

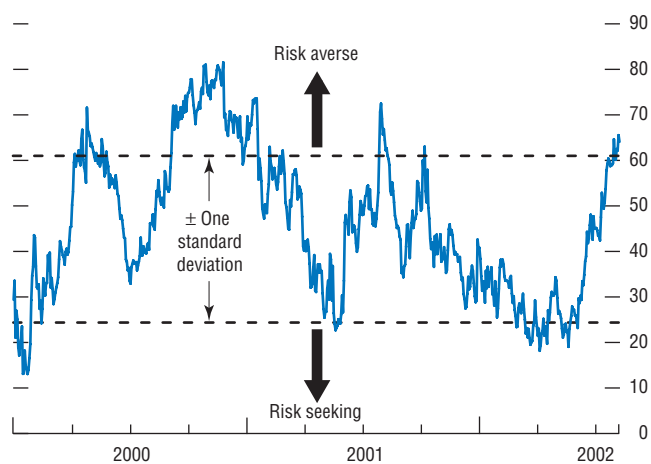
The favorable climate for emerging market financing that characterized the first quarter of 2002 deteriorated in the second, as investors reassessed the pace and durability of the global economic recovery, the valuation of U.S. and European equities, as well as the scope for policy continuity in core emerging markets.

Investor concerns were especially focused on, but not limited to, countries whose economic reform agenda appeared to be at risk owing to domestic political uncertainty. A number of Latin American countries and Turkey were at the focal point of these concerns. While throughout much of the quarter, investors were content to rotate their exposure to countries perceived to pose less risk, signs of contagion emerged, especially toward the end of the quarter, as the correlation of emerging market bond movements with developments in Brazil increased, but remained well below the peaks seen in previous crises. In addition, contagion from Argentina was felt by neighboring countries through banking and real sector channels.

Investor confidence was eroded by a series of serious accounting scandals in mature markets whose breadth remains subject to conjecture. The resultant rise in risk aversion contributed to a substantial decline in bond and equity prices in emerging markets toward the end of the quarter, and increased volatility (see Figure 3.1). Nevertheless, the performance of emerging market bonds and equities through June was superior relative to their mature market counterparts.

The relatively open market access that prevailed in the first quarter was also partially reversed in the second. Primary market access was much reduced to subinvestment-grade issuers in Latin America, without credit enhancements. Issuers with solid credit ratings and those in Asia, Eastern Europe, and the Middle East re-

Figure 3.1. Liquidity and Credit Premia Index



Source: J.P. Morgan Chase.

### Box. 3.1. The Scope for Emerging Market Contagion

As in the capital account crises of the 1990s, adverse debt dynamics, above all, have become a major issue for both Brazil and, to a lesser extent, Turkey. After a brief episode of contagion from Brazil in mid-June, investors are assessing the vulnerability of emerging markets. Three potential channels of contagion are considered: a retrenchment of cross-border lending; trade flows; and the financial sector. While these channels of contagion pose potential risks to the asset class as a whole, there are indications that portfolio investors have adopted an increasingly discriminatory stance toward individual markets, largely based on their policy regimes and track records.

In recent years, banks have built increasingly global operations, partly through direct equity investments in emerging markets. As business platforms have been broadened, risks have been diversified. The assessment of risks, however, tends to be conducted in broad terms. In times of heightened risk aversion, this puts emerging markets at the forefront and banks may choose to retrench from emerging markets as a whole, while not always taking into account the particular circumstances of individual markets.

Such decisions tend to be taken on the basis of banks' total exposure, not discriminating whether the exposure was built up via their local operations or through major financial centers. The analysis that follows captures this notion by using BIS data, which consolidates all on-balance sheet claims of BIS-registered banks on private and public entities, including those claims held by local branches and subsidiaries. These data, therefore, may also differ significantly from international debt statistics.

#### Retrenchment of Cross-Border Lending

Bank exposure to Brazil is large—\$142 billion—and relatively concentrated. While U.S. banks provided \$34 billion in short- and long-term financing, Europe's four largest lenders (aggregated by nationality) provided \$68 billion in financing to Brazil, including \$26 billion from Spain (see the Table).

There is a risk of roll-over problems of these loans in Brazil and emerging markets in general, including for "safe havens." A potential retrenchment of U.S. lending could adversely affect Mexico and Taiwan Province of China, both hav-

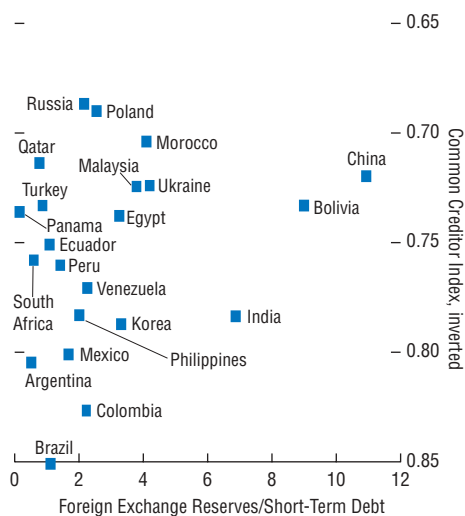
#### Selected Emerging Markets: BIS Lending and Common Creditor Index<sup>1</sup>

	Common Creditor Index	BIS Loans end-2001 US\$ Billion	Share of Total in Percent						
			U.S.	Four Largest European Lenders					Other
				Total	Spain	U.K.	Netherlands	Germany	
Brazil		142.4	24.0	47.6	18.0	11.1	10.7	7.7	28.4
Colombia	0.83	16.4	25.0	52.1	28.6	7.9	5.2	10.4	22.9
Argentina	0.81	73.9	29.1	45.9	24.4	8.6	3.7	9.1	25.0
Mexico	0.80	215.1	35.9	47.9	39.5	2.7	2.1	3.7	16.2
Taiwan Province of China	0.80	32.2	36.6	33.9	0.0	16.7	12.6	4.5	29.6
Korea	0.79	73.2	22.4	22.8	0.2	9.5	3.9	9.2	54.8
Philippines	0.79	22.4	21.7	33.6	0.6	11.5	4.9	16.6	44.8
Venezuela	0.77	21.6	15.0	64.9	44.7	7.1	3.5	9.5	20.1
Chile	0.77	43.9	16.9	64.7	49.3	3.9	3.8	7.7	18.4
South Africa	0.76	22.3	14.1	38.3	0.2	8.4	6.2	23.6	47.6
Indonesia	0.76	37.4	9.0	41.4	0.2	10.0	9.3	21.9	49.5
Thailand	0.75	42.4	10.3	29.6	0.0	9.8	10.5	9.3	60.1
Bulgaria	0.74	1.5	11.4	51.2	0.6	2.3	17.7	30.7	37.4
Turkey	0.74	39.7	11.3	43.5	0.9	7.8	7.0	27.8	45.2
Russia	0.69	41.5	6.0	61.9	0.6	1.5	6.8	53.0	32.1

Sources: IMF, *International Financial Statistics*; and Bank for International Settlements.

<sup>1</sup>The common creditor index average is 0.49 across a group of 165 developing countries with outliers, such as Sierra Leone (0.20) and Tonga (0.06).

**Common Creditor Index Versus Foreign Exchange Reserves/Short-Term Debt, 2001**

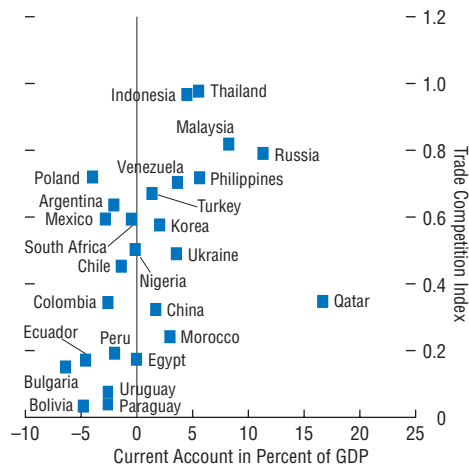


Sources: Bank for International Settlements; International Monetary Fund, *World Economic Outlook* database; and IMF staff estimates.

ing raised more than one-third of their external bank financing in the United States. In addition, Mexico raised 40 percent of its bank financing from Spain, highlighting the risk of a potential reduction of resources from this source. A broad-based retrenchment by European lenders would heavily affect Latin America as well as emerging Europe. More than half of bank financing was provided by Europe's four largest lenders to Russia, Bulgaria, Colombia, Chile, and Venezuela, with Spain having provided the bulk of financing to Chile (49 percent) and Venezuela (45 percent).

Private and public borrowers in countries with borrowing patterns similar to those of Brazil could also suffer from a potential retrenchment of bank lending. The common creditor index in the Table measures the similarity of countries' borrowing patterns relative to those of Brazil. The index ranges between 0 and 1, with a higher index value indicating patterns more akin to those of Brazil.

**Trade Competition Index Versus Current Account, 2001**

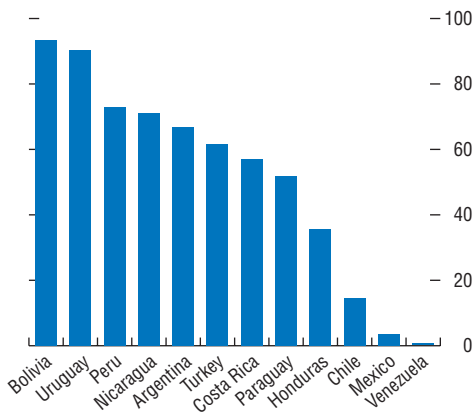


Sources: International Monetary Fund, *World Economic Outlook* database; and IMF staff estimates.

The common creditor index points to risks across Asia, including India, the Philippines, Korea, and Indonesia (see the first Figure). Nevertheless, India's and Korea's high gross official foreign exchange reserve coverage of short-term external debt suggests that risks are limited. In Latin America, Colombia's borrowing patterns are close to those of Brazil, while the FX reserve coverage of short-term debt is relatively low in Ecuador. Similarly, Nigeria and South Africa appear vulnerable on these grounds, although the depreciation of the rand has boosted competitiveness.

#### *Redirection of Trade Flows*

Sharp exchange rate movements and a subsequent redirection of international trade flows could also act as a channel of contagion, although they have proven to be of lesser importance in the capital account crisis of the 1990s. We apply a widely used trade competition index, which—analogue to the common creditor index—measures the similarity of countries' trading patterns with those of

**Box. 3.1 (concluded)****Dollarization in Selected Emerging Markets, End-2001***(Foreign exchange deposits in percent of total deposits)*

Brazil. The index ranges between 0 and 1, with a high index value indicating a high degree of overlap of a country's export markets with those of Brazil. The index, however, does not take into account differences in the product composition of exports and a high index value, therefore, is a necessary but not sufficient condition for a high degree of competition in third markets (see the second Figure).

Many of the emerging markets continue to enjoy comfortable current account positions. These provide a cushion and the risks of trade-related contagion are significantly lower than the risks of financial market contagion. Nevertheless, the external positions of a number of countries appear vulnerable. These include Indonesia, Thailand, and Malaysia, where exporters may be faced with competition from

Brazil in third markets, to the extent that they compete along product lines. In emerging Europe, the Middle East and Africa regions, Poland, South Africa, and Turkey could also experience additional competitive pressure with potentially adverse consequences for their respective currencies. In Latin America, Mexico may face heightened competition as well, albeit to a lesser extent than its peers mentioned above.

***Dollarization and Systemic Risks***

Dollarization of financial sector balance sheets poses systemic risks and is a potential further channel of contagion. Non-residents' withdrawals of foreign exchange deposits triggered bank runs in Uruguay and Paraguay in the aftermath of the Argentine crisis. As commercial banks' liquid foreign exchange assets were inadequate to cover the demand for deposits, central banks provided lender-of-last-resort financing, thereby straining their official foreign exchange reserves. Besides the risk of a sudden outflow of deposits, banks are exposed to credit risks when extending loans denominated in foreign exchange to unhedged borrowers. Credit risk thus can cause or aggravate mismatches of assets and liabilities in foreign exchange.

Dollarization is prevalent in Latin America and is a policy issue for selected countries, including Turkey. In Latin America, regulation has prevented dollarization in Brazil and Mexico, and most economies exhibiting a high degree of dollarization are relatively small. This suggests that the systemic risks associated with dollarization more likely manifest themselves as a result of a crisis rather than as a potential cause, not unlike the experience of Uruguay and Paraguay.

tained market access, however. Given that sovereign borrowers actively prefinanced their borrowing programs, Latin American corporate borrowers are the most vulnerable to prolonged market closure. Indeed, a number of Latin American corporate issuers have already encountered difficulties raising new funds.

Emerging markets remain vulnerable to a further decline in market sentiment.

- Indicators of risk aversion and contagion have increased, but remain well below historical peaks. They could rise further if sentiment deteriorates. Continued weakness and volatility in mature equity markets, especially if accom-

panied by a further downward assessment of global growth prospects, would trigger a retrenchment from emerging markets.

- There is a risk that bank lending may retrench from Brazil and emerging markets in general (see Box 3.1). The high concentration of loans within a relatively small number of institutions points to vulnerabilities also in “safe haven” countries.
- Within emerging markets, developments in Brazil are critical. A further deterioration in sentiment toward Brazil would likely be felt more widely, especially as investor concerns over policy continuity and debt sustainability span a number of emerging market countries. These concerns, to a lesser extent, also apply to Turkey, although progress has been made toward the resolution of political uncertainty.

The outlook for emerging markets remains overshadowed by a deterioration in investor sentiment that has weighed on mature and emerging markets alike. While investor confidence has been shaken, a wholesale exit from emerging markets has thus far been averted, and there are indications of continued investor and creditor discrimination, as investors have opted to lower the risk-reward profile of their portfolios by raising their relative exposure to investment-grade credits. In addition, technical conditions in emerging markets have improved, as investors reduced their exposures and increased cash positions. However, these mitigating technical factors are by themselves insufficient to turn investor sentiment.

Capital flows to the emerging markets are likely to remain subdued until global risk aversion reverts and uncertainties over policy continuity in key emerging markets subside. Developments of the past quarter underscore the importance of consistent implementation of adjustment measures and prudent debt management policies as a means of mitigating market turbulence. Such policy continuity is especially critical for countries dependent on uninterrupted access to international capital markets. More generally, recent developments point to the importance of avoiding dependence by ei-

ther the public or private sector on external capital inflows subject to short-term swings, and of using periods of favorable financing wisely.

## Emerging Market Financing Overview

Reflecting the deterioration in investor sentiment, gross capital market flows to emerging markets slowed to \$34.5 billion in the second quarter, about two-thirds the level for the comparable period of last year and the year before. New bond issuance fell from the previous quarter, as did new syndicated loans, as banks continued to retrench from emerging markets. Equity flows, however, remained little changed, reflecting in part continued appetite for new Asian issues (see Table 3.1 and Figure 3.2). Latin American issuance fell most sharply, with non-investment grade issuers in the region suffering from especially difficult market access.

Reflecting these developments, cumulative issuance through the end of June has fallen well short of recent years (see Figure 3.3).

## Emerging Bond Markets

The favorable investment sentiment of the first quarter succumbed in the second to events in Brazil and to a less supportive global environment. Emerging market average trading volumes fell, and trading, especially in periods of sharp market declines, was concentrated on a few issues. As a result, the strong performance of emerging market bonds in the first quarter (of 6.6 percent), was largely offset in the second, as the EMBI+ index fell 5.4 percent, closing virtually flat for the first half of 2002, a performance superior to the NASDAQ (down 26 percent through June) and better than that of the Merrill Lynch High Yield, which lost 4.3 percent (see Table 3.2 and Figure 3.4). The correlation of the returns on emerging market bonds with their mature market high-yield counterparts spiked at the end of June.

At the same time, contagion began to emanate from Brazil, therefore not allowing for definite conclusions as to the causality of the sell-

Table 3.1. Emerging Market Financing Overview

	1999	2000	2001	2000				2001				2002					Year to date <sup>1</sup>
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Apr.	May	Jun.	
<i>(in billions of U.S. dollars)</i>																	
<b>Issuance</b>	<b>163.6</b>	<b>216.4</b>	<b>162.3</b>	<b>60.4</b>	<b>55.4</b>	<b>50.3</b>	<b>50.3</b>	<b>42.2</b>	<b>50.5</b>	<b>29.2</b>	<b>40.4</b>	<b>37.0</b>	<b>34.5</b>	<b>12.3</b>	<b>11.7</b>	<b>10.5</b>	<b>76.2</b>
Bonds	82.4	80.5	89.0	33.8	16.1	21.1	9.4	26.8	28.8	11.7	21.7	22.0	20.8	8.8	6.5	5.5	44.2
Equities	23.2	41.8	11.2	8.9	11.6	8.8	12.4	2.3	5.3	1.0	2.6	4.1	4.3	0.4	1.4	2.5	8.9
Loans	58.0	94.2	62.0	17.6	27.7	20.4	28.5	13.1	16.4	16.4	16.1	10.9	9.4	3.1	3.8	2.5	23.2
<b>Issuance by Region</b>	<b>163.6</b>	<b>216.4</b>	<b>162.3</b>	<b>60.4</b>	<b>55.4</b>	<b>50.3</b>	<b>50.3</b>	<b>42.2</b>	<b>50.5</b>	<b>29.2</b>	<b>40.4</b>	<b>37.0</b>	<b>34.5</b>	<b>12.3</b>	<b>11.7</b>	<b>10.5</b>	<b>76.2</b>
Asia	56.0	85.9	67.4	19.5	26.1	18.3	22.0	19.6	22.8	7.5	17.6	13.3	15.0	2.8	8.1	4.2	30.4
Western Hemisphere	61.3	69.1	54.0	23.7	13.9	18.8	12.7	15.2	15.4	11.4	12.1	11.4	8.0	4.0	0.3	3.7	19.4
Europe, Middle East, Africa	46.3	61.4	40.8	17.1	15.4	13.2	15.6	7.4	12.4	10.4	10.7	12.3	11.4	5.5	3.3	2.7	26.4
<b>Secondary Markets</b>																	
<b>Bonds:</b>																	
EMBI+ (spread in basis points) <sup>2</sup>	703	756	731	674	712	677	756	784	766	1,005	731	598	799	619	650	799	981
Merrill Lynch High Yield (spread in basis points)	453	871	734	584	615	664	871	757	736	915	734	623	809	600	643	809	904
Salomon Broad Inv Grade (spread in basis points)	55	89	78	81	87	83	95	89	80	77	78	69	73	73	70	73	81
U.S. 10 yr. Treasury Yield (yield in %)	6.45	5.12	5.07	6.03	6.03	5.80	5.12	4.93	4.93	4.60	5.07	5.40	4.80	5.09	5.05	4.80	4.22
<i>(in percent)</i>																	
<b>Equity:</b>																	
DOW	25.2	-6.2	-7.1	-5.0	-4.3	1.9	1.3	-8.4	6.3	-17.5	15.7	3.8	-11.2	1.6	-0.2	-6.9	-13.3
NASDAQ	85.6	-39.3	-21.1	12.4	-13.3	-7.4	-32.7	-25.5	17.4	-30.5	29.9	-5.4	-20.7	-8.9	-4.3	-9.4	-33.0
MSCI Emerging Market Free	63.7	-31.8	-4.9	2.0	-10.8	-13.4	-13.5	-6.2	3.1	-23.4	28.4	10.7	-9.0	10.5	-1.9	-7.7	-8.0
Asia	67.6	-42.5	4.2	4.0	-14.0	-22.3	-17.3	-0.1	-1.6	-22.1	36.1	14.9	-6.3	17.5	-1.9	-4.6	0.0
Latin America	55.5	-18.4	-4.3	3.2	-8.1	-6.0	-8.5	-3.5	7.1	-24.7	23.0	7.1	-22.0	3.6	-8.1	-13.6	-25.5
Europe/Middle East	76.7	-23.4	-17.7	3.0	-9.7	-3.9	-14.3	-22.0	4.5	-26.1	36.8	0.2	-11.0	2.6	-0.5	-9.6	-14.7

Sources: Bloomberg L.P.; Capital Data Ltd.; Merrill Lynch: Salomon Smith Barney; and IMF staff estimates.

<sup>1</sup>Issuance data are as of July 16, 2002 close-of-business London and Secondary markets data are as of August 12, 2002 cob New York.

<sup>2</sup>On April 14, 2000 the EMBI+ was adjusted for the London Club agreement for Russia. This resulted in a one-off (131 basis points) decline in average measured spreads.

off. Events toward the end of the quarter marked a significant shift, as the rotation by investors to less risky investments gave way on June 19 to a more generalized sell-off triggered by heightened concerns over Brazil, although high-grade credits have staged a recovery since then (see Box 3.2).

Against the backdrop of rising risk aversion, net inflows into emerging market mutual funds decelerated in the second quarter (to \$28 million, from \$168 million in the first quarter). There, was, however, a net outflow of \$30 million in June. This deceleration is consistent with developments in other assets with similar risk, including, for example, U.S. high-yield corporate bonds, which also saw a slowdown in mutual

fund inflows during the quarter. In July, however, initial inflows to emerging market bond mutual funds were followed by substantial outflows in late July and early August.

Latin American bonds—constituting about three-fifths of the EMBI+ index—bore the brunt of the sell-off (declining by 10.6 percent in the second quarter), while other regions enjoyed modest positive returns, as investors were prepared to rotate their exposure from Latin America to other regions throughout much of the quarter. A notable beneficiary of this rotation was Russia, whose bonds performed relatively well in the second quarter, reflecting a deepening of the local investor base and the adoption of a sizable overweight position by ex-

**Table 3.2. EMBI+ Dollar Returns, 2002**  
(In percent)

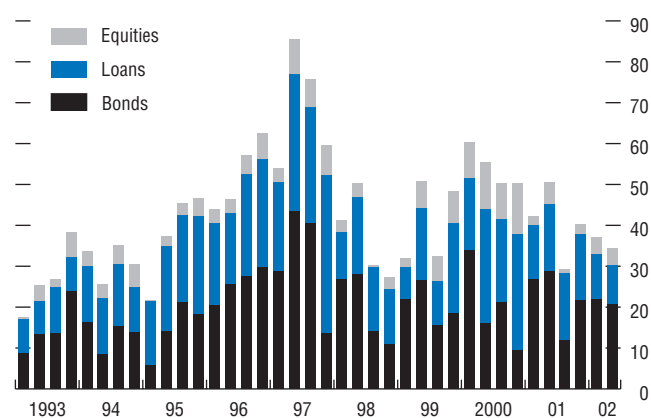
	Year through June 19	June 19 to August 12	Second Quarter	First Half of 2002
EMBI+	2.6	-5.1	-5.4	0.8
EMBI+ adj. Argentina	3.0	-5.1	-5.1	1.4
Latin	-2.9	-8.8	-10.6	-5.4
Non-Latin	11.5	-0.1	2.7	10.8
Argentina	-12.9	-4.4	-18.0	-22.2
Brazil	-14.3	-20.2	-24.5	-18.3
Bulgaria	3.6	-0.3	1.5	2.7
Colombia	2.8	-10.3	1.3	2.1
Ecuador	3.4	-18.7	-6.5	7.1
Korea	6.2	—	4.6	5.9
Malaysia	—	4.1	4.8	—
Mexico	5.3	-0.5	1.4	4.4
Morocco	3.7	-2.1	-2.9	1.8
Nigeria	5.9	-10.4	-4.1	3.4
Panama	1.7	-3.7	-4.6	-0.9
Peru	2.5	-11.9	-8.5	-1.6
Philippines	10.1	0.3	2.3	9.3
Poland	5.0	1.1	2.5	4.7
Qatar	9.2	2.2	6.7	9.1
Russia	17.7	-0.5	5.3	18.0
Turkey	1.5	-3.4	-10.3	-3.3
Ukraine	13.6	0.5	2.4	12.8
Venezuela	9.9	0.7	-2.9	8.0

Source: J.P. Morgan Chase.

ternal investors. This position was reduced somewhat as investors sought liquidity in the wake of the sharp Brazil-induced sell-off in the second half of June. Within Latin America, Mexico continued to benefit from its high-grade status, evidencing a degree of continued investor discrimination even in a region that is at the focal point of investor concerns. Nevertheless, since the end of June, Mexico's correlation with Brazil has increased sharply, and its debt has underperformed other investment grade credits.

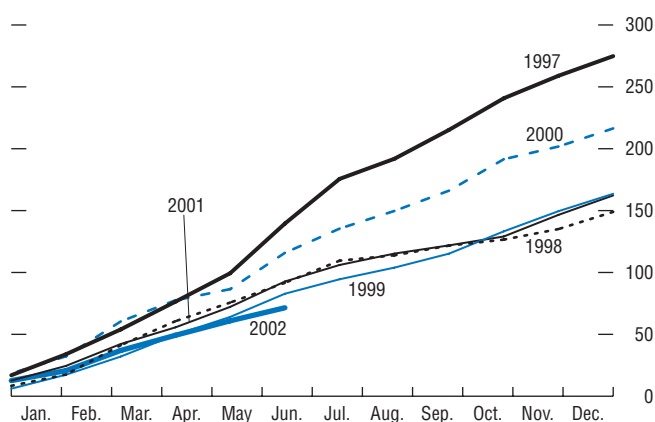
Developments in Brazil—the main driver of investor sentiment during the second quarter—reflected investor uncertainty about policy continuity after the elections and, as these fed through to a weaker *real* and a shortening of maturities for domestic debt, heightened concern about debt dynamics. With almost one-third of the domestic debt linked to the exchange rate, Brazil's debt-to-GDP ratio risks rising significantly, unless the *real* retraces. These concerns contrast sharply with the generally favorable market sentiment toward Brazil that had pre-

**Figure 3.2. Emerging Market Financing**  
(In billions of U.S. dollars)



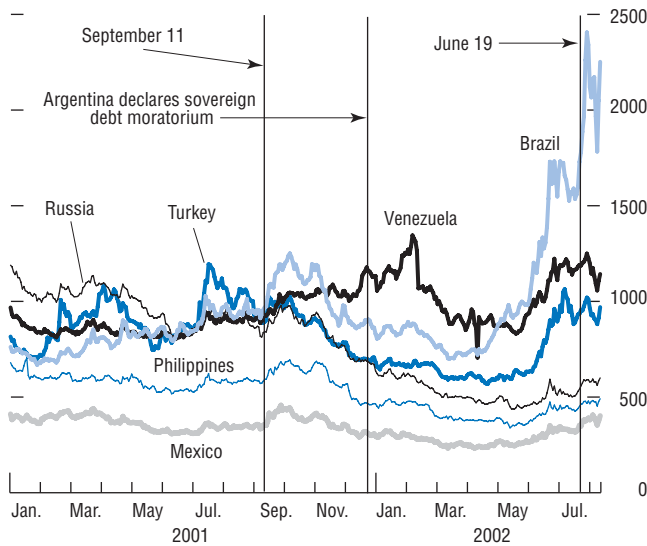
Source: Capital Data.

**Figure 3.3. Cumulative Gross Annual Issuance of Bonds, Loans, and Equity**  
(In billions of U.S. dollars)



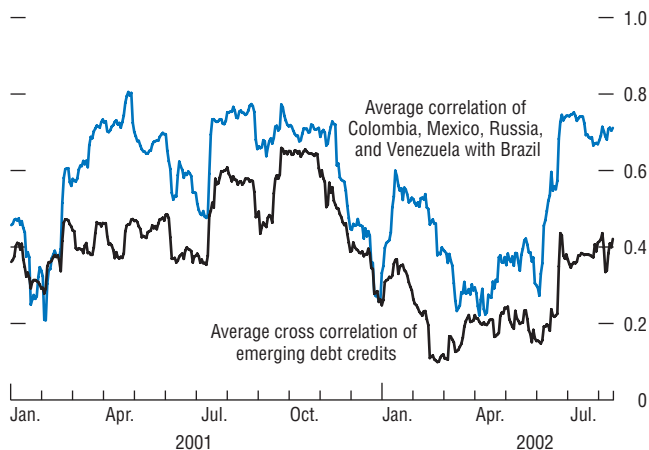
Source: Capital Data.

**Figure 3.4. Emerging Market Spreads**  
(In basis points)



Source: J.P. Morgan Chase.

**Figure 3.5. Average Correlation of Emerging Debt Markets**  
(30-day rolling correlations)



Sources: IMF staff estimates; and J.P. Morgan Chase.

vailed in the beginning of the year, and that resulted in substantial overweight positions by a wide range of foreign investors—positions that amplified price movements when sentiment subsequently soured. Local investors, crossover investors, hedge funds, and proprietary trading desks were reportedly the first to reduce their exposures.<sup>1</sup> Dedicated investors reacted more slowly, and reduced their exposure to slightly underweight during the quarter. There are indications that investment banks accumulated Brazilian paper in their inventories to satisfy client sell orders and became increasingly less accommodating as the quarter progressed in the face of these rising inventories and reduced risk limits. To address the problem of rising inventories, at least one bank has issued a collateralized debt obligation using Latin American bonds repackaged with credit enhancements with a view to broadening the investor base.

Reflecting the importance of Brazil—which represents almost one-fifth of the EMBI+ index—to market sentiment, signs of contagion increased, especially toward the end of the quarter (see Figure 3.5). The average cross-correlation of individual country returns in the EMBI+ rose to 0.4 toward quarter-end, still well below other high contagion episodes, such as the Russian default (0.8), the Brazilian devaluation (0.6), or post-September 11 (0.7).

### Primary Bond Issuance

Issuance from emerging market borrowers totaled \$21 billion in the second quarter, similar to the \$22 billion issued in the first quarter, but some \$8 billion lower than issuance during the

<sup>1</sup>Crossover investors, hedge funds, and proprietary trading desks typically deploy funds over a range of assets in search for relative value to boost returns. The mandate of dedicated investors, in contrast, is focused on a particular asset class, and investment decisions within that class are guided by a benchmark that, in the case of emerging market bonds, assigns varying weights to the bonds of different countries. Dedicated investors generally seek to perform better than the benchmark by taking positions that overweight or underweight the components of the index, and by varying the level of cash held.



### Box 3.2. Developments in Brazil and Emerging Debt Markets Since the End of June<sup>1</sup>

Developments in Brazil remained the overriding driver of investor sentiment during the first weeks of the third quarter. As risk aversion remained high, investor sentiment generally continued to weaken toward high yielding, subinvestment-grade credits, in particular those that were afflicted by investor perception of weakening policy resolve. Investment-grade credits, however, fared better in general, with notable gains in Korea, Mexico, Poland, and Qatar.

The EMBI+ index shed 3.4 percent since the end of June (see Table) and spreads rose to 981 basis points (bps), as investors reduced their exposure to riskier credits. Ecuador's sub-index lost 21.4 percent on worries that it would not be able to meet conditions for a new IMF program. Losses of 8.2 percent in Peru's sub-index were due to concerns over policy continuity. Concerns over the fiscal implications of deteriorating national security weighed heavily on Colombia's debt, which shed 9.6 percent of its value. Meanwhile, Turkey's sub-index recovered by 1.5 percent, following Parliament's decision to hold early elections on November 3 and passage of legislation required to move forward with accession talks with the European Union. Most importantly, Brazil's EMBI+ sub-index—representing almost one-fifth of the EMBI+ index—lost 16.3 percent since the end of June as spreads widened by 694 bps to 2,221 bps.

The sell-off in Brazil's foreign debt was paralleled by a further sharp depreciation of the *real*, which fell to an all time low of 3.6 per dollar on July 31, largely as evidence emerged that corporate and financial sector institutions began to encounter increasing difficulties rolling over foreign credit lines.

Against this background, an agreement in principle on a new 15-month Stand-By Arrangement was reached on August 7, which will be presented to the IMF's Executive Board for approval in early September. The new agreement would commit \$30 billion of additional financing by the IMF, 80 percent of which would be disbursed during 2003. In addition, the net international reserve (NIR) floor stipulated under the current Stand-By Arrangement with Brazil will be reduced by \$10 billion immediately upon Executive Board approval of the program. In order to ensure fiscal sustainability over the medium term, the new program envisages the

#### EMBI+ Dollar Returns, 2002

(In percent)

	First Half of 2002	June 28 to August 12
EMBI+	0.8	-3.4
EMBI+ adj. Argentina	1.4	-3.6
Latin	-5.4	-6.3
Non-Latin	10.8	0.6
Argentina	-22.2	7.0
Brazil	-18.3	-16.3
Bulgaria	2.7	0.6
Colombia	2.1	-9.6
Ecuador	7.1	-21.4
Korea	5.9	—
Malaysia	—	4.5
Mexico	4.4	0.4
Morocco	1.8	-0.2
Nigeria	3.4	-8.3
Panama	-0.9	-1.2
Peru	-1.6	-8.2
Philippines	9.3	1.0
Poland	4.7	1.4
Qatar	9.1	2.3
Russia	18.0	-0.7
Turkey	-3.3	1.5
Ukraine	12.8	1.3
Venezuela	8.0	2.5

Source: J.P. Morgan Chase.

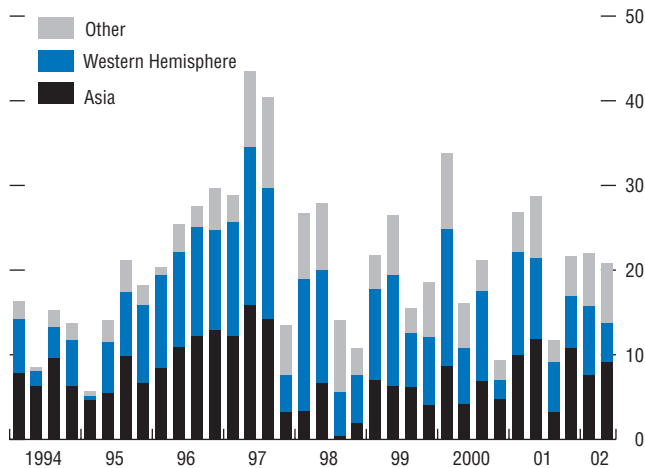
maintenance of a primary surplus target of no less than 3.75 percent of GDP during 2003 to be revisited at each quarter, and the inclusion of no less than that level of primary surplus target in Brazil's budgetary guidelines law for 2004 and 2005.

While initially markets greeted the larger-than-expected package and reduction of the NIR floor with enthusiasm, investors' concerns about the scope for reform continuity soon resurfaced, in light of the commentary on the new program from some of the presidential candidates. The gains of the EMBI+ sub-index triggered by the IMF program announcement quickly dissipated, while the *real* weakened once more to 3.15 per dollar, albeit remaining above its low.

The emerging market outlook remains overshadowed by sustained risk aversion, investor concerns over global growth, as well as a potential retrenchment of cross-border bank lending, besides continued concerns over policy continuity in core emerging markets. A key risk is that apparent rollover problems encountered by Brazil may spread to other markets, while low liquidity could result in drastic price action.

<sup>1</sup>This box reviews developments until August 12.

**Figure 3.6. Bond Issues**  
(In billions of U.S. dollars)



Source: Capital Data.

same quarter last year (see Figure 3.6).

Investment-grade issuers dominated the quarter and accounted for about two-thirds of total bond issuance. Corporate bond issues (including publicly owned corporations) accounted for 62 percent of total issuance (22 percent of which was taken up by the Malaysian agency Petronas' issues in dollars and euros), and the bulk (90 percent) of new corporate issues were undertaken by Asian and Eastern European firms. Issuance in U.S. dollars continued to predominate, reaching an unusually high proportion (about 80 percent) of total issuance in the second quarter.

On the sovereign side, bond issuance was strong in early April (accounting for 71 percent of total issuance in the quarter), when market conditions were more favorable, and large coupon and amortization payments provided additional demand for bonds. However, a combination of an increase in Brazil-induced risk aversion, initially reflected in difficulties in absorbing a new Brazilian bond issue, signaled the beginning of a drop in appetite in mid-April. There was a dramatic slowdown in sovereign bond issues during the remainder of the quarter, with no issuance in May. In Latin America, the only sovereign issuer during the latter two months of the second quarter has been Colombia, which raised \$240 million as part of a \$500 million debt exchange with mostly local investors. El Salvador, however, raised \$300 million in July, following an \$500 million issue in April.

Access remained relatively unimpeded for Eastern European, investment-grade Asian, and relatively infrequent sovereign issuers seen to provide portfolio diversification, such as Jamaica and Grenada. Since April, Poland, supported by its high ratings, successfully issued \$1 billion, while the Philippines added \$300 million to its 2009 bond, capitalizing on the perception that it was one of the more attractively priced Asian issuers. Malaysia raised \$600 million in early July.

Risk aversion remains strongest in the euro- and yen-denominated markets, largely due to a falloff in retail demand for emerging market bonds in these markets after Argentina's default.

Since April, these markets were open primarily to issuers with an investment-grade rating or those providing diversification and considered to be unlikely to be affected by broader market turmoil, including Estonia (€100 million), Iran (€500 million), Croatia (¥25 billion), and South Africa (\$1,000 million).

Going forward, access will in part be determined by the divergent credit quality across the emerging markets. While the corporate credit quality improved during the second quarter, with the credit ratio defined as the number of credit downgrades per upgrade having fallen to 1.5 in the second quarter from 2.9 a quarter earlier, Latin America clearly underperformed other regions. Korea, with five upgrades in the second quarter, showed the strongest improvement. Looking forward, S&P continues to see Latin America as the most vulnerable to further downgrades, mainly due to the impending crisis in Argentina and strain in Brazil. Over half of the issuers currently on negative credit watch are Latin American issuers, with industry exhibiting more weakness than other sectors.

A large majority of the international bonds issued by emerging market sovereigns in the first seven months of 2002 did not include collective action clauses. About 73 percent of bonds issued, representing 81 percent of total value, were governed by New York law, under which market practice does not normally include collective action clauses in bond covenants. In 2001, 37 percent of new sovereign issues (33 percent of value) were governed by English or Japanese law, which typically includes collective action clauses.

### Bond Market Vulnerabilities

The channels of contagion include a sharp and generalized increase in the cost of funds to emerging markets and a retrenchment of cross-border lending by banks and the financial sector as a result of currency mismatches in the assets and liabilities of banks (Box 3.1). Market participants see a risk that contagion could increase, especially if sentiment toward Brazil deteriorates.

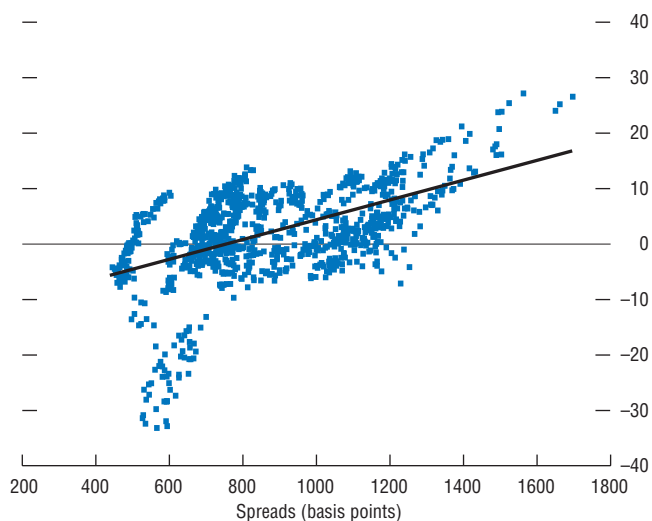
- Latin American bonds—which account for 50 to 60 percent of most emerging market bond indices—would most likely continue to bear the brunt of a deterioration in sentiment, although investment-grade credits would likely hold up relatively well.
- Investor retrenchment would also likely affect other countries in which concerns over policy continuity and debt dynamics predominate. Turkey could be vulnerable also in this case.
- Notwithstanding the reduction in foreign investor exposure to Brazil in the course of the quarter, these remain sizable. Given these exposures, and the diminishing liquidity from banks' dealing desks as investment banks cut back their risk limits, investors could seek to raise cash levels by selling the liquid issues of other countries. In that event, Mexico, Russia, and the Philippines could be affected.
- In addition to financial contagion from Brazil, developments in Argentina continue to sour investor sentiment toward the region and have affected neighboring countries through real and banking sector channels. In Uruguay, where a sizable share of deposits in the banking system are owned by Argentine residents, spreads in its most liquid bond have widened to new highs.

Market sentiment toward emerging bond markets is also vulnerable to increased risk aversion stemming from mature market developments, including in particular continued equity market volatility. Using a relatively short-term measure, the rolling 30-day correlation between the EMBI+ total return index and the S&P 500 total return index changed sign and magnitude sharply since early May, rising from  $-0.1$  to  $0.4$  by the end of June. Longer-run correlations have been stronger. A further sharp downturn in mature equity markets would likely lead to a further retrenchment from emerging markets, especially if the prospects for global growth were also undermined.

There are a number of factors mitigating these vulnerabilities.

- Emerging market valuations have become more attractive. Historically, emerging market

**Figure 3.7. EMBI+ Spreads Versus 60-Day Returns**  
(60-day return; in percent)



Sources: IMF staff estimates; and J.P. Morgan Chase.

bond investments have generally performed well in periods following an increase in EMBI+ bond index spreads (see Figure 3.7). Spreads rose 201 basis points throughout the second quarter to 799 basis points at the end of June, and further to 981 basis points as of August 12 (see Box 3.2). At these levels, absent further bad news, there is scope for renewed portfolio inflows into the asset class, especially if the global economic recovery is sustained.

- Rising cash holdings have mitigated downside risks. Cash holdings have increased, suggesting the possibility of a rebound in prices should sentiment improve. The cash holdings of dedicated investors have reportedly increased to an average of 9–10 percent (with a median of 5–6 percent), with some of the most risk averse funds reporting as much as 15 percent in cash. However, past experience suggests that these cash levels could rise further. During periods of high global risk aversion, average cash allocations have been 2 to 3 percentage points higher, and median allocations some 1 to 2 percentage points higher.
- Investment banks report that a pipeline of new emerging market bond mandates has been built up whose deployment, once sentiment improves, would provide a further support to prices.

### Primary Market Vulnerabilities

Primary market vulnerabilities revolve around the possible duration and extent of investor retrenchment should there be a further sharp deterioration in investor sentiment. Market closures can follow periods of extreme volatility, are more prevalent in environments where event risk is high, and can be triggered by developments in either mature and emerging markets. The risk from market closure appears most acute for Latin American corporates, which experienced serious difficulties in raising new funds without credit enhancements or resorting to private placements (Box 4.2, Chapter IV). Refinancing risks to the region's corporates are

**Table 3.3. Equity Market Performance, 2002***(In percent, dollar indices)*

	Q1	Q2	First Half of 2002	Year to Date <sup>1</sup>
Emerging Market Free	10.7	-9.0	0.7	-8.0
EMF Asia	14.9	-6.3	7.7	0.0
EMF Latin America	7.1	-22.0	-16.5	-25.5
EMEA	5.1	-1.8	3.1	-7.6
Dow	3.8	-11.2	-7.8	-13.3
S&P 500	-0.1	-13.7	-13.8	-21.3
Nasdaq	-5.4	-20.7	-25.0	-33.0
ACWI Free	0.5	-9.5	-9.1	-17.6
ACWI Free exc. U.S.	1.1	-3.5	-2.4	-13.1

Sources: Bloomberg L.P.; IMF staff estimates; and Morgan Stanley Capital International.

<sup>1</sup>Data as of August 12, 2002.

thus very high. On the sovereign side, the risk of market closure is mitigated, as many sovereign credits successfully refinanced large portions of their 2002 needs in the last quarter of 2001. However, this refinancing cushion is running out.

### Emerging Equity Markets

As in the case of emerging market bonds, emerging equities fell in the second quarter, largely offsetting the strong performance of the first quarter. Nevertheless, emerging market equities outperformed their mature market counterparts in the first half of the year. Most of the decline in the second quarter was concentrated in June and in Latin American shares (see Table 3.3). Asian equities also suffered declines, following a particularly strong performance in the first quarter, while the Europe, Middle East and Africa index suffered only a modest decline.

Latin American equities fell in synch with bonds, with the three-month moving correlation between returns on the EMBI+ and the Latin American shares spiking to a three-year high, reflecting in part currency developments, but still remaining below the peaks seen during previous crises (see Figure 3.8). All the main markets declined, with Brazil falling 25.9 percent and Chile dropping 6.1 percent, with the latter closely

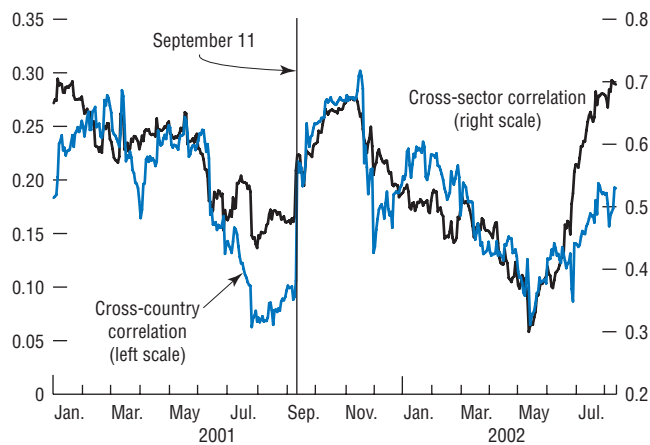
**Figure 3.8. Correlation Between Returns on the EMBI+ and the Latin American Free Equity Index**

*(60-day rolling correlations)*



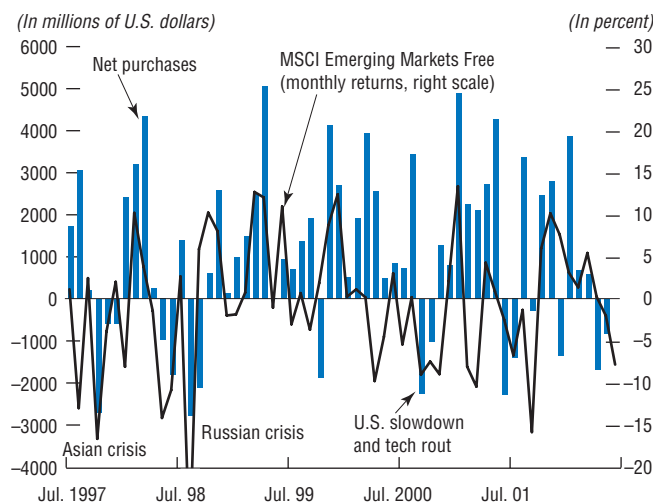
Sources: IMF staff estimates; J.P. Morgan Chase; and Morgan Stanley Capital International.

**Figure 3.9. Average Correlations of the Returns on Emerging Equity Markets Indices**  
(50-day rolling correlations)



Sources: IMF staff estimates; and Morgan Stanley Capital International.

**Figure 3.10. Net Foreign Purchases and Monthly Returns on Emerging Equity Markets<sup>1</sup>**



Sources: IMF staff estimates; central banks; and Bloomberg L.P.

<sup>1</sup>August 2001 data exclude \$8.9 billion for Mexico for the purchase of Banamex by Citigroup.

tracking U.S. equity markets. Mexico was not immune, as its shares fell 19.6 percent during the quarter, reflecting declining U.S. markets and weak global telecoms.

Asian equities also declined in the second quarter, notwithstanding gains by Indonesia (19.0 percent) and China (1.1 percent), with the better performers benefiting from the impact of strong domestic demand on expectations for earnings growth. India fell 7.8 percent on heightened regional political instability, notwithstanding the view that equity valuations were favorable. A high proportion of technology shares weighed on the performances of the Korean market (which fell 3.6 percent) and Taiwan Province of China (which fell 14.3 percent). Hong Kong SAR fell 6.1 percent as a large pipeline of China-related new equity issuance (of \$22.4 billion) remained a key concern. Nevertheless, Thailand gained 5.3 percent, given strong inflows from foreign investors.

Among the regional subindices, emerging Europe, Middle East, and Africa performed best, losing only 1.8 percent, even as Turkey fell sharply (down 35.2 percent) and Russia lost 1.6 percent on weaker oil prices. South Africa turned in a strong 7.3 percent gain over the quarter despite a major sell-off in June.

Regional and country considerations appear to have dominated investor concerns as the cross-correlation of country correlations declined, while cross-sector correlation increased (see Figure 3.9). This investor focus was also evidenced by the shift in mutual fund flows during the quarter from Latin America. All sectors fell, led by the high tech and telecommunications sectors, which declined by 17.6 percent and 14.4 percent, respectively.

### Net Foreign Flows to Emerging Equity Markets

Net foreign purchases of emerging equities moderated over the quarter, and were negative in May and June (see Figure 3.10). Following net inflows into U.S.-based emerging equity mutual funds (of \$338 million) in the first quarter, there

were net withdrawals (of \$25 million) in the second quarter. In June alone, the net outflow from emerging market mutual funds reached \$293 million.

### Investor Sentiment and Earnings Outlook

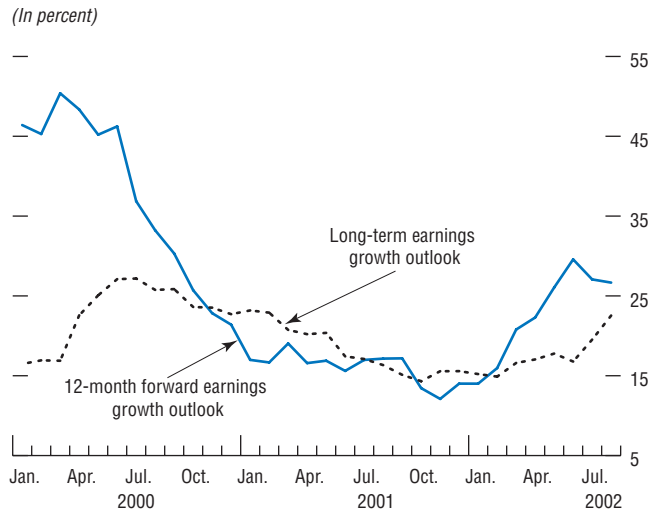
Despite heightened risk aversion, and the poor performance of the second quarter, institutional emerging market equity investors reportedly remain overweight in emerging market equities, owing largely to perceived favorable valuations, lower leverage, and the view that the asset class has scope for becoming a larger share of the portfolios of large institutional investors. Markets do not perceive the potential for slow global economic growth as a significant threat to emerging equities, especially in Asia, where economic data remain positive. While dollar weakness poses some risk to the region's export recovery, intraregional trade, especially with China, continues to accelerate.

Earnings growth expectations further support the outlook for emerging equities. The long-term earnings growth outlook improved slightly in June, and the 12-month forward consensus earnings projection remains strong, despite a slight downward revision in June (see Figure 3.11).

### Primary Equity Issuance

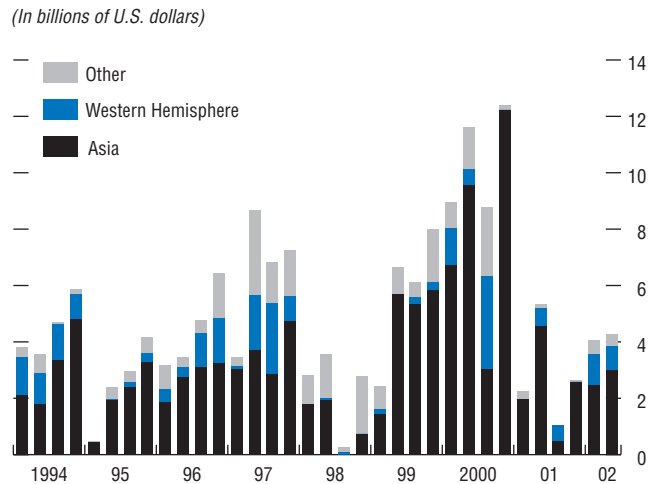
International equity issuance by emerging markets totaled \$4.3 billion in the second quarter, slightly higher than issuance in the first quarter, but well off the volume seen last year (see Figure 3.12). Asian companies, especially high-tech firms located in Taiwan Province of China, dominated issuance, and represented about 70 percent of the total. Korean banks and Malaysian firms in the telecommunications and transport sectors also had big issues. There were only two equity issues originating from Latin America—Bancomer, a Mexican bank (\$782 million) and a public service company in Brazil (\$61 million). Two South African mining companies issued a total \$260 million.

**Figure 3.11. Emerging Market Earnings Forecasts**



Source: I/B/E/S International.

**Figure 3.12. Equity Placements**



Source: Capital Data.

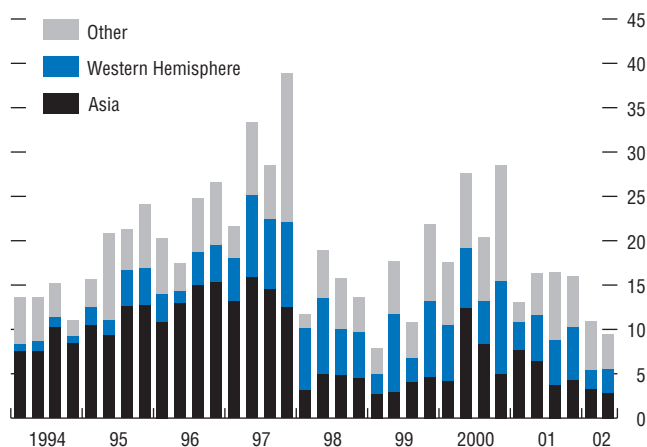
### Syndicated Lending in the Emerging Markets

Syndicated lending to emerging markets declined in the second quarter of 2002, reflecting downward revisions to the global economic outlook and heightened concerns about corporate governance and accounting issues in the mature markets, with their attendant ramifications for banks' portfolios (see Figure 3.13). As in the other sources of emerging market finance, creditors sought to shift their exposure to higher-quality borrowers. Losses on banks' Argentine exposures and an escalation of worries about Brazil later in the quarter also weighed on sentiment. Reflecting such concerns, European and U.S. banks continued to tighten lending standards, with the total volume of lending to emerging markets declining to just \$9.4 billion in the second quarter, from \$10.9 billion in the first. Lending amounted to about 57 percent of that of the second quarter of 2001, and constituted the lowest quarterly figure since the third quarter of 1999, with volumes in June particularly low as developments in Brazil took a turn for the worse. Looking forward, syndicated lending is not expected to gather pace over the summer, which is typically a slow period in the loan markets, nor to pick up substantially in the fall in the absence of a decisive turnaround in the global outlook.

The rotation of lenders' exposure from Latin America into emerging Europe, the Middle East, and Asia, noted in the June 2002 issue of the *Global Financial Stability Report*, remained a theme, even as substantial liquidity in these local markets continued to spur local currency denominated lending. In addition, the share of lending to sovereigns and public institutions remained steady at a high level. Brazil received the highest volume of loans (\$938 million) of any country, split more-or-less evenly between public and private institutions, although these deals were reportedly difficult to syndicate in the absence of political risk insurance. However, three-quarters of this lending to Brazil represent refinancing of maturing loans. Turkish corporates and banks were also large syndicated loan recipients (\$665 million).

**Figure 3.13. Syndicated Loan Commitments**

(In billions of U.S. dollars)



Source: Capital Data.



On the pricing front, competition among lenders for top-tier company mandates in Asia and emerging Europe remains keen, resulting in a narrowing of loan margins, in some cases approaching Western European levels (see Figures 3.14 and 3.15). In Asia, substantial bank liquidity, combined with a dearth of attractive lending opportunities, is leading banks modestly down the credit curve to medium-sized firms and prompting them to offer longer tenors to top-tier clients at very fine margins. In Latin America, syndicated loan spreads remain flat despite sharply shorter tenors, with attention focused on credit quality.

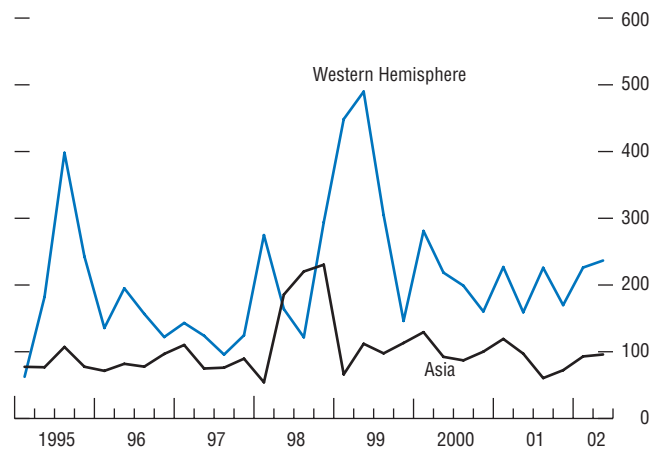
### Foreign Exchange in Emerging Markets

Foreign exchange developments in emerging markets diverged during the second quarter, as Latin American currencies fell sharply (see Figure 3.16), reflecting a broader retrenchment from the region, while Asian currencies tended to rise, in some cases raising competitiveness concerns.

In *Brazil*, the *real* has depreciated by 26 percent since mid-April and 21 percent for the quarter, closely tracking the decline in the country's debt and equity markets. While corporate hedging remained relatively subdued (compared to the last quarter of 2001), demand for dollars increased as investors reassessed their positions amid concerns about policy continuity and debt dynamics. In addition, the introduction of mark-to-market regulations for fixed income mutual funds in late May led to heavy redemptions from these funds (\$8 billion in June alone), with some of the outflows finding their way out through the currency market. Against this background, the central bank began shortening the maturity profile of domestic debt, rather than paying the higher interest rates investors were demanding to hold longer dated assets. As *real* weakness persisted, the central bank actively intervened. However, the potential for dollar demand stemming from corporate debt amortizations (reportedly \$1.4 billion in July and \$1.3 billion in August) is

**Figure 3.14. Loan-Weighted Interest Margin**

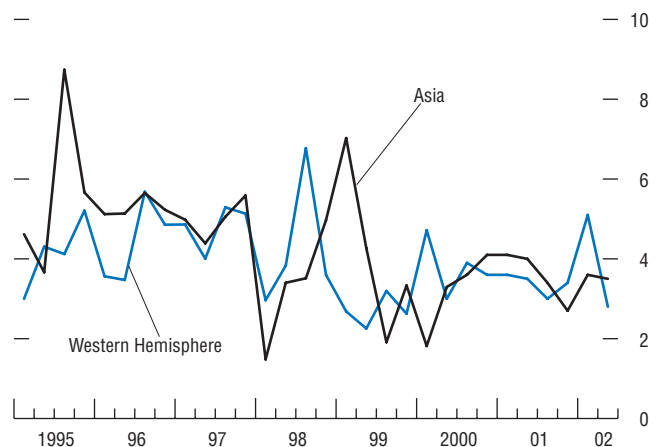
(In basis points)



Source: Capital Data.

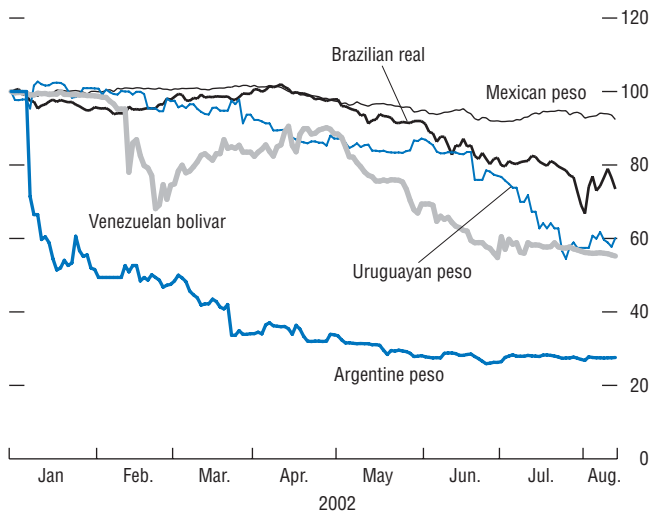
**Figure 3.15. Loan-Weighted Maturity**

(In years)



Source: Capital Data.

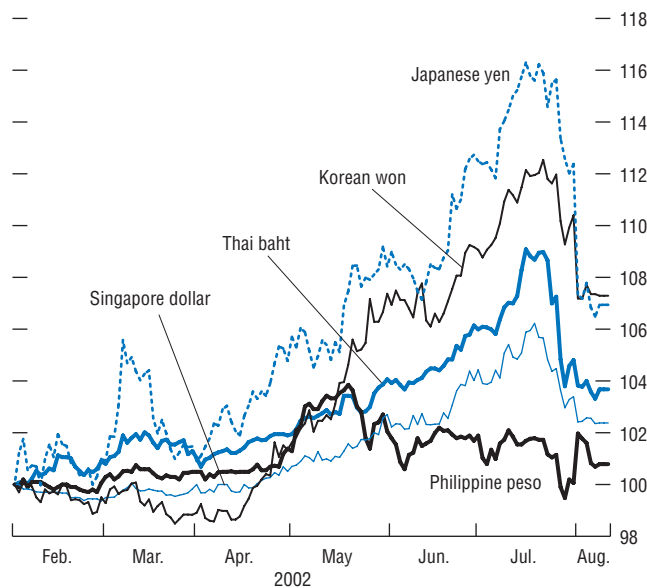
**Figure 3.16. Latin American Currencies Against the U.S. Dollar**



Source: Bloomberg L.P.

**Figure 3.17. Asian Currencies Since the Dollar Peak**

(January 31, 2002 = 100)



Source: Bloomberg L.P.

high and market access for corporates remains difficult.

In *Mexico*, the peso depreciated 6.7 percent against the dollar during the quarter, largely owing to U.S. dollar weakness, concerns about U.S. growth, and the adoption of a looser monetary policy stance. The monetary easing in April was widely interpreted as an expression of concern over peso overvaluation. In response, the Bank of Mexico stressed that such a move was due to a much more favorable inflation outlook. The unwinding of speculative positions, profit taking in the fixed income market, and corporate hedging accentuated the depreciation. Moreover, projections for capital inflows have been reduced due to the low interest rate differential with the United States and delays in the liberalization of the energy market, which will reduce the amount of foreign direct investment (FDI) into the sector.

In *Argentina*, the peso fell 30 percent against the dollar during the quarter, largely as excess liquidity in the system resulting from the deposits outflows, and from central bank assistance to the banks, triggered additional demand for dollars, despite heavy central bank intervention and tighter restrictions for currency transactions. Developments in the deposit base and in the banking system at large are likely to continue to put pressure on the peso, with one-year forwards pricing the peso at 9 to 10 pesos per dollar. For the other countries in the region, currency weakness has been the norm. In *Venezuela*, the depreciation of the bolivar continued unabated (48 percent for the quarter) on reportedly strong capital outflows, while the use of resources from the oil-stabilization fund was not sterilized. In addition, currency depreciation was perceived as the only remaining tool left to the government to close the fiscal gap, given its difficulties in accessing local and external financing. In *Uruguay*, the authorities abandoned the trading band system in late June and let the peso float freely. Since then the peso depreciated sharply, while reserves have continued to decline and concerns about deposit outflows remain salient.

Eastern European currencies in general have tracked the euro's steady rise. The *Czech koruna* appreciated strongly, rising 5.1 percent against the euro during the quarter, notwithstanding a rate cut and central bank intervention. The koruna's ascent was driven by the improving external balance and expectations of privatization receipts. The volatility of the *Hungarian forint* rose, while the currency closed the quarter largely unchanged against the euro. Investor concern was focused on the attainment of the year-end inflation target range, which appeared increasingly challenging, notwithstanding a 50-basis-point hike of the central bank benchmark rate in May, fears of supply pressures in the local bond market from the government's fiscal plans, and investor perception of uncertain prospects for continued central bank independence. The *Polish zloty* depreciated 11.2 percent against the euro during the quarter, as interest rates were cut three times by a cumulative 150 basis points. Profit taking from foreign investors in the local bond market weakened the currency, as did investor concerns over the compatibility of the muted currency board with the fiscal stance.

The *Turkish lira* reversed course losing 15 percent against the dollar, as political concerns weighed on the lira and foreign investors remained on the sidelines. The *South African rand* appreciated by 9.5 percent over the second quarter, thus recouping ground lost since the late 2001 turmoil. Besides the rising interest rate differential, higher commodity prices and easing

political tensions in Zimbabwe helped support the currency. With a firming euro, the prospects for the rand are seen as stable. The currency, however, has historically exhibited a strong correlation with emerging market conditions, as well as with assessments of global growth prospects.

Asian emerging markets were seen as offering some of the better prospects for investors, and high foreign exchange reserves were seen as giving economies in Asia some degree of protection against negative shocks (see Figure 3.17). In contrast to those of several Latin American nations, Asia's external financing requirements are quite low. Three Asian economies—China, Hong Kong SAR, and Malaysia—have exchange rates pegged to the U.S. dollar. Their currencies automatically weakened as the dollar fell, helping improve their competitiveness vis-à-vis other economies in the region. Other countries in the region were faced with rapid appreciation. The *Korean won* tracked the yen and rose 10.6 percent over the quarter against the dollar, although the rise since the end of 2001 has only been some 3 percent in nominal effective terms. The strengthening of the *Thai baht*, *Singapore dollar*, and *New Taiwan dollar* was much more modest, at 4.2–4.8 percent. The *Indonesian rupiah* continued to benefit strongly from improved investor confidence and performance under the IMF-supported program. As a result, the rupiah showed the region's largest gains again in the second quarter, rising another 12.8 percent, bringing the gains for the year to 19.5 percent.