of China's exports to advanced industrial economies has tended to rise (with Japan a striking exception). China's share in the exports of emerging Asia has risen, from 13% in 1996–2001 to 22% in 2005–06. Over these periods, the share of emerging Asia in China's imports rose from 31% to 35%.

... importing mainly production inputs ...

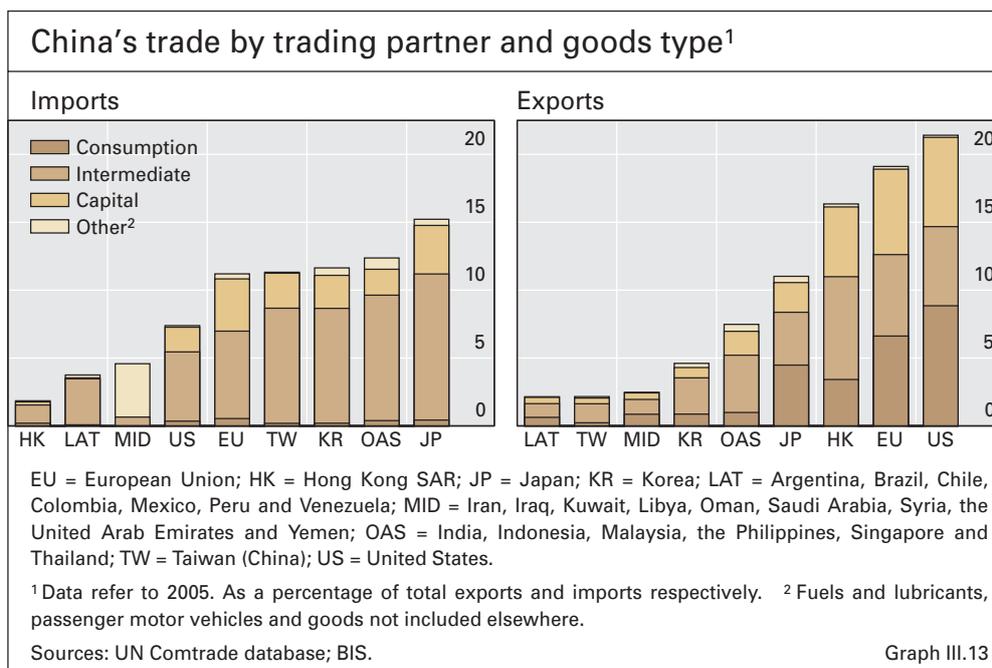
Second, a significant proportion of China's imports is accounted for by production inputs, particularly for the export sector. About 70% of Chinese imports consist of intermediate goods, and 57% of these goods come from emerging Asia and Japan (Graph III.13, left-hand panel). At the same time, consumption and capital goods make up 72% of Chinese exports to the United States and 68% of those to the European Union. This illustrates a growing

Asian trade shares				
Averages, as a percentage of total exports and imports respectively				
	Exports		Imports	
	1996–2001	2005–06	1996–2001	2005–06
Emerging Asia excluding China ¹				
United States	21.0	14.6	14.3	9.4
European Union	15.9	13.6	12.9	10.3
Japan	10.1	8.0	17.9	13.9
China	12.9	21.8	13.7	18.4
Emerging Asia excluding China internal trade ¹	25.2	26.4	24.4	26.5
Latin America ²	1.8	1.8	1.2	1.3
Middle East ³	2.7	3.4	6.3	9.2
Africa ³	1.3	1.6	1.4	1.1
China				
United States	19.9	21.4	11.3	7.5
European Union	15.6	19.3	14.6	11.3
Japan	17.4	10.2	19.7	14.9
Hong Kong SAR	20.2	16.0	4.6	1.6
Emerging Asia excluding China and Hong Kong SAR	12.7	14.5	30.9	34.8
Latin America ²	1.7	2.4	2.2	3.9
Middle East ³	2.6	3.3	3.0	5.3
Africa ³	1.7	2.3	1.6	3.2
<i>Memo:</i>				
<i>European Union internal trade</i>	<i>66.9</i>	<i>67.5</i>	<i>63.4</i>	<i>62.6</i>

¹ Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. ² Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. ³ IMF Direction of Trade regional grouping.

Sources: IMF; BIS calculations.

Table III.3



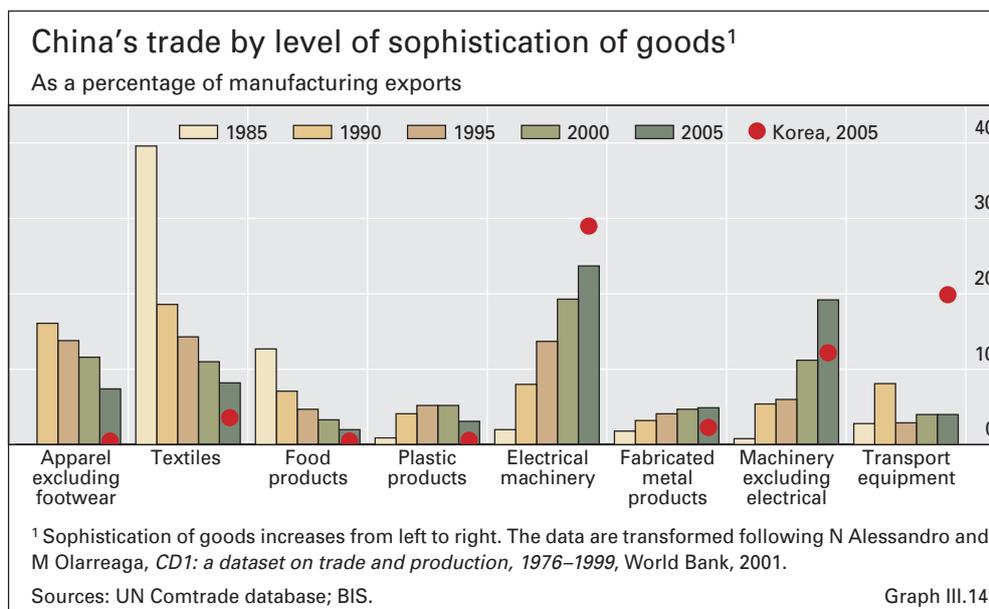
vertical integration in the production process in Asia, responding to the fact that certain countries seem to have a comparative advantage in one or other stage of production. Chinese exports, therefore, have a comparatively high import content and China's value added is correspondingly low. Moreover, distribution margins often account for an even larger proportion of the final retail price for Chinese exports. As a result, a doll that sells for \$20 in the United States is estimated to contain only 35 cents of value added by Chinese labour.

As is also apparent in Graph III.13, China's trading relationships extend well beyond production networks in Asia. In particular, its imports have contributed significantly to the demand for raw materials from the Middle East and Latin America, recently accounting for about 5% and 3.3% respectively of total exports from those regions. In Africa, the corresponding figure is 7%. Moreover, a substantial proportion of incremental demand for major commodities can be attributed to China. For example, between 2004 and 2006, it accounted on average for about 37% of the annual increase in world demand for oil. China is now the second largest oil importer in Asia after Japan, and demand is expected to increase by 5–7% a year. The country is also the world's largest consumer of commodities such as copper, nickel and zinc and, given its high demand for such products, has been instrumental in causing these prices to rise. This demand is likely to continue for some time as China is still in the early stages of industrialisation, when infrastructure investment is of particular importance.

Third, China is gradually shifting from exports of labour-intensive and less advanced manufactured goods to more technology-intensive goods. Between 1998 and 2005, the share of consumption goods in exports of final goods fell from 48% to 32%, while the share of capital goods rose from 15% to 26% (the remainder are largely intermediate goods). The share of manufacturing exports in total exports has also risen, with a growing share for more sophisticated

... and playing a large role in commodities markets

Moving up the technology ladder



goods such as machinery (Graph III.14). The incentive to climb the technology ladder was boosted by an announcement in September 2006 that tax rebates would be abolished or reduced for certain export products with low value added, or which contribute to high pollution or high consumption of resources. The government has also invested heavily to foster research and development in China, although the lack of adequate intellectual property protection there remains a potential deterrent to high-tech commercial operations.

Medium-term implications: how has China affected trade opportunities?

The preceding discussion suggests that China's impact on trade opportunities for other emerging markets is mixed because it is potentially both a competitor and a new market for goods and services. For some commodity exporters in Latin America and Africa which do not compete with China, its entry into the world trading system offers clear benefits from terms-of-trade gains, although there could also be some offset to the extent that these countries import oil. Net benefits might also be expected for countries that have been displaced by China in low value added or assembly operations, but which now supply it with production inputs. For example, while Chinese competition might displace PCs assembled in Korea for sale in developed countries, such effects could be largely offset by increased Chinese demand for Korean PC components such as semiconductors.

In contrast, countries competing with China in final goods, with no offsetting sales of production inputs to the latter, will find their trade opportunities reduced. China has displaced Mexico and Central America as a supplier of textiles and garments to the US market, and is an emerging competitor for goods embodying intermediate technology (electronics and electrical goods, computers and automobile industry parts). Some other countries have been affected in part because of their own domestic policies. To illustrate: China is a world leader in sales of apparel in world markets, in direct

China's entry into global trade benefits some ...

... but may be a challenge to others

competition with India. Chinese imports of high-quality textiles to produce these goods have grown, but are sourced mainly from Japan and the newly industrialised economies. China does not import these textiles from India, even though India is the world's second largest producer. In part, this has been due to export restrictions on India's textile industry imposed by the Indian government.

The medium-term trade opportunities created by China's global integration would be considerably greater if its import demand began to reflect its own final domestic demand, as well as the derived demand from those to whom it exports. This is not yet the case. Final consumption goods constitute only 4% of China's total imports and calculations suggest that the elasticity of demand for its ordinary imports (ie those not used for processing in the export sector) with respect to domestic spending is insignificant. In line with this, China also appears to be engaged in large-scale import substitution; for example, it has recently become self-sufficient in steel.

China imports little for domestic consumption

A related medium-term question is whether China's rapid growth and demand for commodities and intermediate imports are themselves sustainable. Its very high rates of investment run the risk of supporting projects with low or even negative returns. High rates of investment were also observed in East Asia in the 1980s and early 1990s, culminating in the 1997–98 crisis.

Recent evidence suggests that the easier access to the formal financial system enjoyed by China's state-owned enterprises (SOEs) encourages overinvestment and lowers the marginal return on capital. Indeed, productivity levels at SOEs are roughly 30% lower than in private firms. It is estimated that by allocating resources more efficiently, China could reduce its investment levels by 5% of GDP and raise consumption without sacrificing economic growth. At present, the authorities are seeking to contain unproductive investments through a variety of administrative measures, by reducing credit growth (at times selectively) and by tightening monetary policy. But such public sector measures need to be supported by market forces that also operate effectively and quickly to contain unproductive investments. Evidently, the longer these resource misallocations are allowed to continue, the greater the eventual fallout.

Overinvestment threatens growth ...

A related implication of easy access to credit has been a heavy concentration of bank exposure on less profitable SOEs. According to government figures, roughly 40% of industrial SOEs make losses. The bulk of recorded aggregate profits are earned by relatively few enterprises, which fund themselves primarily from retained earnings rather than borrowing from banks. This implies that a substantial proportion of lending by China's banks could turn into non-performing loans should the country's economy slow significantly. Presumably, this would also have sizeable fiscal implications unless Chinese banks were to become considerably more profitable in the interim.

... and exposes banks

An additional medium-term concern for more technologically advanced competitors, such as Korea, is the possibility of their being "hollowed out" due to an increasing tendency to shift manufacturing jobs to China. There is some room for optimism in this regard. Although China has attracted the bulk of FDI flows to emerging markets, its share has fallen, from a peak of 39% in 2003 to

Hollowing-out effects not seen

26% in 2006. Furthermore, with the notable exceptions of Japan, Hong Kong SAR and Taiwan (China), the share of manufacturing production in GDP has not declined in other emerging Asian economies since 1993. However, this does not rule out the possibility that employment in the manufacturing sector could still fall in response to increases in productivity, as appears to have occurred in the United States and a number of other advanced industrial countries.

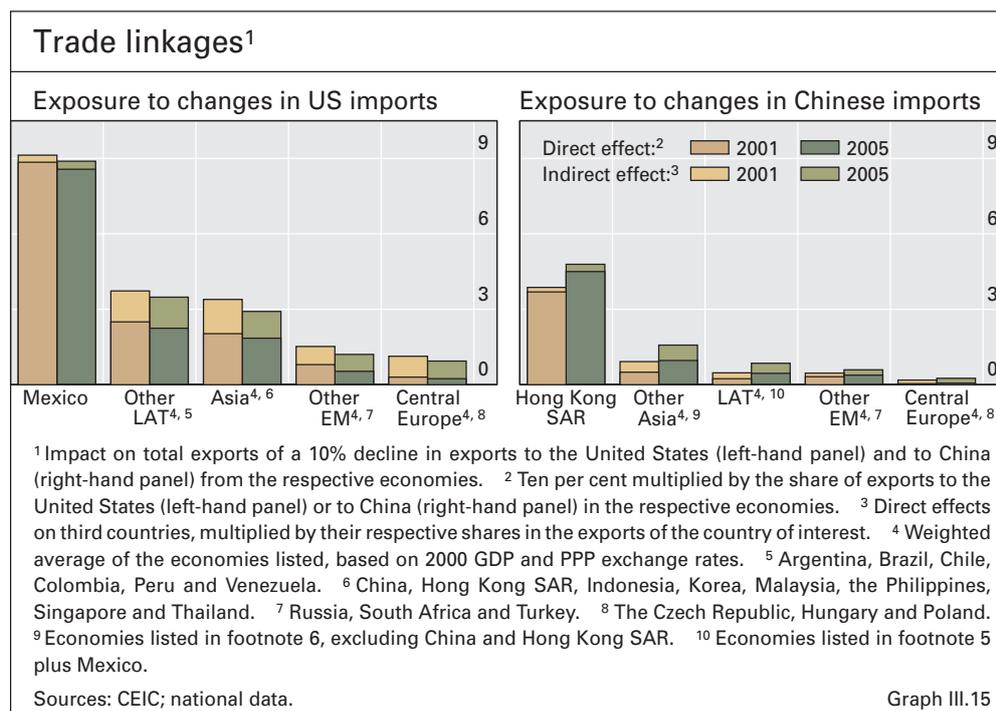
Exposure and resilience of emerging Asia (excluding China) to shocks

Large impact from a US slowdown ...

China's growing prominence in world trade has changed the channels through which external demand shocks are transmitted to EMEs, and has also influenced the pattern of co-movement in trade flows. A US slowdown affects emerging Asia by lowering demand for its exports to the United States (direct demand effect), but it also has indirect effects coming through the slower US demand for Chinese exports. For instance, a 10% slowdown in US imports directly lowers Korea's exports by 1.5%. However, the same shock also reduces China's exports by 2.1%, which causes a further drop in imports from Korea. Under certain assumptions, these indirect effects lower Korean exports by another 1.3% (Graph III.15). A US slowdown could also cause the US dollar to depreciate against Asian currencies, which would further amplify both the direct and the indirect effects.

... or smaller impact from a Chinese slowdown

The lack of response of China's imports of final products to changes in domestic demand, cited earlier, indicates that a Chinese slowdown would have smaller effects on Asian economies than would a US slowdown. However, this also suggests that the extent to which China could provide a cushion to the Asian economies in the event of an adverse global demand shock would also be more limited.



Implications for exchange rate policies

The development of trade networks is likely to affect exchange rate policies, but the precise effects will depend on the extent of direct trade competition, trade through production networks and the resulting business cycle synchronisation. For example, an increase in US demand for China's exports in equilibrium would require a renminbi appreciation against the dollar. The exchange rate response of China's Asian neighbours would then depend on the extent to which they compete with China or form part of a (vertically integrated) production network with it.

Given a renminbi appreciation against the US dollar ...

On the one hand, to the extent that its neighbours compete with China in third markets, they would wish to see their currencies fall against the renminbi. One indicator of this is the overlap in goods exported: between China and Thailand, for instance, this measure grew from 50% in 1998 to 55% in 2005; between China and Korea, it increased from 44% to 56% during the same period. In contrast, China does not compete at all with most Latin American countries (except Mexico).

... China's competitors would prefer to devalue against the renminbi ...

On the other hand, to the extent that its Asian neighbours are linked to China through production networks, as discussed earlier, demand for their exports to China is set to grow. To avoid external imbalances or overheating, these economies therefore have an incentive to allow their currencies to appreciate along with the renminbi. Thus, the increased synchronisation of business cycles resulting from production networks would tend to link East Asian currencies more closely to China's. This effect may be dampened, however, to the extent that trade flows are not sensitive to exchange rate changes.

... while stronger synchronisation might encourage linking to the renminbi

China's emergence as a major trading country has already had a substantial impact on the global economy. How it succeeds in achieving sustainable growth will have major consequences for the rest of the world in the years ahead.