

V Emerging market economies

The December *Review* described a deterioration of emerging market economy (EME) asset prices during the second half of 2000, following a year of gradual improvements. Although yield spreads on sovereign bonds narrowed during the second quarter of 2001, many EME asset prices are weaker than a year ago. The risks to EMEs' macroeconomic and financing prospects are also probably greater than in June 2000 in the face of falling asset prices and a weaker macroeconomic outlook in the industrial world. Many EMEs remain vulnerable to such external factors. Argentina and Turkey continue to display overt symptoms of vulnerability. So far, however, there has been little evidence of widespread or sustained contagion to other EMEs or beyond.

Asset prices and capital flows

On average, EME equity prices are a little lower than in December but around 30 per cent lower than a year ago, in US\$ terms. In all regions increases in equity prices during December and January were offset by sharp price falls during the remainder of the first quarter. Since then, equity prices have picked up a little (Chart 78). Movements in sovereign yield spreads have been less uniform. In higher-rated EMEs, sovereign yield spreads have fallen over the past twelve months. However, among low-rated economies, such as Argentina and Turkey, spreads remain higher than a year ago (Chart 79).

Gross financing flows to EMEs have slowed so far during 2001. Sovereign issuance has been US\$20 billion in 2001 to date, compared with US\$30 billion over the same period of 2000, while flows to EME corporates slowed from US\$74 billion to US\$46 billion (Chart 80). The Institute of International Finance expects net capital flows to EMEs to fall this year. However, this reflects Turkish and Argentine prospects, with net flows to other EMEs projected to rise by US\$6 billion.

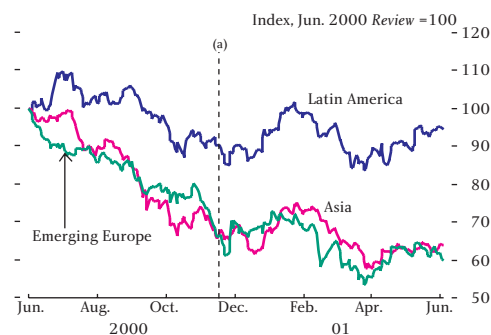
Potential external shocks

Sections I to IV have described the risks arising from the worsening macroeconomic outlook among the industrial economies. These might affect EMEs both through the trade account, as demand for exports falls, and through the capital account if the supply of external capital to EMEs is affected.

Trade links

Exports to industrial economies accounted for almost 60 per cent of developing countries' exports in 1999. Weakening macroeconomic prospects in the industrial economies are a factor explaining the downward revisions to growth forecasts for most EMEs (Chart 81). These trade effects may, however, be partially offset if lower interest rates in industrial economies permit looser monetary policy amongst EMEs – for example where currencies are pegged to the US dollar. There is some

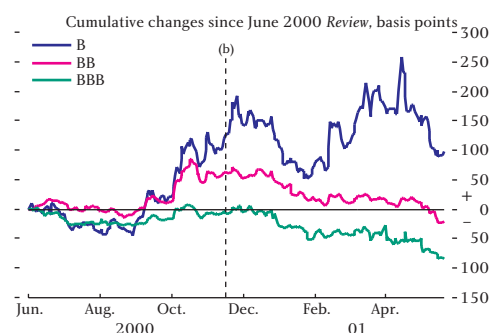
Chart 78:
EME US\$ equity prices: by region



Source: MSCI.

(a) December 2000 *Review*.

Chart 79:
Changes in EME sovereign US\$ bond spreads: by rating^(a)

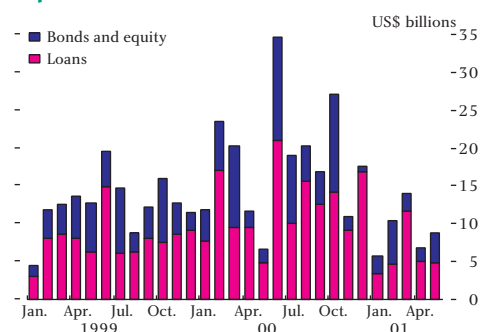


Sources: JP Morgan Chase & Co and Standard and Poor's.

(a) Based on latest ratings.

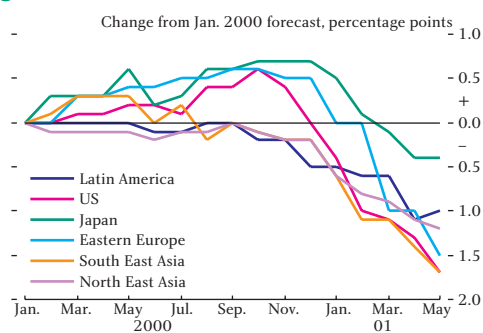
(b) December 2000 *Review*.

Chart 80:
Gross international financing by EME corporates



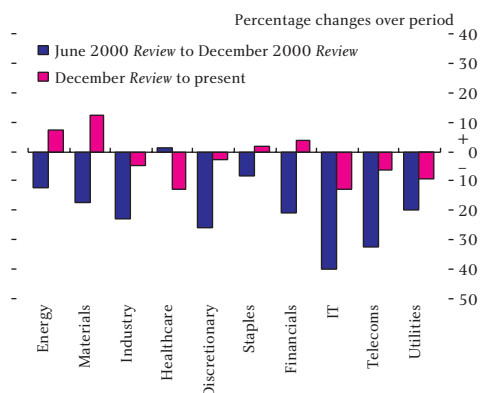
Source: Capital Data.

Chart 81:
Changes to Consensus Forecasts for GDP growth in 2001



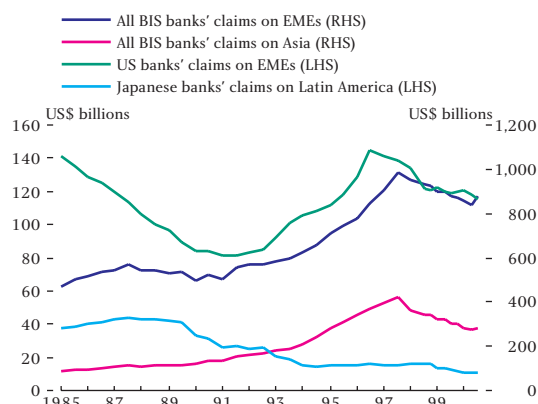
Source: Consensus Forecasts.

Chart 82:
EME US\$ equity price changes: by sector



Source: MSCI.

Chart 83:
Industrial-country banks' external claims on EMEs^(a)



Source: BIS.

(a) Using consolidated data, not adjusted for risk transfer.

correlation between trade exposures to the United States and revisions to country growth forecasts. Notably, in Latin America, Mexico (for whom the United States was the destination for 88 per cent of exports in 1999) has seen a 1.9 percentage point reduction in Consensus growth forecasts for 2001 since December.

Exports to industrial countries are particularly important for the Asian EMEs, which are more open than the EME average. The Asian EMEs are also more exposed to the sectoral slowdown in technology growth, as ICT-related products account for a significant proportion of exports. Box 2 reviews trade links between non-Japan Asia and the United States in more detail. As discussed in Section IV, the Asian EMEs have relatively close economic and financial links with Japan, where macro-economic prospects have also deteriorated. The relative exposure of Asian EMEs to external demand shocks and the significance of the technology sector may be factors behind the substantial falls in Asian equity prices over the past twelve months (Chart 78). This would also be consistent with the concentration of falls in EME equity prices within the IT and telecoms sectors (Chart 82).

Supply of finance

The conjunction of weaker macroeconomic prospects in industrial countries and the reduction in wealth associated with lower asset prices may reduce the pool of external financing available, particularly to higher risk borrowers. In the past, macroeconomic and asset price weakness in industrial economies or their banking systems has sometimes coincided with reductions in the stock of bank lending to some EMEs. For example, US-owned banks' external claims on EMEs fell by almost a third between 1986 and 1991 (Chart 83), while Japanese banks' claims on Latin America fell by around a half between 1988 and 1993. However, data are available only for a short period and other factors, such as losses following the increased incidence of EME defaults during the 1980s, may have been more important. Moreover, any possible relationship between conditions in industrial countries and capital flows to EMEs is less clear in broader measures of net capital flows – that include equity and foreign direct investment (FDI) – which rose through the early 1990s. More recently, local factors in the borrowing countries may have dominated.

Internal factors: some country issues

Vulnerabilities in EMEs can arise from a variety of sources, including significant economy-wide external financing needs; sectoral balance sheet weaknesses such as high leverage among firms; and concentration of trade revenues in particular markets. These structural factors might, in adverse circumstances, constrain the policy options available to accommodate or deal with shocks.

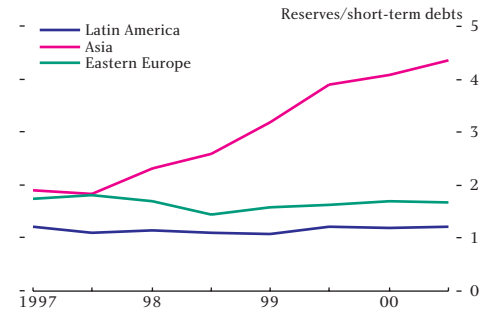
External financing needs

Where short-term external debts are significant, the recurring need to refinance maturing liabilities leaves a country vulnerable to any fall in the supply of capital. This may then magnify the effect of any deterioration of trade or fiscal prospects. As noted in previous *Reviews*, many EMEs have short-term external debts that are high relative to liquid assets such as official foreign currency reserves. At a regional level, while most Asian EMEs have increased stocks of foreign currency reserves and repaid debts since 1997, Latin American economies typically continue to have significant financing needs relative to reserves (Chart 84). In some EMEs, these external financing vulnerabilities are exacerbated by other features of public sector balance sheets. For example, in South Africa the Reserve Bank still has a significant (over US\$7 billion) net open forward position, leaving liabilities sensitive to changes in the exchange rate.

In Brazil, the structure of public sector debts has improved markedly since the previous *Review* with, for example, the average duration of traded Federal securities rising over 50 per cent to 9.5 months. But debt servicing costs remain sensitive to sharp movements in asset prices, as 24 per cent of local-currency denominated Federal securities are indexed to the exchange rate and a further 51 per cent pay floating interest rates. The Brazilian exchange rate has depreciated by 18 per cent so far in 2001, and this weakness has been associated with a sharp rise in near-term interest rates (Chart 85). Brazilian asset price movements reflect close links with Argentina and the United States. These economies were the destination for a third of Brazil's exports in 1999, while the US was the source of a fifth of Brazilian FDI inflows in 2000. Additionally, Brazil's near-term macroeconomic prospects have recently been affected by energy shortages.

The Eastern European accession economies typically have lower external debt servicing requirements than the Latin American EMEs. However, the larger economies have relied on sizeable net equity inflows to finance the trade deficits associated with industrial restructuring during the late 1990s (Chart 86). If these deficits persist, asset prices and exchange rates would weaken if the supply of equity capital were to fall, for example because of an economic downturn in the EU (the source of the bulk of recent FDI inflows) or if the likelihood of EU accession were to be reappraised. In Poland, where the current account deficit was 6 per cent of GDP in 2000, the risks associated with reduced capital flows might be magnified by the banking sector's off-balance-sheet commitments. According to central bank figures, these have increased substantially in gross terms since 1998, though the net position may be smaller if exposures have been hedged with strong counterparties.

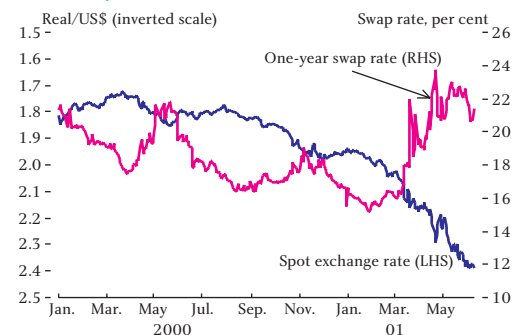
Chart 84:
Reserve coverage of short-term external debts to BIS area banks: by region^(a)



Sources: BIS and IMF.

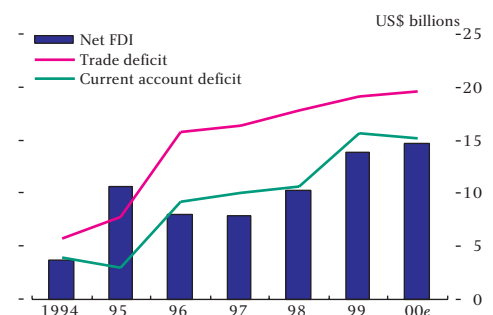
(a) Regional figures are a weighted average of major EMEs' ratios. Weights reflect UK-owned banks' current external claims. The sample covers EMEs accounting for over 90 per cent of each region's liabilities to UK-owned banks.

Chart 85:
Brazil: exchange rate and one-year interest rate swap



Source: Bloomberg.

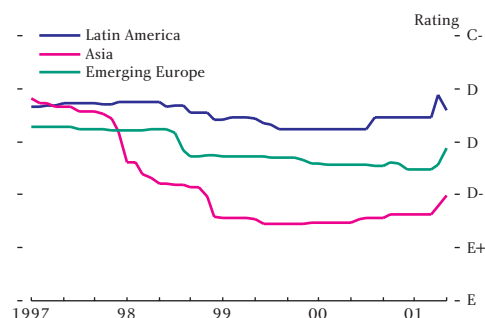
Chart 86:
Major accession economies' balance of payments^(a)



Sources: IMF and IIF estimates for 2000.

(a) Poland, Hungary and the Czech Republic, which together accounted for over 70 per cent of accession economies' US\$ GNP in 1999.

Chart 87:
Moody's bank financial strength ratings^(a):
regional averages^(b)

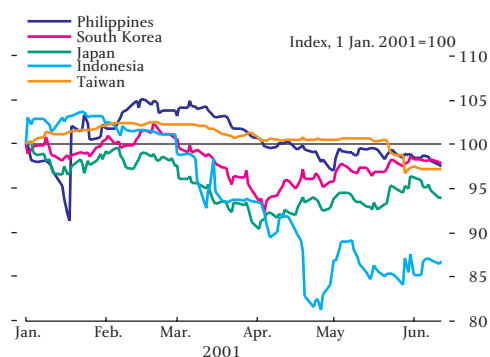


Sources: Moody's Investors Service and Bank calculations.

(a) Bank financial strength ratings reflect Moody's opinion of the likelihood that a financial institution will require third party support. They are made on a scale A (least risk) to E (most risk). From February 2001, the number of categories within this range was increased to permit greater differentiation of risks. Changes in ratings around this period often reflect this adjustment rather than a change of view.

(b) Regional figures are an average of constituent country figures, weighted according to current UK-owned banks' external claims. Country figures are an asset-weighted average of individual institutions' ratings. The sample covers EMEs accounting for around 90 per cent of each region's liabilities to UK-owned banks.

Chart 88:
Asian exchange rate developments vs the US\$



Source: Bloomberg.

Sectoral balance sheet weaknesses

Countries' sectoral balance sheet positions are considerably more complex than can be captured by focusing solely on external financing needs. The Asian crisis is a recent example of how links between corporate and banking sector balance sheets can magnify the impact of external shocks. The main crisis economies – Indonesia, Korea and Thailand – have increased their international reserves since 1997. However, public sector domestic debts have risen and falls in equity prices have raised the cost of equity capital. Banks' balance sheets weakened during the 1996/97 crises, as the stock of non-performing loans rose. Balance sheet weaknesses were reflected in downgrades by ratings agencies. For example, Moody's downgraded their bank financial strength ratings, which give an indication of the likelihood that individual banks will require support (Chart 87). Banking sectors in the crisis economies remain relatively weak. Non-performing loans are still quite high, though in some countries they have been reduced in part as bad loans have been transferred to separate asset management companies. These sectoral balance sheet weaknesses could exacerbate the potential consequences of slowing global demand. Some other Asian economies, such as Malaysia and Hong Kong, appear to have more robust sectoral balance sheets, but exchange rate pegs constrain the policy response to external shocks.

Indonesia remains the most vulnerable of the major Asian economies. State interventions to assist ailing and failed banks have led to a significant increase in public sector debt. The government's domestic debt rose from near zero at end-1997 to around 50 per cent of GDP in 2000. Because of Indonesia's position as an oil exporter, rising oil prices during 1999 and 2000 helped offset some of the fiscal costs of bailouts and debt service. But these costs are ongoing, leaving Indonesian prospects vulnerable to any fall in oil prices. Moreover, since around half of public sector debts are foreign currency-denominated, debt-servicing costs are sensitive to exchange rate movements. The rupiah has depreciated markedly during 2001, relative to both the US dollar and the yen (Chart 88).

The Korean economy has close trade links with industrial countries (see Box 2) and is particularly exposed to any slowdown in demand for technology products. During the first quarter, the won depreciated against the US dollar, broadly in line with the yen (Chart 88), which is one factor behind the rise in inflation during 2001 (Chart 89). The cost of servicing Korean corporates' US\$57 billion external debts will also have risen¹⁷. However, any tightening of domestic monetary policy could tend to raise the cost of servicing domestic debts and would affect

¹⁷: Regrettably, data on debts are split by residence rather than currency. The Financial Stability Forum's 'Report of the Working Group on Capital Flows' discusses the use of balance sheets for risk monitoring in some detail.

Korean firms needing to rollover maturing loans. Recent developments at Hyundai's affiliates, which have asked banks to restructure debts, illustrate the ongoing weakness of corporate balance sheets.

Malaysia and Taiwan also have close trade links with industrial countries, are very open, and have a concentration of exports in the technology sector. In Malaysia, the current monetary policy regime of fixed exchange rates limits the options for absorbing external demand shocks, such as a US slowdown. Foreign currency reserves have declined by around 15 per cent since the *December Review*. In Taiwan, the exchange rate is floating, the depreciation of the Taiwanese dollar since March is likely to have increased competitiveness (Chart 88).

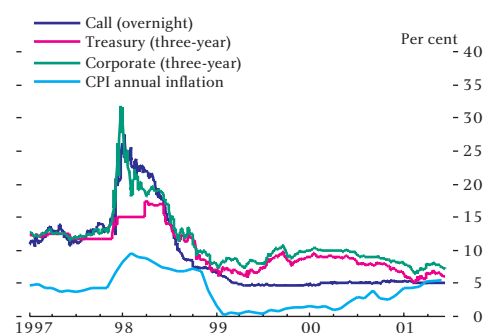
Hong Kong also has a fixed exchange rate regime and close trade links with industrial countries. So far however, and despite superficial similarities with the currency board structure in Argentina, there has been little indication of pressure on Hong Kong's currency, as interbank rates have remained close to US dollar rates (Chart 90). This may partly reflect higher wage and price flexibility in Hong Kong and so a greater capacity to adjust to shocks. Consumer price deflation has, however, been associated with falling property prices. Given the concentration of domestic banks' assets in the property sector, this might have been expected to weaken banks' balance sheets. According to the Hong Kong Monetary Authority, balance sheets appear robust, with persistent post-tax profits and low non-performing loans. However, the full effects of lower property prices on banks' balance sheets may not yet have been felt.

China is considerably less exposed to external disturbances than most other EMEs as the economy is less open and less reliant on the technology sector. But any sharp change in Asian exchange rates could affect Chinese competitiveness. As noted above, many Asian currencies have depreciated against the US dollar during 2001. But there is little evidence of Chinese exchange rate pressure in forward markets. The Chinese banking sector has a weak balance sheet with non-performing loans of around 40 per cent, according to the World Bank. Future prospects are linked closely to the performance of China's state-owned enterprises, which account for the bulk of bank loans, and improvements in risk management within the banking sector.

Commodity dependence

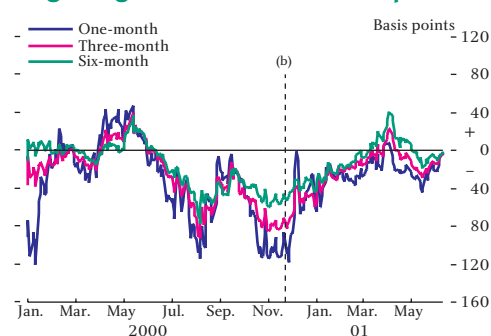
Many EMEs remain dependent on a few primary commodities for a large part of their export receipts (Table 10). The most significant single commodity is oil, accounting for around a third of commodity exports from the major EMEs. Although oil prices have fallen from their peak in September 2000, they remain well above the trough in 1998. As discussed in the *December Review*, oil-importing EMEs, such as Korea and India, have therefore

Chart 89:
Korea: interest rates and inflation



Source: Thomson Financial Datastream.

Chart 90:
Hong Kong: US dollar interbank spreads^(a)



Source: Reuters.

(a) Hong Kong dollar rates from HIBOR, US dollar rates from LIBOR.

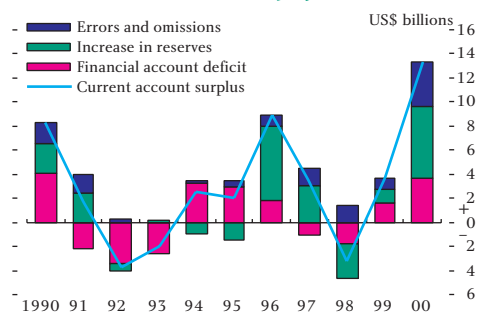
(b) December 2000 *Review*.

Table 10:
Share of exports contributed by primary commodities; selected EMEs (1998, per cent)

Country	All primary	Oil
China	11	2
Malaysia	19	6
Korea	7	3
Thailand	24	2
Indonesia	38	17
Singapore	12	7
Hong Kong	3	0
Philippines	9	1
Argentina	63	8
Brazil	42	1
Mexico	14	6
Venezuela	76	70
Colombia	68	22
Chile	51	0
Russia	47	37
Turkey	21	1
Hungary	15	1
Czech Republic	11	1
Poland	19	1

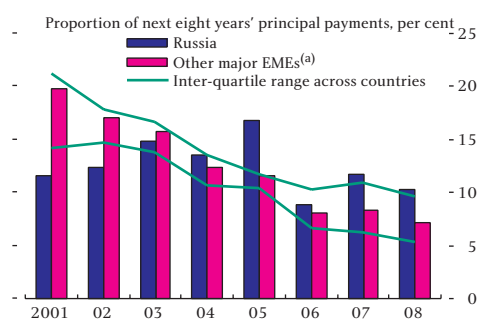
Source: International Trade Centre.

Chart 91:
Venezuela – balance of payments



Source: IMF.

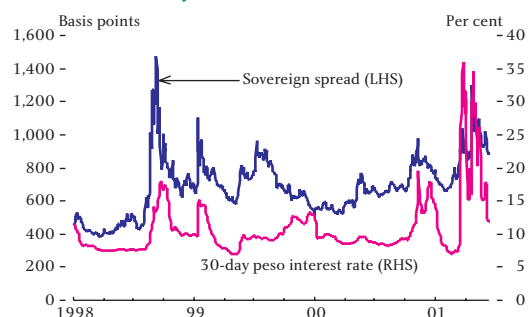
Chart 92:
Russian amortisation schedule on external debts



Source: World Bank.

(a) Based on cumulated principal payments due from a sample of major EMEs.

Chart 93:
Argentina: sovereign US\$ bond spreads and short-term peso interest rates



Sources: JP Morgan Chase & Co and Bloomberg.

experienced deteriorating terms of trade. Oil exporters have gained from the price rises but, despite this, some major oil exporters remain vulnerable to financing shocks. However, options prices suggest that substantial price changes are not seen as likely in the near term.

For example, in Venezuela, the real exchange rate has appreciated by about 40 per cent over the past four years, reducing the competitiveness of the non-oil sector – 30 per cent of exports – and hence prospects for diversification. Inflationary pressures may have been fuelled by expansionary fiscal policy as the non-oil fiscal deficit rose to almost 11 per cent of GDP in 2000. Moreover, although the authorities have set up a fund to save a portion of oil receipts, some of the oil windfall may have leaked abroad. 'Errors and omissions' in the balance of payments, sometimes used as an indicator of capital flight, have been large (Chart 91). Consequently, reserves have not risen in line with trade surpluses.

In Russia, 'errors and omissions' in the balance of payments have also been significant in the past, but international reserves nevertheless rose sharply, by US\$15.8 billion, in 2000. Russia has relatively small near-term financing needs, but faces a larger amortisation burden between 2003 and 2005 (Chart 92). These amortisation humps leave some vulnerability to a sharp and sustained fall in oil prices, with taxation of energy producers accounting for about 5 per cent of GDP in 1999. There is also some risk that inflation may rise, as the monetary injection accompanying the rise in foreign currency reserves has not been fully sterilised by central bank monetary operations.

EMEs: recent crisis cases

The December *Review* described the onset of tight financing conditions for two major EMEs – Argentina and Turkey. In both cases, the root cause lay in local factors. In Argentina, prolonged macro-economic stagnation and structural fiscal and labour market weakness was exacerbated by an appreciating real exchange rate. In Turkey, the banking sector's net foreign currency exposures led to losses as the exchange rate depreciated during 2000.

Argentina

At the time of the previous *Review*, Argentina posed the greatest EME risk to international financial stability, with relatively large liabilities to BIS-area banking systems and market perceptions of significant credit risk. These perceptions, as reflected in sovereign yield spreads, improved in the early part of 2001 as the authorities agreed a financing package with local banks, the IMF and other official creditors. However, this was more than reversed in late March when, in the face of increased political uncertainty, yield spreads rose along with short-term interest rates (Chart 93). Yields have since fallen back somewhat, helped by the

US\$29.5 billion swap of public sector debts in June. In the recent past higher yields have raised the cost of refinancing maturing government debts.

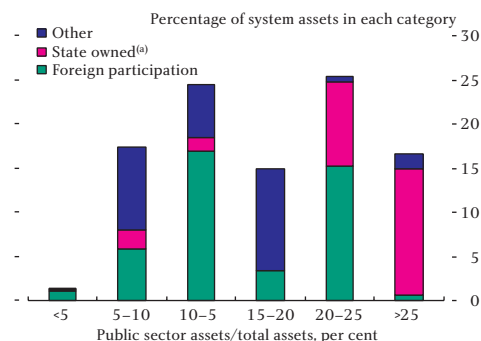
Moreover, economic fundamentals in Argentina have not strengthened since December. The economy remains depressed and industrial production is no higher than in 1996. The authorities have announced a series of tax and structural reforms intended to stimulate growth. Recovery is widely expected by 2002, though in the near term the potential for growth may have been dampened as real interest rates have risen. There was a significant outflow of deposits from the banking system during March, which may have affected the scope for bank lending. Recent relaxations in banks' liquidity requirements may have offset this effect, but at a potential cost in terms of reduced robustness of banking sector balance sheets. A number of large (primarily state-owned) banks have significant exposures to the public sector (Chart 94) so that the banking sector's robustness is related in some degree to sovereign credit standing.

Turkey

In Turkey, macro-financial fundamentals have deteriorated in the aftermath of the currency crisis in February. Even after a revised US\$7.5 billion IMF programme announced in December, asset prices weakened early in 2001. The crawling exchange rate peg was abandoned on 22 February and the lira has since depreciated by about 40 per cent relative to the US dollar (Chart 95).

The currency crisis has had an adverse impact on banks' balance sheets, raising the cost of servicing the banking system's net foreign currency liabilities. Banks with, in aggregate, around 30 per cent of system assets had net foreign currency liabilities greater than their capital at the end of 2000 (Chart 96). Any re-capitalisation of the banking sector as a whole will pose a fiscal cost unless private buyers are found. Fiscal prospects have already deteriorated, because the depreciation has raised the cost of servicing foreign currency debts and higher real interest rates have been paid on refinanced lira debts. In response to these developments, the IMF announced a further US\$10 billion financing package in April, to alleviate any near-term public sector financing shortfall. In June, the Turkish authorities announced a debt swap which will lengthen maturities. The IMF package includes some significant structural reforms, particularly in the banking sector. But some risks remain, notably because real interest rates are currently high. High real interest rates may more than offset the impact on final demand of any gains to competitiveness: Consensus forecasts for GDP growth in 2001 have been revised down by 9.1 percentage points since December (to a contraction of 4.8 per cent), though recovery is expected in 2002.

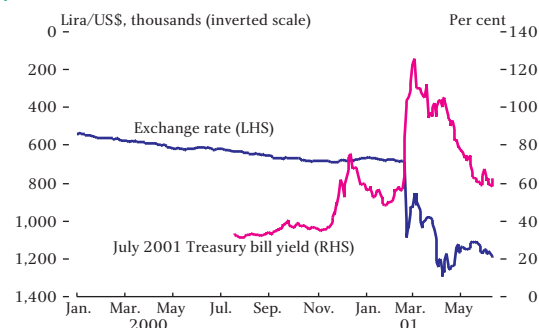
Chart 94:
Argentine banks' exposure to the public sector, 1999 accounts



Sources: Bureau van Dijk BankScope and Bank calculations.

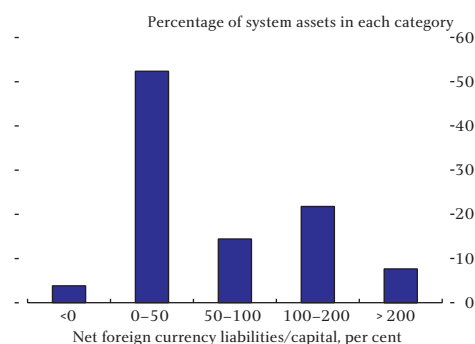
(a) Banks classed as state owned following local central bank definitions.

Chart 95:
Turkey: exchange rate and Treasury bill yield



Sources: Bloomberg and Reuters.

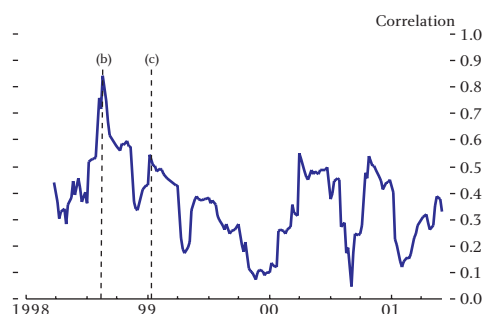
Chart 96:
Significance of net foreign currency liabilities across the Turkish banking system, end-2000^(a)



Sources: The Banks Association of Turkey and Bank calculations.

(a) Excludes intervened banks.

Chart 97:
Correlation between changes in EME sovereign yield spreads^(a)



Sources: JP Morgan Chase & Co and Bank calculations.

(a) Correlation between weekly changes in spreads of EMEs within JP Morgan's EMBI Global index.

(b) Russian crisis 17/8/98.

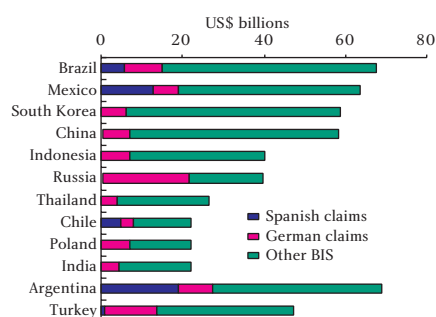
(c) Brazilian devaluation 13/1/99.

Table 11:
Importance of crisis economies as a destination for regional exports

	Proportion of local regional exports (per cent)
Argentina (1999)	3
Turkey (1999)	2
memorandum item:	
<i>Argentine links with Mercosur</i>	12
Brazil (1999)	3
Russia (1998)	9
Thailand (1996)	2
Mexico (1994)	2

Source: IMF.

Chart 98:
EMEs' liabilities to BIS banks by origin, end-2000^(a)



Source: BIS.

(a) Using consolidated data, not adjusted for risk transfer.

Links to the international financial system

Developments in EMEs may affect global financial stability through a number of channels, including through their impact on other EMEs and the credit exposures of financial institutions in industrialised countries.

Links amongst EMEs

The December Review discussed possible channels through which adverse developments in one EME may affect other EMEs. These include economic links, such as trade relationships, and links through the global financial system. So far, however, there has been little evidence of sustained asset price contagion from recent pressures on some EMEs. Although the correlation between weekly movements in EME bond yields has risen recently, it remains lower than in late 2000 or at the time of the Russian and Brazilian crises (Chart 97). Indeed, Mexican sovereign yield spreads have fallen since the previous Review.

Intra-EME trade links are typically less significant than trade with industrial countries. At a regional level, only a small proportion of Latin American and Eastern European exports are destined for Argentina and Turkey respectively (Table 11). However, the regional figures mask a concentration of trade flows within the narrower Mercosur trading block, of which Argentina is a member along with Brazil, Paraguay and Uruguay.

Regional trade effects may be magnified by 'common creditor' effects if lenders specialise in lending to particular regions. Losses incurred on exposures to one EME may, depending on the circumstances, affect creditors' appetite for risk generally. And even if risk appetite does not change, losses may cause a reassessment of risk and return for EME assets as a class. For example, Spanish banks have significant claims on Argentina relative to their total external claims. But Spanish banks are nowhere else as significant for the borrowing country as in Argentina. German banks have significant claims on Turkey, accounting for over a quarter of Turkish liabilities. Russian liabilities are also concentrated amongst German-owned banks (Chart 98). German banks' claims on EMEs are, however, small relative to their total cross-border claims.

Possibly the most significant links arise from Argentina's position as a major EME bond issuer (Table 12). Concerns about the future liquidity of EME debt markets might occasionally dominate credit risk as determinants of the cost of capital. Developments following Russia's partial default in August 1998 illustrates the potential for these indirect market linkages to lead to widespread falls in EME asset prices. Spreads on all major EMEs' bonds rose by more than half in the two months to end-August 1998.

Argentine bonds account for a larger part of the JP Morgan's Global Emerging Market Bond Index than Russian bonds did at the time of its crisis. Moreover, trade links between Argentina and Brazil – also a major bond issuer – are significant. However, there are also some reasons to expect less contagion than in the recent past. First, in 1998, some creditors to Russia may have been forced to adjust portfolios rapidly to the extent that the default was a surprise – although Russian bond yields began to rise several months prior to the partial default (Chart 99). In contrast, market perceptions of Argentine creditworthiness have deteriorated over some time. Second, creditors' behaviour may have changed since 1998, with a greater differentiation of country risks. This is consistent with the increased dispersion of sovereign yield spreads described in Box 3. Finally, market anecdote suggests that highly leveraged institutions are less prevalent in EME markets than they used to be, reducing the potential for forced selling following localised falls in asset prices.

Links to global financial markets

Links from EMEs to industrial countries operate primarily through the impact of losses incurred on portfolios of EME assets. Available data suggest that US mutual funds holdings of emerging market equities amount, however, to just 0.4 per cent of their total equity funds. Banking system loan exposures to Argentina and Turkey are also generally small. Some 'off-balance-sheet' exposures, such as committed lines and credit derivatives, are not captured and could conceivably be significant. But the available data on credit derivatives suggest that only a small proportion of these are structured around sovereign instruments, and therefore even less will relate to EMEs.

Developed-country banking system credit claims on Argentina and Turkey are large relative to their claims on most other individual EMEs, but small relative to their overall credit exposures. Argentina has the greatest liabilities to BIS-area banks, while Turkey ranks sixth. But taken together, these two EMEs account for just 1.5 per cent of BIS-area banks' total external claims and much less of total assets. As noted above, these aggregate data mask a concentration of exposures of Spanish banks to Argentina (Chart 100). Box 4 in Section VI therefore discusses Spanish banks' exposures to Latin America in the context of their position in the international financial system more generally.

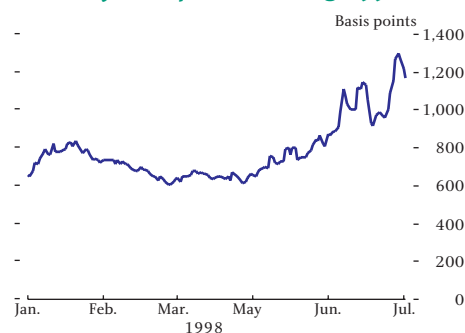
Table 12:
Importance of crisis economies in EME capital markets

	Weight in EMBI (Global) per cent
Argentina	19
Turkey	3
memorandum item: ^(a)	
Brazil (Dec 1998)	19
Russia (Jul 1998)	10

Source: JP Morgan Chase and Co.

(a) Brazilian and Russian weights for the month preceding devaluation/partial default.

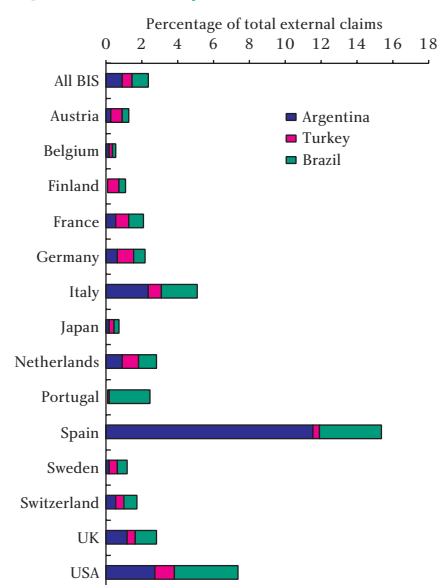
Chart 99:
Russian yield spreads during 1998^(a)



Source: JP Morgan Chase & Co.

(a) Spread on US dollar-denominated instruments.

Chart 100:
Concentration of BIS banks' claims on Argentina, Turkey and Brazil, end-2000^{(a)(b)}



Source: BIS.

(a) Full data are not available for Canada, Denmark and Ireland.

(b) Using consolidated data, not adjusted for risk transfer.

Box 2: The macroeconomic impact of the US slowdown on growth in non-Japan Asia

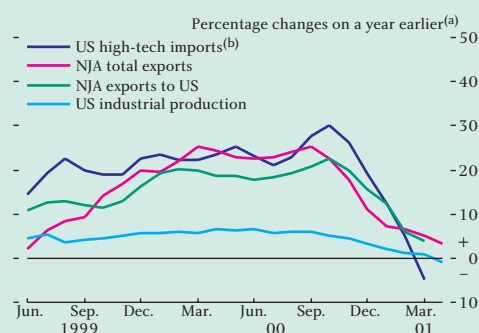
Table A: NJA Trade Patterns, 1999

	Merchandise trade as percentage of GDP	Percentage high-tech products in total exports ^(a)
China	36	15
Hong Kong	223	22
India	19	n/a
Indonesia	61	6
Korea	65	30
Malaysia	190	52
Philippines	87	63
Singapore	269	53
Taiwan	81	37
Thailand	94	26

Sources: IMF Direction of Trade Statistics and World Economic Outlook database and World Trade Organisation.

(a) Defined as office machines and telecoms equipment (SITC 75, 76 and 776).

Chart A: NJA total exports and imports to US

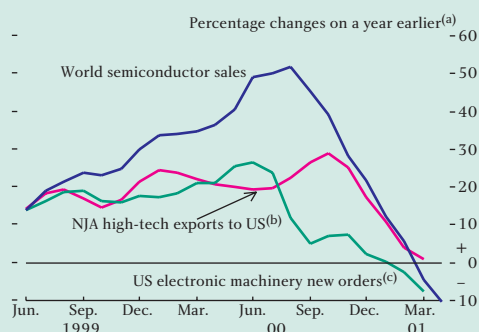


Sources: Bloomberg, IFS, US Census Bureau and Thomson Financial Datastream.

(a) Three-month moving average except US industrial production.

(b) Defined as telecommunications, semiconductors, electrical apparatus, computer accessories and computers.

Chart B: NJA high-tech exports



Sources: Bloomberg, Thomson Financial Datastream and US Census Bureau.

(a) Three-month moving average.

(b) Defined as SITC 75,76,77.

(c) Seasonally adjusted.

There have been widespread downward revisions to Consensus forecasts of growth in the Asian EMEs. Forecasts for Korea, Malaysia and Thailand have been revised most markedly. Both the general worsening of Asian growth prospects and patterns within the region may well reflect trade patterns.

51 per cent of non-Japan Asian (NJA)¹ exports were to industrial economies in 1999, with the US accounting for 21 per cent of total exports, the EU 18 per cent and Japan 11 per cent. Additionally, the industrial economies are also a final destination for much of the intra-regional trade in intermediate products. In the current conjuncture, weakening demand prospects in the US and Japan may therefore have a significant impact on Asian exports. There is already some evidence of this in macro-economic data as US imports of goods from NJA have weakened in recent months (Chart A).

Export growth has declined particularly sharply in the Philippines, Taiwan and Thailand. This may also reflect the composition of their exports, which is skewed towards the high technology products (Table A). Looking forward, recent falls in new electronics orders in the United States, and in world semiconductor sales (Chart B) may lead to a further slowing of NJA export growth. However, computer chip prices have fallen more slowly so far in 2001 than during late 2000.

Slowing exports may well have a material impact on prospects for growth because Asian economies are typically open, with trade significant relative to GDP (Table A). However, measures of openness may overstate the potential impact of an external demand shock on growth. Some economies, such as the Philippines, specialise in assembly and re-export of imported intermediate goods where the value added is lower than the full US\$ value of exports. Other economies, such as Korea, may be affected more because the bulk of their exports are from higher value-added export production sectors.

In the near term, fiscal expansion, monetary loosening and/or exchange rate depreciation might offer a partial offset to weaker external demand. However, continued high levels of corporate or public debt, fixed exchange rate regimes (for example, in Malaysia) or inflation concerns may limit policy flexibility.

¹ Non-Japan Asia is taken to cover China, Hong Kong, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand. Together, the GDP of these economies was US\$2.8 trillion in 1999, compared with US\$4.5 trillion in Japan. Data on the direction of trade flows exclude Taiwan which is not covered by the IMF's Direction of Trade Statistics.

Box 3: The dispersion of yield spreads on EME sovereign bonds

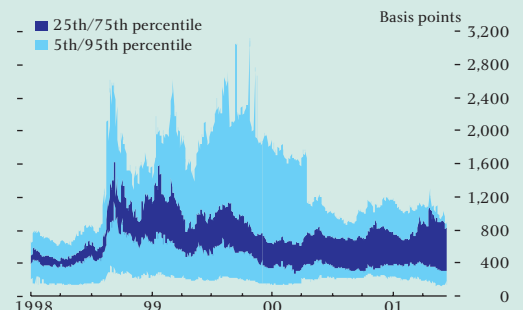
Yield spreads on broad EME sovereign bond indices, such as JP Morgan's EMBI Global, can provide a useful summary of investors' pricing of the risk inherent in these assets. But, as with any average, it may mask interesting developments in the components. Patterns in spreads across countries provide one possible indicator of the risk of contagion following a credit event. And the variation in spreads across countries of differing creditworthiness gives some indication of investors' willingness to hold debt of different credit quality.

Chart A shows the evolution of yield spreads across the country components of the EMBI Global index. The darker band shows the range of spreads for the 50 per cent of index capitalisation around the median, while the lighter band covers 90 per cent. The increase in spread dispersion following the Russian crisis in August 1998 is notable. Spread dispersion, as reflected in the 50 per cent band, remains more than three times greater than prior to the Russian crisis.

It seems likely that yield spreads were unusually compressed during 1997 and early 1998, suggesting some mispricing of credit risk or possible creditor exuberance. This is apparent from Chart B, which describes the distribution of spreads across a narrower index of 11 EMEs (accounting for around 75 per cent of today's market value) available before 1998. The bulk of country spreads had declined to between 300 and 600 basis points in the 18 months prior to the Russia crisis. Asset price contagion may have been exacerbated as views were revised post Russia. This suggests that, as well as debtor countries needing to learn some lessons about prudent national balance sheet structures, creditors from industrialised countries also had lessons to learn about the pricing of risk, particularly once risk correlations and the aggregate effects of their own credit policies are factored in.

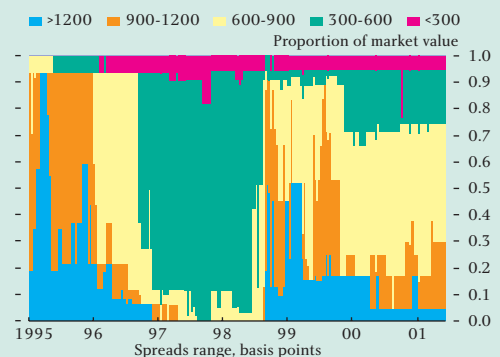
Chart B also suggests that the current position is more healthy. At the end of 1997, around 70 per cent of the value of the index was contained within the range 300–600 basis points. Now, no 300 basis point 'bucket' contains more than half the index. Chart C therefore examines the yield spread on each of the country components in more detail. It plots the cumulative distribution of yield spreads, reflecting the prevailing market capitalisation of each country's bonds. The blue line, which shows the most recent values, confirms that the variation of spreads is currently greater than in 1997, with spreads ranging from 67 basis points (Hungary) to 2,187 basis points (Ivory Coast).

Chart A:
EME sovereign US\$ bond spreads:
distribution over time^(a)



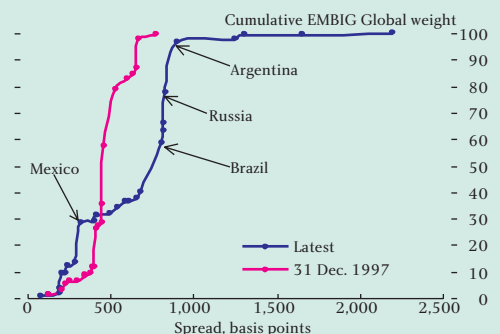
Sources: JP Morgan Chase & Co and Bank calculations.
(a) Cross-country distribution across components of the EMBI Global index.

Chart B:
EME sovereign US\$ bond spreads: time
series of spread buckets^(a)



Sources: JP Morgan Chase & Co and Bank calculations.
(a) Cross-country distribution across components of the EMBI.

Chart C:
EME sovereign US\$ bond spreads:
snapshot cumulative distribution



Source: JP Morgan Chase & Co and Bank calculations.