

Emerging market asset prices saw strong increases in 1999 (see Table 3.1) as fundamentals in many countries improved and the domestic and external financing situation of most emerging markets continued to recover from the rolling crises that affected Asia, Russia, and Brazil between mid-1997 and early 1999. Further, despite the Nasdaq-induced weakness of March–May 2000, emerging market asset prices in mid-2000 were mostly higher than a year earlier, reflecting the ongoing unwinding of the (probably excessive) pessimism toward emerging market economies that had grown out of the recent crises. The outlook for the crisis-affected Asian countries continued to strengthen, although in most cases financial systems and corporate sectors remain weak and structural reform agendas, long. In Brazil, strengthened economic policies resulted in a much smaller than feared fallout from the January 1999 devaluation. Even in Russia the improvement in outlook has been noteworthy, and agreement was reached in February 2000 to exchange the defaulted London Club securities for Russian Federation eurobonds. Potential problems in some other emerging markets have so far been avoided, and those cases of significant weakness or slippages have generally involved country-specific problems that did not have systemic implications. For example, Ecuador’s default on its Brady bond debt in September 1999 had only modest effects on bond yields for other countries, the actual or prospective debt-servicing problems of Côte d’Ivoire and Nigeria in early 2000 were viewed as country-specific, and (as is discussed in Chapter V) Pakistan and Ukraine have been through debt renegotiations that have gone far more smoothly than was initially expected. Finally, the outlook for some of the stronger emerging market credits has continued to improve, most notably in Mexico, which was up-

graded to investment grade by one major ratings agency, somewhat ahead of expectations. The net outcome of these developments was that the declines in net private flows to emerging markets in 1997 and 1998 were partly reversed in 1999 and data on gross flows for the first six months of 2000 provide reasons for continued cautious optimism.

The past year or so has seen some important changes in financial markets and in the financing of emerging market sovereigns and corporates. These changes partly reflect the broader evolution of financial markets but also reflect the responses of borrowers and lenders to the recent crises. International flows to emerging markets have seen continued growth in foreign direct investment, a recovery in portfolio investment, and a cutback in bank lending. Within domestic markets, there has been substantial development of local currency bond markets in many countries and an internationalization of emerging equity markets. These developments imply a widening of the investor base for emerging market assets, greater diversification of funding currencies and sources by governments and corporates, and a shift toward longer-term funding. Encouragingly, the volatilities of returns on emerging markets debt and equity have declined substantially from crisis levels, making them more attractive as asset classes. These trends are discussed further in this chapter. As is discussed in the concluding section, these ongoing developments may help to enhance the stability of financing flows to emerging market sovereigns and corporates.

Developments in Aggregate Private Capital Flows to Emerging Markets

The latest annual data on net private capital flows to emerging markets show that net inflows stabilized in 1999 after large falls in 1997 and

Table 3.1. Returns on Different Asset Classes in 1998–2000¹
(In percent)

	1998	1999	2000 First Half
Bond indices			
Emerging markets (J.P. Morgan, EMBI Global)			
All countries	-11.5	24.2	7.0
Africa	-0.2	20.6	-4.6
Asia	13.4	14.4	1.5
Europe	-47.6	56.7	27.3
Middle East	n/a	4.5	4.5
Latin America	-6.1	21.3	4.2
U.S. Government Bond (Salomon)	9.8	-2.2	4.9
Global Government Bond (Salomon)	15.3	-4.3	0.0
U.S. Investment Grade (Salomon)	8.6	-1.6	2.4
U.S. High Yield (Merrill Lynch)	3.7	1.6	-1.2
Equity indices			
Emerging markets (MSCI EMF)			
All countries	-25.3	66.4	-9.0
Asia	-11.0	69.4	-10.5
Europe and Middle East	-26.0	79.6	-7.0
Latin	-35.1	58.9	-5.1
All mature markets (MSCI World)	24.8	25.2	-2.3
U.S., S&P 500	28.6	21.0	-0.4
U.S., Nasdaq	39.6	85.6	-2.5

Source: Bloomberg Financial Markets L.P.

¹Index providers shown in parentheses.

1998 (Table 3.2). Flows to regions that had not seen crises—Africa, Europe excluding Russia, and the Middle East—saw unchanged or increased net inflows in 1999. The five Asian countries most affected by the 1997–98 crises saw net outflows that were broadly unchanged from 1998, while the outflows seen from other Asian countries were much reduced relative to 1998. Russia saw continuing substantial net private outflows. And Brazil, which had seen a sharp fall in net inflows in 1998, saw inflows in 1999 that were little changed from 1998. By contrast, other Western Hemisphere countries that had seen only a modest fall in net inflows in 1998 saw a larger fall in inflows in 1999. Overall, net private capital flows to emerging markets were equivalent in 1999 to about 1.1 percent of aggregate emerging market GDP, down from about 3 percent in the middle of the 1990s.

The stabilization in private flows as well as the strengthening of aggregate current account positions allowed a substantial buildup in foreign reserves in 1999 and in early 2000. Current account positions strengthened in several regions,

boosted by oil in the cases of Russia and the Middle East countries. Large current account surpluses were maintained in Asian countries, in sharp contrast to the substantial deficits that were seen in some countries prior to the crises. Reserves have continued to grow in most regions, but in particular in Asia, where they rose by nearly \$80 billion in 1999 after growth of over \$60 billion in 1998. These improvements in the current account and reserve positions of most regions help—along with the continuing development of domestic financial markets discussed below—explain why the sharply reduced level of net private flows to emerging markets has not resulted in greater disruptions in domestic financial markets and economies.

The stabilization of net private capital flows reflects continuing growth in foreign direct investment and a recovery in portfolio investment, which more than offset a continuing cutback in bank lending. There was a continuing reduction in the exposures of international banks to emerging markets, although there was some easing in the trend between the first and second halves of 1999 (Table 3.3). The cutback in expo-

Table 3.2. Net Private Capital Flows to Emerging Markets, 1992–99
(In billions of U.S. dollars)

	1992	1993	1994	1995	1996	1997	1998	1999
Emerging markets								
Total net private capital inflows	112.6	172.1	136.3	226.9	215.9	147.6	75.1	80.5
Net foreign direct investment	35.4	59.4	84.0	92.6	113.2	138.6	143.3	149.8
Net portfolio investment	56.1	84.4	109.6	36.9	77.8	52.9	8.5	23.3
Bank loans and other	21.0	28.3	-57.3	97.4	24.9	-44.0	-76.7	-92.5
Africa								
Total net private capital inflows	-4.0	-1.8	2.9	10.9	7.5	16.7	11.5	14.8
Net foreign direct investment	0.6	1.9	2.3	2.2	4.8	7.4	5.2	9.5
Net portfolio investment	1.8	1.0	2.0	1.4	1.3	3.7	4.3	4.4
Bank loans and other	-6.4	-4.7	-1.4	7.3	1.4	5.6	2.0	0.9
Asia								
Total net private capital inflows	20.8	57.4	63.6	104.9	104.1	-1.4	-42.6	-27.0
Net foreign direct investment	15.7	33.9	47.1	46.6	53.1	55.5	58.3	49.9
Net portfolio investment	9.0	21.8	11.8	14.2	12.9	3.5	-17.9	-5.6
Bank loans and other	-3.9	1.7	4.7	44.1	38.1	-60.4	-82.9	-71.3
Five crisis-affected Asian countries¹								
Total net private capital inflows	29.0	31.8	36.1	74.2	65.8	-20.4	-25.6	-24.6
Net foreign direct investment	7.3	7.6	8.8	7.5	8.4	10.3	8.6	10.2
Net portfolio investment	6.4	17.2	9.9	17.4	20.3	12.9	-6.0	6.3
Bank loans and other	15.3	7.0	17.4	49.2	37.1	-43.6	-28.2	-41.1
Europe								
Total net private capital inflows	6.5	27.4	1.8	48.8	26.7	32.2	16.3	18.0
Net foreign direct investment	5.1	6.7	6.1	14.6	14.4	20.3	21.7	24.2
Net portfolio investment	2.3	12.4	21.5	14.6	19.6	23.3	0.7	6.6
Bank loans and other	-0.8	8.4	-25.8	19.7	-7.4	-11.4	-6.1	-12.8
Russia								
Total net private capital inflows	0.7	5.9	0.6	16.4	-0.1	1.4	-13.4	-16.2
Net foreign direct investment	0.7	0.9	0.6	2.0	2.5	6.2	2.8	2.7
Net portfolio investment	0.0	5.0	16.3	10.3	17.6	18.4	3.9	-1.1
Bank loans and other	0.0	0.0	-16.2	4.0	-20.1	-23.2	-20.1	-17.8
Middle East								
Total net private capital inflows	33.7	22.3	18.6	9.1	5.6	14.6	19.9	20.6
Net foreign direct investment	0.2	3.5	5.4	4.6	1.4	2.3	2.0	2.6
Net portfolio investment	12.7	5.1	7.6	3.8	3.0	3.3	6.7	7.3
Bank loans and other	20.8	13.6	5.6	0.8	1.2	9.0	11.2	10.8
Western Hemisphere								
Total net private capital inflows	55.6	66.8	49.4	53.1	72.1	85.5	70.0	54.1
Net foreign direct investment	13.9	13.4	23.1	24.7	39.5	53.1	56.1	63.6
Net portfolio investment	30.3	44.0	66.7	3.0	41.0	19.2	14.7	10.6
Bank loans and other	11.4	9.4	-40.4	25.5	-8.4	13.2	-0.8	-20.1
Brazil								
Total net private capital inflows	14.1	12.0	6.7	32.5	34.3	23.3	13.8	13.3
Net foreign direct investment	1.9	0.8	0.9	2.8	10.0	15.5	22.5	28.6
Net portfolio investment	14.5	12.3	52.6	11.7	21.9	7.6	14.8	3.2
Bank loans and other	-2.3	-1.2	-46.9	18.0	2.4	0.2	-23.5	-18.5

tures was largest for the crisis-affected Asian economies, with sharp cutbacks in interbank exposures as emerging market banks repaid credit lines, which more than offset increased exposures to nonbanks. In Latin America, Brazil saw a cutback in bank exposures in the first half of 1999 but no change in the second half, leaving overall exposures about 27 percent lower than

in mid-1998. With the exception of Argentina, most other Western Hemisphere countries also saw reduced bank financing. Russia saw a continuing cutback in exposures, while other Eastern European countries tended to have unchanged or slightly reduced exposures. Bank financing to Africa and the Middle East tended to be modestly higher in 1999. The cutback in

Table 3.2 (concluded)
(In billions of U.S. dollars)

	1992	1993	1994	1995	1996	1997	1998	1999
Memorandum items:								
Change in reserve assets								
Emerging markets	27.3	83.1	92.7	123.7	109.1	68.7	59.3	85.6
Africa	-3.2	1.4	5.1	1.8	5.1	11.2	-2.0	4.0
Asia	7.7	43.7	79.4	48.2	61.7	23.8	63.6	78.3
Affected countries	15.0	18.3	10.7	14.0	14.5	-35.9	47.1	40.0
Europe	-1.0	13.4	9.8	40.9	3.0	8.3	4.1	5.8
Russia	0.0	5.8	-1.9	10.4	-3.1	1.6	-5.1	0.7
Middle East	1.0	4.3	2.6	7.8	12.8	11.7	2.5	4.6
Western Hemisphere	22.9	20.3	-4.1	24.9	26.5	13.6	-8.9	-7.1
Brazil	14.5	8.1	6.5	12.6	8.6	-7.5	-8.2	-7.8
Current account								
Emerging markets	-72.7	-110.3	-73.8	-112.5	-96.0	-77.4	-49.5	21.5
Africa	-10.0	-11.2	-11.5	-16.5	-7.0	-7.4	-20.0	-16.8
Asia	3.6	-13.2	-4.4	-50.4	-38.5	18.0	114.9	103.1
Affected countries	-16.1	-13.5	-23.2	-40.4	-53.0	-25.0	69.1	62.9
Europe	-6.6	-14.5	5.8	-3.1	-20.0	-29.4	-23.6	-6.6
Russia	-1.2	2.6	8.2	4.6	3.8	-3.0	2.5	19.8
Middle East	-25.1	-25.4	-11.5	-5.7	7.8	5.4	-32.2	-4.1
Western Hemisphere	-34.5	-46.0	-52.2	-36.8	-38.3	-64.1	-88.6	-54.2
Brazil	6.1	-0.6	-1.7	-18.0	-23.1	-30.9	-33.6	-24.4
Total net private capital flows as percent of recipient countries' GDP								
Emerging markets	2.3	3.0	2.3	3.5	3.0	2.0	1.1	1.1
Africa	-1.0	-0.5	0.8	2.6	1.7	3.8	2.7	3.5
Asia	1.1	2.6	2.7	3.7	3.3	0.0	-1.5	-0.8
Affected countries	4.3	4.3	4.2	7.3	5.9	-2.0	-3.9	-2.9
Europe	1.2	4.2	0.2	5.2	2.5	2.9	1.6	2.1
Russia	0.8	3.2	0.2	4.8	0.0	0.3	-4.9	-8.9
Middle East	6.7	4.6	3.7	1.7	0.9	2.3	3.2	3.1
Western Hemisphere	3.7	3.4	2.7	3.2	4.0	4.3	3.5	2.9
Brazil	2.3	1.2	0.8	4.6	4.4	2.9	1.8	2.2
As percent of emerging markets' GDP								
Direct investment	0.7	1.0	1.4	1.4	1.6	1.9	2.1	2.1
Portfolio investment	1.1	1.5	1.9	0.6	1.1	0.7	0.1	0.3
Bank loans and other	0.4	0.5	-1.0	1.5	0.4	-0.6	-1.1	-1.3
Total official capital flows (U.S.\$ billions)	21.2	17.2	3.4	11.7	0.4	23.5	44.7	3.0
Total official capital flows (percent of emerging markets' GDP)	0.4	0.3	0.1	0.2	0.0	0.3	0.6	0.0
Total official capital flows (percent of G-7 GDP)	0.1	0.1	0.0	0.1	0.0	0.1	0.2	0.0

Sources: IMF, *International Financial Statistics*; and *World Economic Outlook*.

¹Indonesia, Korea, Malaysia, Philippines, and Thailand.

bank exposures to emerging markets appears to reflect both supply and demand side factors. Certainly, and notwithstanding the improved fundamentals and higher secondary market prices for bonds and equities, some mature market banks have sought to reduce their exposures to emerging markets. But, as discussed below, domestic macroeconomic trends and market conditions (e.g., increased domestic savings and strong current account positions, and

growth of domestic bond market and a desire to reduce reliance on external borrowing) have also contributed substantially to repayment of exposures to mature market banks. Encouragingly, there has been a fairly generalized reduction in the share of exposures of one year or less and, as of end-1999, short-term exposures had fallen to 48 percent of total exposures to emerging markets, down from 56 percent at the end of 1996.

Table 3.3. Changes in Bank Exposures to Emerging Markets
(In billions of U.S. dollars)

	1997		1998		1999	
	1st half	2nd half	1st half	2nd half	1st half	2nd half
Total	77.2	23.2	-30.5	-50.1	-31.3	-24.9
Asia	33.8	-7.8	-57.6	-28.0	-11.9	-16.2
Indonesia, Korea, Malaysia, and Thailand	18.4	-20.3	-46.9	-21.2	-11.9	-12.7
Africa	4.7	-0.8	-0.5	-2.9	0.2	0.7
Middle East	6.1	2.1	3.6	5.4	2.9	0.3
Europe	11.8	8.4	11.5	-17.0	-13.5	-1.4
Russia	7.8	4.1	3.4	-19.2	-8.8	-3.4
Western Hemisphere	20.8	21.3	12.5	-7.6	-9.0	-8.3
Brazil	3.9	3.8	7.7	-11.7	-8.3	-0.5

Source: BIS, *Consolidated International Banking Statistics*.

Foreign direct investment (FDI) continued to grow in 1999, confirming the stability and importance of this component. Given the large reductions in bank exposures, FDI more than accounted for the total of all net private flows to emerging markets in 1999 (as in 1998). FDI grew or was stable in most regions, with encouraging growth in Africa (notably Morocco, Tanzania, and South Africa, and predominantly resource-related) to a record level. Moreover, at the individual country level, changes in FDI flows over the last two years appear to be uncorrelated with the changes in other capital flows received (Figure 3.1). In particular, based on a sample of 40 large emerging markets, there has been no tendency for countries with large bank and portfolio outflows (inflows) to have experienced weakening (strengthening) FDI flows. This is further evidence of the stability to external financing that has resulted from the continuing growth of FDI, which now accounts for 2.1 percent of emerging market GDP and is nearly as large as gross private market fi-

ancing in the bond, equity, and loan markets combined.¹

The fact that there was only a modest pickup in 1999 in external financing by emerging market borrowers—despite the generally improved conditions in international markets—in part reflects the improved access of governments and corporate borrowers to domestic financing. In Asia, increased domestic savings and current account surpluses have been reflected in higher foreign reserves and ample domestic liquidity, boosted in some cases (notably Korea) by capital inflows. Short-term rates in many countries in Asia have been below those in the United States and Europe (with Indonesia and the Philippines being two notable exceptions). As is further discussed in Box 3.1, governments in several countries are attempting to build up domestic debt markets to finance their deficits and this—along with strong domestic liquidity—has provided a boost to corporate debt issuance, which grew by more than 200 percent in aggregate in 1999 in the five crisis-affected countries.

¹Several comments might be made about this finding. First, FDI by definition will be fairly stable because its measurement includes the retained earnings on all previous FDI. Second, the allocation of investment between direct and portfolio is somewhat arbitrary and differs across countries. Third, it is possible—as noted in this report in previous years—that the stability of FDI may be somewhat artificial if owners of direct investment hedge the value of their claims from exchange rate changes: this would be reflected not in FDI but in the other components of flows. However, discussions with market participants provide little support for this type of activity occurring on a systematic basis, perhaps reflecting the longer-term focus of FDI. Finally, the absence of a positive correlation may not be surprising given that, in some cases in Asia, FDI directly replaced bank loans as foreign parent companies recapitalized joint ventures to offset the loss of external bank financing or as foreign investors acquired shares in banks or companies that had lost external financing.

Similarly, the larger Latin American corporates have also found domestic financing to be more available than in recent years. With the shift to greater exchange rate flexibility in several countries, corporates are looking more to local markets for domestic currency financing, where they are finding rates that are low both by historical standards and relative to foreign borrowing costs. In addition, there has been substantial growth in domestic venture capital and private equity activity in Latin American technology projects.

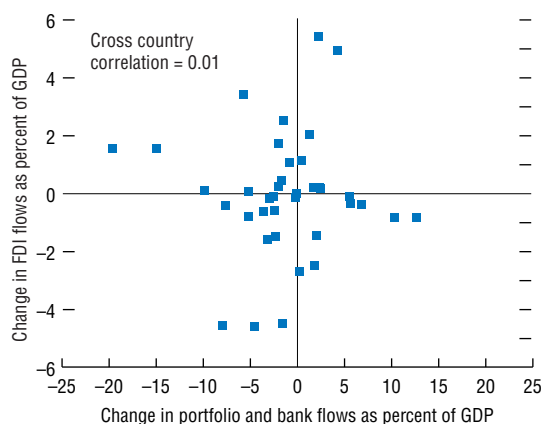
The relatively modest growth in fundraising in international markets also reflects the fact that the financial health of those larger companies that have traditionally had access to international markets has mostly improved over the past year. Asian corporates—especially exporters—are typically showing stronger earnings, and the marked decline in corporate health of Latin American companies that was expected a year ago—including in this report—has not happened. For example, the number of upgrades by Moody's for emerging market corporate and financial companies exceeded the number of downgrades by 33 percent in 1999, with substantial improvements in Asia, Eastern Europe, and Mexico and a deterioration only in Latin America (excluding Mexico). In the first half of 2000, the improvement in credit ratings continued, with over four times more upgrades than downgrades. Reflecting their improved financial health and the availability of cheaper domestic currency financing, some corporates in Asia and Latin America are reported to have been buying back their own foreign currency debt. Of course, the improvement in corporate health is not uniform and there are a number of large companies in several Asian countries that still require extensive restructuring.

Developments in the Bond, Equity, and Loan Markets

New issuance by emerging market borrowers in the bond, loan, and equity markets grew about 15 percent between 1998 and 1999 and showed fur-

Figure 3.1. Changes in FDI and in Other Private Capital Flows

(Changes between 1997 and 1999 as percent of 1997 GDP, for 40 major emerging markets)



Source: IMF staff calculations based on data from *World Economic Outlook*.

Box 3.1. Emerging Market Bonds Going Local

The period since the crises in emerging markets has seen substantial development of local bond markets in emerging markets. The local debt market has been described as one of the fastest growing security markets in the debt world (see Merrill Lynch, 2000). The recent crises have pointed toward the potential dangers associated with overreliance on foreign currency debt financing and the desirability of sovereign and corporate borrowers diversifying their investor base and liability mix. The growth is particularly noteworthy in Asia, where corporate bond issuance in local markets tripled in 1999 in the five crisis-affected countries. The size of local bond markets in emerging/converging countries is estimated by Merrill Lynch at \$1.2 trillion at end-1999, with government debt accounting for about 70 percent.

The growth of local markets has been boosted in Asia by the need to finance fiscal deficits, corporate debt restructuring, and bank bailouts. Of 19 major emerging markets surveyed by Merrill Lynch, 8 of the 10 largest local bond markets are in Asia. Forecasts by J.P. Morgan indicate that Asian governments will issue another \$135 billion in local debt markets in 2000 (up 20 percent from 1999, and compared with total gross financing in the international bond, equity, and loan markets in 1999 of \$63 billion), with refinancing of maturing foreign currency debt cited as one of the driving forces for the continued growth of local bond markets. Growth in domestic savings has also boosted development of bond markets, and in some cases the bond market has benefited from a mistrust of the banking sector.

In many cases, governments have been instrumental for the growth of local bond markets. Governments often play an important role in promoting the necessary institutions and infrastructure and are important in their role as regulators of the market. Opening markets up to foreign participation has in some cases substantially improved the functioning of the market, although in other cases governments are yet to remove restrictions on short selling that are viewed as hampering market development. The

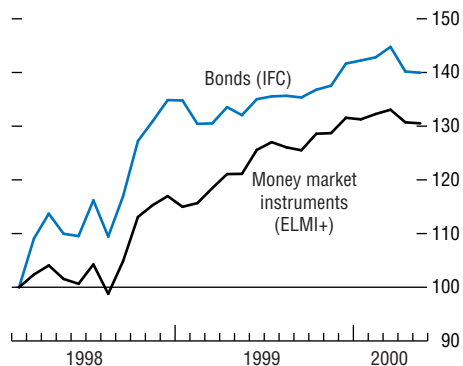
publication of new issuance calendars to enhance predictability and transparency in the market has also been seen as an important ingredient in the success of some local bond markets.

In addition to the gains to monetary policy and public debt management operations created by more active local debt markets, there are also important externalities, since a well-functioning government debt market provides local capital markets with a benchmark yield curve that other instruments can be priced off. This is not only important for issues in the primary market, but it also allows marking-to-market, which is an important ingredient in promoting a liquid secondary market (for example, in the absence of proper market prices during the crises, some investors held on to securities—valuing them at inflated prices—to avoid showing losses that would have become apparent if the securities had been sold). Other advantages to local bond markets include the reduction in vulnerability of local borrowers to exchange rate movements, and the addition of an investment opportunity for local investors that does not contain foreign currency risk.

As a result of these developments, there will be increasing demand by investors for relevant performance data. One index that goes back to 1994 is the Emerging Local Markets Index Plus

Performance of Local Debt Instruments

(Total return indices, February 1998 = 100)



(ELMI+) produced by J.P. Morgan, which consists of short maturity domestic currency instruments. In addition to this, following its earlier development of emerging market equity indices, the IFC is currently developing local bond market indices that include instruments of more than one year's remaining maturity. Where available, the IFC database includes indices and data for both government and corporate bonds, and in mid-2000 included the following countries: the Czech Republic, Hungary, Korea, Malaysia,

Poland, South Africa, the Slovak Republic, and Thailand. Between February 1998 and May 2000, an equally weighted index consisting of the individual IFC indices has shown an average annual return of about 18 percent, and shown somewhat similar movements over time (with a correlation of monthly returns of 0.85) to the ELMI+, which has yielded an average return of approximately 14 percent over the same period. The figure shows total return indices for the two variables.

ther strength in the first half of 2000 (Table 3.4).² Amid a global equity boom, growth in 1999 was strongest in the equity market, with issuance by technology, media, and telecommunications companies increasing fourfold over 1998 and issuance in other sectors growing by nearly 50 percent. Growth in the bond and loan markets was more subdued. Total new financing remained nearly 40 percent below the peak levels of 1997, with new financing in the equity market only about 10 percent below its 1997 level but the syndicated loan market still nearly 50 percent below its historical peak. New financing in the first quarter of 2000 was very strong, especially in March, but moderated in the second quarter following the sharp fall in the U.S. Nasdaq market. Nonetheless, new financing in the first half of 2000 was the strongest since the second half of 1997 and was running at an annual rate of more than 40 percent higher than in 1999.

The improved access by emerging market borrowers in 1999 and the first half of 2000 was

helped by generally improving fundamentals that led to perceptions of increased creditworthiness. With many key emerging markets being net commodity exporters, emerging markets benefited from the strengthening in commodity prices. For example, starting in mid-1999 the Commodity Research Bureau index of commodity futures prices began to strengthen from 20-year-low levels. In addition, oil prices recovered from early 1999 and in March 2000 reached their strongest level since the Gulf War. Further, the improving outlook for GDP growth that was seen first in Asia near the end of 1998 spread to Latin America and other emerging markets by mid-1999. Consensus private sector forecasts of GDP growth for 2000 were raised for most major emerging markets between mid-1999 and mid-2000, on average by about 1 percentage point (Figure 3.2). Increases of more than 1½ percentage points were recorded for Hong Kong SAR, Korea, Malaysia, Mexico, Singapore, Russia, Thailand, and Ukraine, with Ecuador the only

²The differences between the balance of payments data discussed in the previous section and the gross financing data discussed in this section reflect both conceptual differences and—presumably mainly in the balance of payments data—measurement error. Balance of payments data—taken here from the IMF's World Economic Outlook database—potentially offer the most complete coverage of total capital flows, but are subject to errors and omissions (and also to substantial revision). By contrast, gross financing data include new capital raising that occurs in the context of formal international offerings or syndicates, but exclude bank lending that is not syndicated and investments that do not occur through international public offerings: thus, substantial amounts of trade financing, foreign direct investment, and investment in domestic securities are excluded from these data. In addition, such data are for gross new financing, and therefore exclude purchases in the secondary market and do not reflect repayments or take account of the maturity of the financing (e.g., a 2-year note issuance facility that is renewed five times will show up in the data five times, while an economically equivalent 10-year bond issue will show up only once).

Table 3.4. Gross Private Market Financing to Emerging Markets, by Region, Financing Type, and Borrower Type¹

	1994	1995	1996	1997	1998	1999	1998				1999				2000	
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
	<i>(In billions of U.S. dollars)</i>															
All emerging markets	133.4	160.3	226.1	297.2	157.4	178.5	42.2	52.7	32.3	30.2	33.4	54.9	36.3	54.0	74.1	54.6
Asia	83.5	88.1	123.4	130.6	41.1	66.6	9.2	15.0	7.1	9.8	12.5	18.0	18.9	17.3	30.5	28.2
Western Hemisphere	25.8	36.3	64.9	96.2	66.6	65.4	22.6	22.7	10.4	10.9	13.2	22.8	9.8	19.5	26.3	12.8
Middle East	8.9	9.2	10.3	16.3	9.6	15.5	1.2	1.4	4.8	2.1	3.5	4.3	2.1	5.7	1.4	4.3
Africa	3.6	9.4	5.7	15.2	3.9	4.7	1.6	0.9	0.2	1.2	1.0	1.8	0.3	1.6	6.3	1.8
Europe	11.7	17.4	21.9	38.9	36.2	26.3	7.6	12.7	9.7	6.1	3.2	8.0	5.1	10.0	9.5	7.5
Bonds	53.8	59.2	105.3	133.2	80.2	87.0	26.7	28.6	14.0	10.8	21.8	27.5	15.9	21.8	36.3	15.5
Equities	17.9	10.0	17.8	26.2	9.4	23.2	2.8	3.6	0.3	2.8	2.4	6.6	6.1	8.0	8.9	11.1
Loans	61.6	91.1	103.0	137.8	67.7	68.4	12.7	20.5	18.0	16.6	9.2	20.8	14.2	24.2	28.8	28.1
Sovereign	16.6	25.6	41.8	47.4	50.6	51.9	17.9	15.2	10.5	7.0	12.5	16.8	7.2	15.3	27.5	9.1
Public	39.0	49.0	54.7	74.5	33.5	25.6	5.0	12.4	9.7	6.3	5.1	6.3	5.7	8.5	17.9	8.9
Private	77.8	85.7	129.5	175.3	73.3	101.0	19.3	25.1	12.1	16.9	15.8	31.8	23.3	30.2	28.6	36.6
	<i>(Percent of total)</i>															
Asia	62.6	55.0	54.6	44.0	26.1	37.3	21.8	28.5	22.1	32.5	37.3	32.8	52.1	32.1	41.2	51.7
Western Hemisphere	19.3	22.6	28.7	32.4	42.3	36.6	53.4	43.0	32.2	36.2	39.6	41.6	27.1	36.1	35.5	23.4
Middle East	6.7	5.7	4.5	5.5	6.1	8.7	2.9	2.7	15.0	7.0	10.5	7.8	5.7	10.5	1.9	8.0
Africa	2.7	5.8	2.5	5.1	2.5	2.6	3.9	1.7	0.5	4.1	3.0	3.3	0.9	2.9	8.5	3.2
Europe	8.7	10.8	9.7	13.1	23.0	14.7	18.0	24.2	30.2	20.3	9.7	14.5	14.2	18.4	12.8	13.7
Bonds	40.3	36.9	46.6	44.8	51.0	48.7	63.2	54.3	43.5	35.9	65.2	50.1	43.9	40.3	49.1	28.3
Equities	13.5	6.2	7.9	8.8	6.0	13.0	6.7	6.8	0.8	9.2	7.3	12.1	16.8	14.8	12.1	20.3
Loans	46.2	56.9	45.5	46.4	43.0	38.3	30.1	38.9	55.6	54.9	27.5	37.8	39.2	44.8	38.9	51.4
Sovereign	12.4	16.0	18.5	16.0	32.1	29.1	42.4	28.9	32.4	23.1	37.5	30.7	19.9	28.4	37.1	16.7
Public	29.2	30.6	24.2	25.1	21.3	14.3	11.9	23.5	30.1	21.0	15.3	11.4	15.8	15.7	24.2	16.2
Private	58.3	53.4	57.3	59.0	46.6	56.6	45.7	47.6	37.5	56.0	47.2	57.9	64.3	55.9	38.7	67.1

Sources: Capital Data; and IMF staff calculations.

¹Data for 2000-Q2 are preliminary.

country where forecasts were revised substantially downward. As a result, growth of the major emerging markets was projected to reach 5.6 percent in 2000 and to exceed G-7 growth of about 3.7 percent, the biggest growth differential since 1997. In addition, contrary to some earlier fears, the Y2K rollover occurred virtually without incident in emerging market countries, and the modest tightening in market access in the lead-up to the rollover created no serious problems for emerging market borrowers.

Reflecting the improved outlook, most actions by external credit rating agencies involved upgrades to ratings. Of the 12 emerging markets that saw substantial changes in credit ratings on long-term foreign currency debt between mid-1999 and mid-2000, 10 saw upgrades and only 3 experienced downgrades (Table 3.5). While the average credit rating in Asia is

still substantially below precrisis levels, the average rating in Latin America has now recovered to its pre-Asian crisis level, and the average rating in Eastern Europe (excluding Russia) is now higher than mid-1997 (see Figure 3.3).³ Africa and the Middle East is the one grouping for which the average rating (dominated by South Africa and Saudi Arabia) did not decline at any stage over the last three years.

Bond Market Developments

Primary Market Issuance

Emerging market access to the international bond market continued to recover during 1999 and in the first half of 2000. Excluding the exchange component of Brady debt exchanges (discussed below), bond issuance grew 6 percent

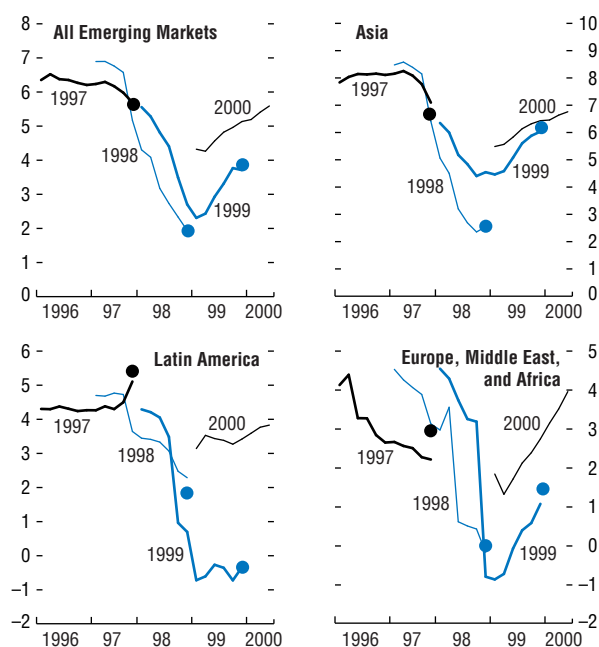
³Average credit ratings are calculated based on the importance of countries in gross private market flows to emerging markets (based on the sum of bond, equity, and loan issuance over 1995–99).

from 1998 to 1999. Reflecting the need to finance deficits and bank recapitalization and the earlier pickup of economic growth and creditworthiness in Asia, borrowers from that region (notably from Hong Kong SAR, Malaysia, and the Philippines) largely accounted for the growth in bond issuance in 1999. Excluding Asia, bond issuance actually fell 10 percent in 1999, reflecting declines in both Europe and the Western Hemisphere, although borrowers in a few countries that had been little affected by the crises (including South Africa, Israel, and Qatar) obtained increased financing from the bond market. In the first six months of 2000, bond issuance was running at an annual rate (excluding debt exchanges) similar to that of 1999, with much of the issuance occurring in the month of March, when emerging market issuers took advantage of positive sentiment over Mexico's upgrade and the successful conclusion to negotiations on a Russian debt exchange and raised \$15 billion in new financing (excluding exchanges), the third-strongest month on record. However, overall market access worsened substantially after March and many planned issues were postponed following the sharp weakening of the Nasdaq index, and total issuance (excluding Argentina's June debt exchange) in the second quarter was the lowest since the Russian crisis affected the last quarter of 1998.

While sovereign borrowers continue to raise the majority of funds, other factors suggest some modestly greater risk appetite by investors. Excluding debt exchanges, sovereign borrowers accounted for about 60 percent of funds raised in the first six months of 2000, up from about 55 percent in 1998 and 1999, and only about 30 percent in 1997—in part, the increase in sovereign issuance early 2000 may reflect greater front-loading of annual funding than in the past. Other public sector issuance accounted for a similar share of total issuance to the previous two years (about 15 percent) but remained below the levels of 1997 (23 percent). And private sector issuance accounted for a shrinking share of total issuance (about 25 percent in the first half of 2000, down from about 31 percent in

Figure 3.2. Consensus GDP Forecasts for Major Emerging Countries¹

(Weighted average for countries within group, in percent)



Source: IMF staff analysis based on data from Consensus Forecasts.

¹Lines show the evolution of monthly consensus forecasts of annual GDP growth beginning with the forecast at the start of the prior year. Circles show actual outcomes for each year.

Table 3.5. Significant Ratings Changes for Emerging Market Countries, July 1999–June 2000¹*(Ratings for Moody's, Standard & Poor's, and Fitch IBCA, respectively, shown in parentheses)*

Upgrades		Downgrades	
Hungary	(Baa2/BBB/BBB) to (Baa1/BBB+/BBB+)	Colombia	(Baa3/BBB-/BB+) to (Ba2/BB/BB+)
Korea	(Baa3/BBB-/BBB) to (Baa2/BBB/BBB+)	Ecuador	(B3/n.r./n.r.) to (Caa3/n.r./n.r.)
Malaysia	(Baa3/BBB-/BBB-) to (Baa3/BBB/BBB)	Moldova	(B2/n.r./B) to (B3/n.r./B-)
Mexico	(Ba2/BB/BB) to (Baa3/BB+/BB+)		
Poland	(Baa3/BBB/BBB+) to (Baa1/BBB+/BBB+)		
South Africa	(Baa3/BB+/BB/) to (Baa3/BBB-/BBB-)		
Thailand	(Ba1/BBB-/BBB-/) to (Baa3/BBB-/BBB-)		
Barbados	(Ba1/A-/n.r.) to (Baa2/A-/n.r.)		
Trinidad and Tobago	(Ba1/BB+/n.r.) to (Baa3/BBB-/n.r.)		

Source: Rating agencies.

¹Significant ratings change defined as either two-notch change, change through investment-grade barrier, or single-notch change by two agencies.

1998–99 and 48 percent in 1997). However, compared with the first half of 1999, investors appeared more willing to buy bonds that were either unrated or rated below investment grade (Figure 3.4). Further, data on credit enhancements also suggest a picture of better access for lower rated issuers. In particular, the proportion of issuance carrying enhancements (with warrants or convertibility to equity, guarantees, backing with assets or receivables, or put options) fell dramatically from over 20 percent in 1999 to only about 7 percent in the first six months of 2000. Finally, there was a substantial increase in the average maturity of issuance of unenhanced bond issues from about 7 years in 1999 to about 10 years in the first six months of 2000. In addition, as discussed above, the reduced access by corporates may also reflect reduced funding needs and greater access to funds in their domestic markets.

After little such activity in 1998, sovereign borrowers have conducted several new issues of eurobonds in exchange for Brady bonds over the past year. After exchanges involving the buyback of \$8.3 billion in debt in 1997, buybacks contracted to only \$0.7 billion in the tight market

conditions of 1998. However, debt exchanges picked up in 1999 as market conditions improved, with \$4.6 billion of exchanges by Brazil, the Philippines, Mexico, and Uruguay, and the exchanges continued in the first half of 2000 with \$4.3 billion from Argentina, Mexico, and Brazil.⁴ These exchanges have yielded benefits in terms of reducing debt-service costs and freeing up collateral in the form of U.S. treasury bonds backing the Brady bonds. The reason for these debt-service savings is that the yield on Brady bonds (adjusted where necessary to remove the effect of the collateral) has been substantially above the yield on eurobonds of similar durations.⁵ Indeed, it is puzzling that more buybacks have not already occurred, since their benefits have been apparent for several years. Market participants expect buybacks to continue.

Secondary Market Developments

Emerging market bonds posted strong returns in 1999, significantly outperforming the low or negative returns seen for most alternative fixed income asset classes in mature markets. Overall, total returns averaged about 22 percent, or 16 percent excluding Russian assets, which yielded

⁴All amounts are in terms of the face value of new securities (and cash) provided in the exchanges. Reflecting the gradual decline in the stock of Brady bonds and increase in stock of eurobonds, data from the Emerging Markets Traders Association (EMTA) show that turnover in eurobonds exceeded turnover in Brady bonds for the first time in the first quarter of 2000.

⁵See the 1997 *International Capital Markets* report (IMF, 1997) for further discussion of suggested rationales for the surprising yield differential. While it is difficult to be certain, the yield differential probably reflects the preference of most investors for "more conventional" securities—i.e., ones without unusual cash flow patterns, which represent pure sovereign risk, and which did not emerge from earlier defaults—and the costs and risk involved in attempting to arbitrage between different bonds.

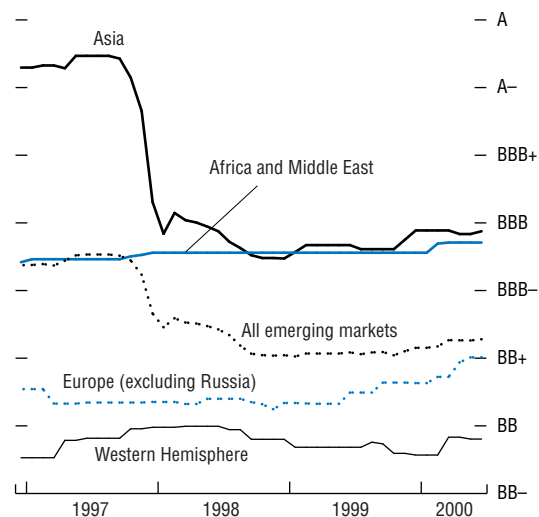
about 160 percent.⁶ The stripped yield on the EMBI (Emerging Markets Bond Index) Global index (excluding Russia) fell to about 530 basis points at end-1999, down from 825 basis points at end-1998, and a peak of about 1,330 basis points in the Russian crisis.⁷ Nonetheless, this spread level was still substantially above the levels seen in 1997 and early 1998 (Figure 3.5).

The strong performance in emerging market debt continued until March 2000, supported by positive sentiment over the rating upgrade for Mexico and the successful conclusion of negotiations for the Russian debt exchange. The increased demand for Mexican bonds that resulted from the prospective upgrade to investment grade by Moody's resulted in a fall in Mexican yield spreads of about 120 basis points between early February and early March, although much of this was reversed in the subsequent generalized weakening in emerging markets and in the lead-up to the July elections (see Box 3.2 for further discussion of the importance of credit ratings in emerging markets). Further, the fall in yields on Mexican bonds resulted in a switch by managers that specialize in emerging markets toward the remaining non-investment-grade emerging market issuers. Indeed, follow-

⁶Most references to average returns or average yield spreads for emerging market bonds are based on J.P. Morgan's EMBI Global index. This index was introduced in mid-1999 in response to investor demand for an index with broader country coverage (27 countries versus 16 in EMBI-plus, as of June 2000), less focus on Latin American borrowers, and better instrument composition (a greater proportion of eurobonds relative to Brady bonds) than its predecessor EMBI and EMBI-plus indices. It has now been adopted by many investors as the relevant benchmark. As in last year's report, all references to spreads in 1998–2000 are to the index excluding Russia to abstract from the high degree of volatility introduced by Russian spreads.

⁷All analyses of yield spreads in this chapter refer to spreads on U.S. dollar-denominated bonds relative to U.S. treasury securities of similar maturities. Given the recent turmoil in the treasury market, many market participants argue that spreads relative to the swap curve may be a better measure of underlying spreads. To date, however, there has been no widespread shift to this convention, and to the extent that spreads on other "credit products" (e.g., U.S. high-grade or high-yield) are also quoted relative to treasury bonds, there is little impact on an assessment of the relative attractiveness of the different credit products.

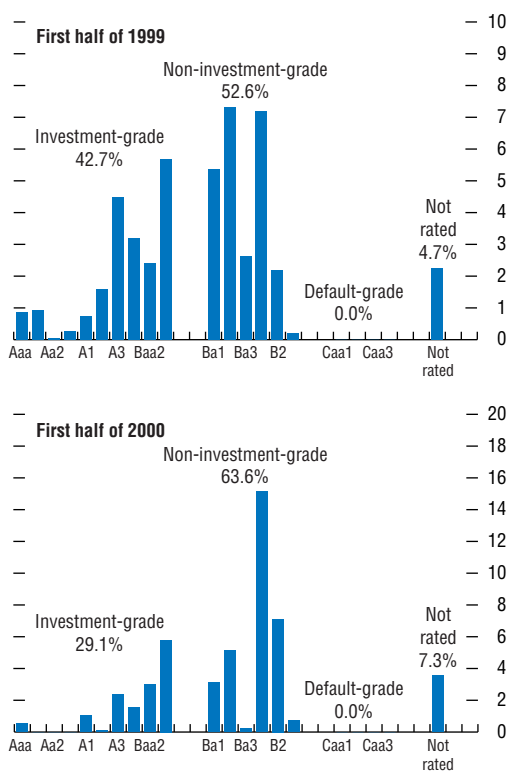
Figure 3.3. Average Credit Ratings in Emerging Markets¹



Sources: IMF staff calculations based on data from Moody's, Standard & Poor's, and Capital Data.

¹Includes all major emerging markets with credit ratings as of December 1996.

Figure 3.4. Ratings of Emerging Market Bond Issues
(In billions of U.S. dollars)



Source: IMF staff calculations based on data from Capital Data.

ing Mexico’s review and upgrade market participants began to talk of a generalized upswing in the sovereign credit cycle and began to position their portfolios to benefit from expected upgrades for other countries.

The continued strength in emerging market bonds in the first few months of 2000 pushed yield spreads to low levels compared with spreads on U.S. high-yield bonds, a major competitor asset class. As of March 2000 the spread difference between emerging market bonds and U.S. high-yield bonds was at an all-time low (Figure 3.5). Indeed, depending on the indices used, some measures showed emerging market spreads on average to have fallen below the spreads on comparably rated U.S. high-yield bonds, something that had previously been thought unlikely given a conventional wisdom that emerging market bonds had both higher default probabilities and lower recovery rates in the event of default. The terms of recent debt exchanges for Russia, Ukraine, and Pakistan have, however, been more favorable to investors than might have been suggested by previous sovereign defaults by other countries. Further, recent indications of increasing U.S. corporate defaults have caused some reassessment of the relative probabilities of default for the two asset classes.

The peak in emerging market bond prices in early March 2000 coincided with the peak in the U.S. Nasdaq index. As the Nasdaq fell sharply from its peak, and competitor asset classes such as U.S. high-yield weakened, emerging market debt prices also fell. The weakness of the Nasdaq also appeared to affect a wide range of other emerging market assets, from the obvious—most equity markets—to the less obvious, including the exchange rates and local debt markets of a wide range of countries. (In part, the weakness of some currencies, especially in Central and Eastern Europe, may have reflected the weakness of the euro against the dollar.) Further, as the Nasdaq recovered from late May (and expectations about further large increases in U.S. official interest rates eased) emerging market bonds also recovered. This apparent link between the Nasdaq and emerging markets has been widely

analyzed. As explored in Box 3.3, a major factor behind the “EMBI-Nasdaq link” would appear to be that both asset classes are viewed as among the riskiest of financial assets, so that both benefit when global risk is perceived to be falling and both suffer when risk is perceived to be rising.

The declines in emerging market asset prices in March–May 2000 were noteworthy, but have certainly not completely erased the rally that preceded them. As of end-June, the spread on EMBI global (excluding Russia) was about 630 basis points, about 70 basis points below the level of mid-1999 and about 200 basis points below the level of the end of 1998. Yield spreads in a range of countries—including Brazil, Hungary, Malaysia, Mexico, Russia, and Turkey—were substantially lower than in mid-1999, and yields on only a few countries—including Colombia, Ecuador, and the Philippines—were significantly above levels of a year ago (Figure 3.6). Further, while the overall level of emerging market yield spreads remains substantially above the levels prior to the Asian crises, the increase is most pronounced for the riskier credits (see Figure 3.7, which shows the typical yield spread on emerging market sovereign bonds of different ratings).⁸

Recent data suggest that liquidity in emerging market debt has improved modestly. Market par-

⁸These spread/ratings relationships were obtained from ordinary-least-squares regressions of stripped yield spreads on sovereign bonds on a constant, and variables for the rating and duration of each bond, and a dummy variable for Brady bonds. We are grateful to Chase Securities for providing the data on these bonds. The sample was limited to bonds with at least one year to maturity and with ratings between A–/A3 and B–/B3, which yielded sample sizes of about 80 bonds at the start of sample and around 140 at the end. Figure 3.7 shows the fitted yield for a eurobond with duration equivalent to about 10 years to maturity. (The data provide some evidence of a discrete jump in yields at the investment-grade barrier, but we do not include this more complex specification in the results shown.)

These estimated yield spread curves can also provide a perspective on the comparison with U.S. high-yield bonds. As of June 2000, the spread on a BB-rated emerging market bond was estimated to be about 10 percent lower than the spread on a comparably rated U.S. corporate bond (based on the indices for different ratings produced by Merrill Lynch), versus about 30 percent higher prior to the Asian crises.

Figure 3.5. Yield Spreads on Emerging Market and U.S. High-Yield Bonds

(In basis points, weekly average)



Sources: IMF staff calculations based on data from Merrill Lynch and J.P. Morgan.

¹EMBI Global (excluding Russia) from the start of 1998, and EMBI for 1994–97.

Box 3.2. Rating Upgrades May Be Helpful for Your Finances

Recent changes to credit ratings (e.g., Mexico's recent upgrade to investment-grade status by Moody's) have highlighted the importance of credit ratings for international investors. While this role was covered in detail in this report last year (IMF, 1999), this box provides some further perspective on this issue.

Credit ratings on external debt are important because many investors face constraints on the credit ratings on bonds in their portfolio. In some cases these are absolute constraints. For example, the manager of an investment-grade bond portfolio may be precluded from buying bonds that are not classified as investment grade (i.e., at least BBB- or Baa3) by a major ratings agency. In other cases, the constraint is less binding but ratings remain important. For example, the manager of a global bond fund might be required to hold at least 70 percent of assets in investment-grade debt but may be allowed to buy non-investment-grade debt provided it is at least B-rated by a major agency. In the latter case, the sub-investment-grade emerging markets debt is an eligible asset for the manager but it is unlikely to be regarded a core asset with a permanent portfolio allocation because any allocations to non-investment-grade emerging market bonds are "ex-index" and increase risk relative to benchmark, especially reputational risk in the case of default on a bond.

Mexico's upgrade to investment grade by Moody's was important because it opened up a much wider investor base. Mexico was then eligible for inclusion in benchmark investment-grade indices such as those produced by Lehman Brothers and Salomon Smith Barney. The weight of Mexican assets in the "corporate" component of these indices is about 1½ percent, and the weight in the broader investment-grade indices is about 0.3 percent. As portfolios are adjusted (especially in the event that Mexico is upgraded to investment grade by Standard & Poor's and Fitch IBCA), Mexico will become a core part of portfolios that use these indices as benchmarks. The benefit of inclusion in investment-grade benchmarks is that it changes the portfolio decision for an investment-grade man-

ager from a presumption that an asset will generally not be included to one where it generally will be included and where the manager will now have to consciously justify its exclusion. That is, the upgrade will result in both increased and more stable demand for Mexican bonds. This effect was partially incorporated into the pricing of Mexican debt immediately on the news that Mexico had been placed on review for possible upgrade. This reflected demand both from investment-grade managers that had some flexibility to make allocations to non-investment-grade assets and from unconstrained investors (e.g., high-yield managers and hedge funds) who were able to buy opportunistically and realize much of the price impact of the upgrade and then sell after the actual upgrade to investors that did not have the flexibility to buy prior to the actual inclusion in investment-grade indices.

As indicated by the yield changes that resulted around the time of Mexico being placed on review and then upgraded, there is a substantial impact on yields from an investment-grade rating. Much of this difference in yields is clearly due to a "certification effect" by the rating agencies and the large change in investor base that it implies. But relative credit ratings within the investment-grade and non-investment-grade rating groups are also associated with substantial differences in yields (see Figure 3.7). Given that yield spreads tend to move in advance of upgrades and downgrades by the agencies, a part of these yield differences is presumably due to the independent risk assessments of investors rather than investors' responses to the risk assessments of rating agencies. For example, positive sentiment about Mexico's creditworthiness had caused its debt to trade at yields below similarly rated debt prior to its ratings review, and—apart from the exact timing—the upgrade was not unexpected. Similarly, yields on Colombian debt had risen above comparably rated debt well before its downgrade from investment-grade status in the middle of 1999.

In addition to being associated with yield movements, changes in credit ratings are also of-

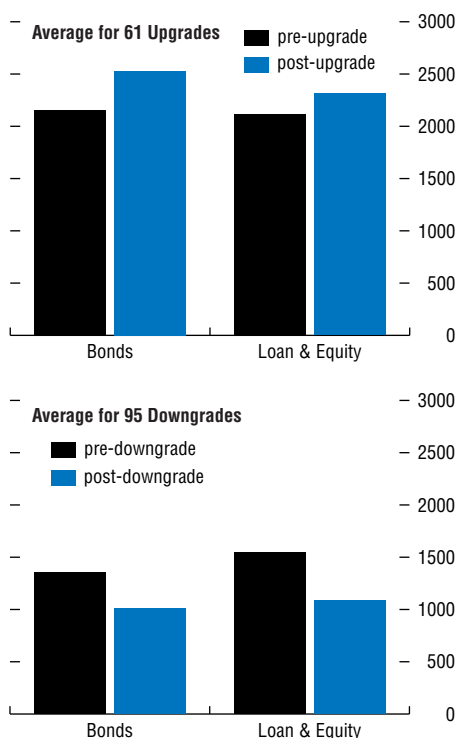
ten associated with changes in flows. We illustrate this by analyzing gross flows into emerging markets in the bond, equity, and loan markets (for all national entities, not just the sovereign), in the 12 months before and after changes in the sovereign's external debt rating (see figure). The analysis is based on 61 upgrades and 95 downgrades of emerging markets by Moody's and Standard & Poor's over 1990–99.¹ The results indicate that bond issuance in the 12 months following an upgrade increased on average by 17 percent, while issuance following a downgrade fell on average by 25 percent. Interestingly—given that ratings play a much less important role in the syndicated loan and equity markets—the ratings changes have similar impacts in these other markets. Financing in syndicated loan and equity markets is also affected, with an average increase of 10 percent following an upgrade and an average fall of 30 percent following a downgrade (with these effects driven by loans rather than equity). It is impossible to precisely disentangle the impact on flows of the ratings change per se—the “certification effect”—and of investors' independent responses to changes in risk that are also reflected in the actions by the ratings agency. However, given that ratings announcements do generally have an immediate effect on bond yields, we suspect that the changes in flows are at least partly due to the ratings change per se. It is noteworthy that flows tend to increase on upgrades and fall on down-

¹Upgrades and downgrades that occurred within six months of a similar earlier ratings change are excluded so that we are not “doublecounting” either rating changes that the two agencies make at nearly the same time or multiple rapid-fire downgrades by one agency. We do not separately examine changes through the investment-grade barrier because the number of such events is relatively small.

grades, even though one might expect that upgrades (downgrades) are associated with improving (worsening) fundamentals that might suggest a reduced (increased) demand for external financing. Whatever the precise causality, the message seems to be that the market rewards improved ratings and fundamentals in emerging markets with both lower borrowing costs and greater financing flows.

Average Financing Flows to Countries in the Year Before and After Sovereign Ratings Changes

(12-month flows, millions of U.S. dollars)



ticipants note that the decline in the number of market-makers in the wake of the Russian crisis seems to have been reversed, with a few banks recently increasing their activities. After remaining low through 1999, turnover in emerging

market debt instruments is estimated by the Emerging Markets Traders Association (EMTA) to have jumped by 53 percent in the first quarter of 2000. More recently, market participants report that liquidity remained good after prices

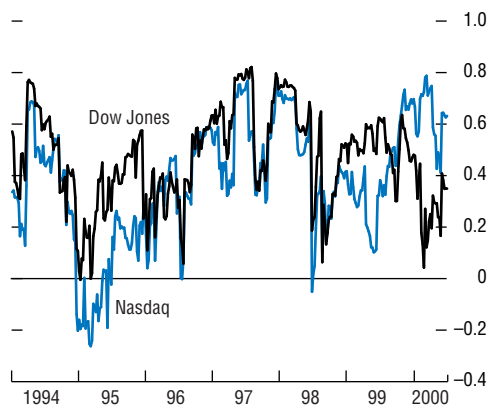
Box 3.3. Do U.S. Markets Drive Emerging Market Assets?

The falls in mature stock markets in early 2000, especially in the U.S. Nasdaq market, were associated with large falls in emerging equity markets and increases in emerging market yield spreads. Indeed, some analysts have recently spoken of a tight EMBI-Nasdaq link. Since this discussion is reminiscent of earlier, supposedly tight relationships between emerging market assets and other assets or variables (e.g., U.S. high-yield bonds, oil prices, and indicators of U.S. monetary policy), this box examines some of these relationships over a longer horizon and in a multivariate context.

The most obvious candidate for a strong relationship between mature and emerging markets would be a link between equity markets. Indeed, when mature equity markets—especially the U.S. market—fall significantly, there is generally an immediate fall in emerging equity markets. Further, this relationship appears to have grown stronger over time. For example, over 1988–94 a 1 percent monthly change in the MSCI world index (of mature markets) tended to be associated with a 0.8 percent change in the MSCI Emerging Markets Free (or “investable”) index. However, over 1995–June 2000 the impact on emerging markets had grown to 1.4 percent. (Here, and in the rest of this box, we generally refer to the causation being from the mature to the emerging markets, although the experience of October 1997 and the Russian crisis shows that this is not always true.) This increase reflects the greater integration of emerging markets into the world market, in both a financial and a real economic sense.

The link from mature market equity to emerging market debt has historically focused on the U.S. Dow Jones or S&P 500 indices rather than the Nasdaq index. Indeed, until recently the correlation between the weekly return on the Dow and the return on emerging market debt had been stronger than the correlation between the Nasdaq and emerging markets (measured by the return on the EMBI or EMBI Global index); see first figure. Further, the recent correlations are no higher than

Correlation Between U.S. Stock Markets and Emerging Market Debt



some previous peaks (notably in the turmoil of late 1997).¹

Yet many other variables have also been mentioned as important influences on emerging market debt. Over the period 1994–2000, both the Dow and S&P 500 indices have been more highly correlated than the Nasdaq with emerging market debt, presumably because they are better measures of the broader U.S. equity market (see table). But the correlation between emerging market debt and U.S. high-yield debt is at least as high as the correlation between the U.S. equity indices and emerging market debt. Further, none of the three commodity price measures examined are statistically significant, although all have the expected sign. And neither of the measures of U.S. treasury yields (the changes in 3-month and 10-year yields) are at

¹The correlations are computed with exponentially declining weights (as used, for example, in J.P. Morgan’s Riskmetrics) rather than over rolling windows (e.g., the 20-day windows used by some market participants). Correlations estimated using the latter tend to be far noisier due to the small number of observations in each correlation and the large changes in correlations that occur as observations drop abruptly out of the sample.

Correlations of Different Variables with Return on EMBI Global, 1994–2000

High-yield	3-month U.S. rate	10-year U.S. rate	Nasdaq	Dow Jones	S&P 500	Oil	Gold	CRB
0.38	-0.02	-0.07	0.30	0.39	0.37	0.05	0.10	0.07

Notes: Bold indicates statistical significance at 5 percent level. High-yield is weekly return on Merrill Lynch high yield index; 3-month and 10-year U.S. rates are the weekly yield changes; Nasdaq, Dow Jones, and S&P 500 are the weekly price changes; Oil refers to change in dollar price of Brent crude; Gold is weekly price change; CRB is weekly change in CRB commodity futures price index.

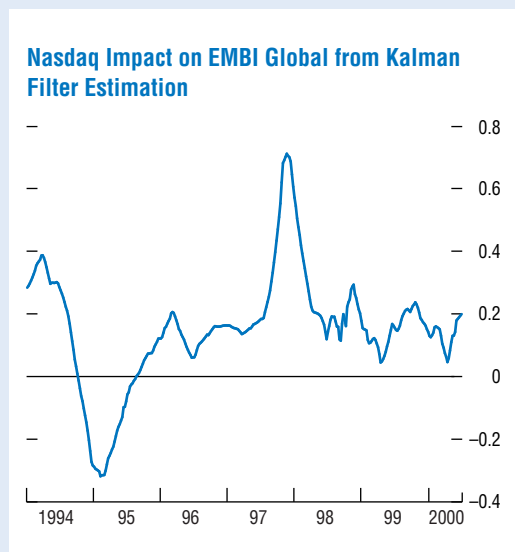
all significant over the full sample, though this does not preclude these variables having an effect through other variables, for example through U.S. high-yield debt. The absence of correlation may not be surprising in light of some recent evidence—emerging markets rallied substantially between June 1999 and February 2000 in the face of four increases in the U.S. federal funds target.

The fact that several variables are associated significantly with emerging market debt returns argues for a multivariate approach. The inclusion of some or all of these variables in regressions to explain the return on emerging markets debt yields the result that the U.S. equity return (however measured) is always significant and the return on U.S. high-yield is also always significant. The two U.S. government rates are

never significant, and of the three commodity prices, only gold approaches statistical significance.

If we think that different factors may be important at different times, this suggests using a time-varying approach. We use the Kalman filter, a technique that allows regression-coefficients to change over time (rather than imposing the restriction that they are fixed over time, which is the standard assumption in ordinary-least-squares regressions). In terms of the explanatory power provided by each variable, the U.S. high-yield variable remains the most important in explaining emerging market debt. The second figure shows estimates for the impact on emerging market debt prices of a 1 percent movement in the Nasdaq index and gives no evidence of a long-run increase in the impact of the Nasdaq on emerging markets debt.² Indeed what appears to be happening is that the Nasdaq is becoming more volatile (see third figure), and emerging markets are now actually responding less than in the past to movements of a given size in the Nasdaq.³

So how should one think about the correlation between the Nasdaq and emerging markets debt? Most important, the correlations are

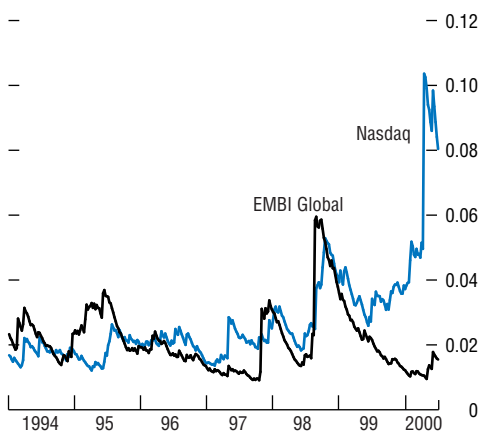


²The regression coefficient on the Nasdaq return of about 0.2 implies that a 1 percent change in the Nasdaq is typically associated with about a 0.2 percent change in the value of emerging market bonds, which in turn corresponds to an EMBI Global yield spread change of about 6 basis points.

³Volatilities are computed with exponentially declining weights, with the weight on the last period's volatility equal to 0.9.

Box 3.3 (concluded)

Volatility of Returns on the Nasdaq and EMBI Global



highly variable, and periods of apparent high correlation will surely be followed by periods of lower correlation. This reflects the fact that emerging debt markets are driven by many different forces, and the relative importance of them is continually changing. However, the two variables that are consistently significant (the return on high-yield debt and the U.S. stock market) are both returns on risky assets that are highly sensitive to profitability and the economic cycle, and to the risk tolerance of investors. This suggests that emerging market debt too is viewed as one of the more risky assets, highly dependent upon the health of the global economy and the risk perceptions and tolerance of those who invest in emerging markets.

began to decline and that trading was orderly with only marginally wider bid-ask spreads on days when the Nasdaq was volatile. Indeed, return volatility (as measured by the volatility of daily returns on the EMBI global index) has remained low by historical standards despite the recent turbulence, and bid-ask spreads on benchmark securities have tended to fall over the last year, although they have not returned to the very low levels seen prior to the Russian crisis (Figure 3.8). Overall, by the standards of many other asset classes, emerging market debt is a relatively liquid asset class. Aggregate turnover (in face value terms) of Brady bonds, eurobonds, and dollar-denominated local instruments in the first quarter amounted to \$530 billion, about 2.3 times the face value of instruments in the J.P. Morgan EMBI Global index. The implied aggregate annual turnover ratio of about 9 is high by the standards of most bond and equity markets.

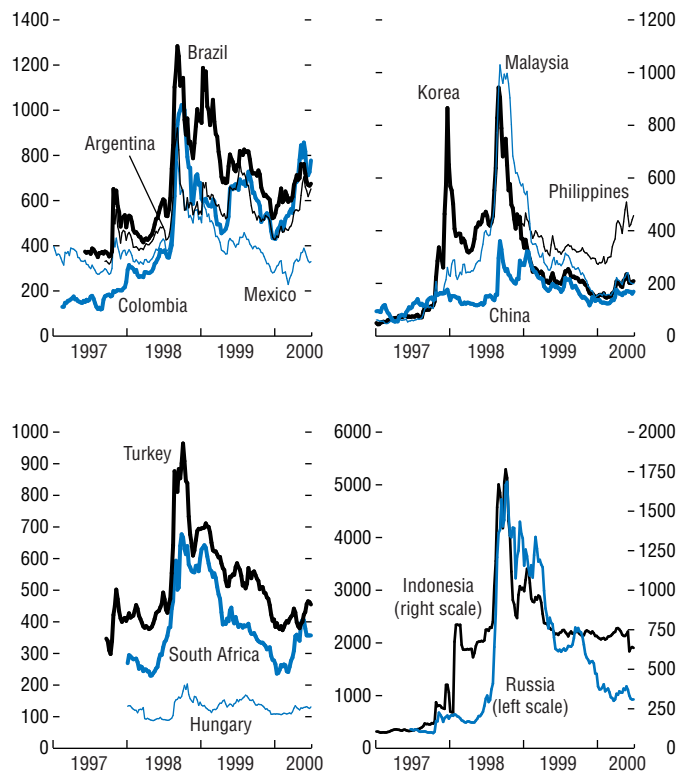
Concerns about the volatility of flows and prices in emerging market assets have frequently been related to the type of investors in emerging market debt. In particular, there is

concern that the amount of funds under management by those managers with an ongoing demand for the asset class—the “dedicated” investors—is quite small relative to the outstanding stock of assets, leaving the asset class “at the mercy” of a wider group—the “crossover” investors—with little long-term commitment to the asset class. The latter investors include managers that specialize in investment-grade debt (who have been more active in emerging markets in 2000 than in 1999), managers that specialize in mature market high-yield securities, as well as global macro hedge funds (who unlike most others have the ability to move between long and short positions). Indeed, emerging markets debt has substantially higher return volatility than many competitor debt products, including U.S. investment-grade and high-yield corporate debt (for further discussion, see Box 3.4). However, there appear to be some positive developments recently in the broadening of the investor base. Two notable trends are the increased demand from European institutional investors and from local investors in emerging market countries.

While most U.S. demand for emerging market bonds has traditionally been from institutional investors, demand in Europe has traditionally been largely retail. More recently, European institutional demand has grown, fueled by the growth in European high-yield funds. While the portfolio behavior of European high-yield managers has yet to be tested through a full cycle, market participants suggest that such investors have more of a buy-and-hold focus than many of their U.S. counterparts, as well as a taste for higher coupons, greater willingness to cross over into emerging market securities, and fewer constraints on holdings based on credit ratings. While European demand for U.S. dollar-denominated assets has traditionally been greater than U.S. demand for nondollar issues, both groups of investors have a preference for assets in their own currency. Thus, the increased European demand has been reflected in a pickup in issues denominated in euros (and the legacy currencies) from 13 percent in 1997 to about 32 percent in 1999 and the first half of 2000.

The widening of the investor base for emerging market assets has also been seen in greater local demand for foreign currency-denominated assets. Market participants have noted this in some of the major emerging markets such as Argentina, Brazil, Mexico, Russia, and Turkey, as well as in countries like Kazakhstan and Lebanon, where local banks and pension funds, respectively, have been major participants in recent dollar-denominated external bond issues. The trend to greater domestic participation in some cases reflects a shift to funded pension systems and is most marked in Argentina, where the authorities have noted with approval that domestic investors absorbed 71 percent of net international debt issuance in 1999. Overall, Argentine pension funds now hold over 30 percent of dollar-denominated eurobonds and about 20 percent of Brady bonds, with substantially higher holding of particular securities. For example, within seven months of the February 1999 sale of a 20-year global bond, over 70 percent of the \$1 billion issue was held by domestic pension funds.

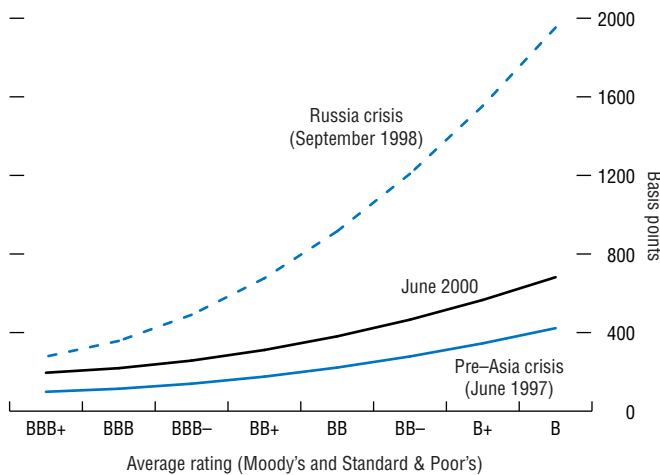
Figure 3.6. Yield Spreads for Selected Emerging Market Eurobonds
(Weekly average, in basis points)



Source: Bloomberg Financial Markets L.P.

A parallel trend (which is observed in the EMTA data, which show a pickup in trading in local currency instruments) is that nonresidents are often holding an increasing proportion of domestic-currency securities. Of course, in most countries nonresidents still hold the vast majority of external issues and resident investors still hold the bulk of domestically issued securities. However, the traditional roles of investors are being blurred and the widening of the investor base—ideally to investors with longer horizons and greater risk tolerance—and greater diversification of investors may contribute to greater stability of asset prices and financing flows.

Figure 3.7. Average Yield Spreads by Credit Ratings



Source: IMF staff analysis based on data from Chase Securities.

Equity Market Developments

Primary Market Developments

Emerging equity markets showed far stronger growth in new issuance in 1999 than the bond or loan markets, and issuance remained strong into 2000. As a result the share of equity in total emerging market fundraising rose from only 6 percent in 1998 to 13 percent in 1999 and about 16 percent in the first half of 2000. The significant pickup in new international issuance in 1999 was fully accounted for by growth in new issuance from Asia. Issuance from Latin America, which was essentially zero in 1998, began to stir in 1999, although it remains far below the peak levels of the early 1990s. As in the mature markets, a number of planned issues by emerging market companies were postponed in April and May 2000 as prices fell. However, with prices beginning to recover from late May, issuance in June was extremely strong, largely reflecting the initial public offering by China Unicom (the second-largest telecom company in China), which raised \$5.6 billion, the largest ever equity fundraising by an emerging market company. Total equity issuance by emerging market borrowers in the first half of 2000 amounted to \$20 billion, nearly as large as total issuance in the whole of 1999.

The growth in issuance in 1999 and the first half of 2000 owed much to the global technol-

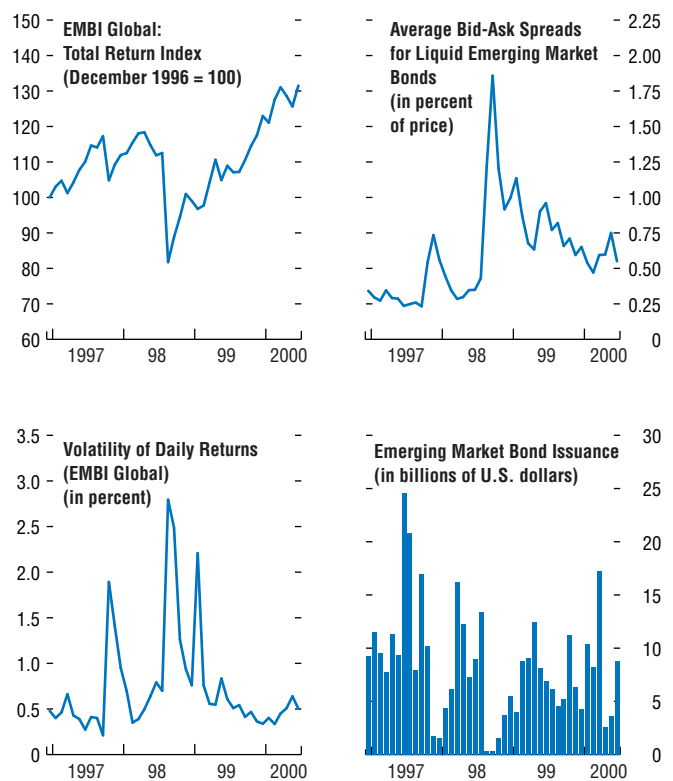
ogy, media, and telecommunications boom. As technology, media, and telecommunications prices rose and pushed valuations on these sectors (and some other sectors) higher, equity issuance became a relatively cheap source of funds. Technology, media, and telecommunications issuance accounted for about three-fourths of equity issuance in the first half of 2000, up from only about 28 percent in 1997–98. Indeed, by many measures, emerging markets have as large a component of technology, media, and telecommunications as the mature markets, although this is largely due to large national telecom companies rather than to large technology or media sectors (see Box 3.5).

Secondary Market Developments

Emerging equity markets had a stellar year in 1999, driven substantially by technology, media, and telecommunications stocks. Indices for the three major regions yielded returns of 50–80 percent, well above the average returns in mature markets although not quite as strong as the U.S. Nasdaq market (Figure 3.9).⁹ As in the mature markets, the performance of technology, media, and telecommunications stocks has been a major contributor to overall stock market performance. In the 14 months to end-February 2000, emerging market telecom, media, and technology stocks grew by about 95, 100, and 170 percent, respectively, compared with overall price growth for emerging markets of about 65 percent. Despite these gains, regional indices for Latin America and Asia remained below their precrisis peak levels of early 1997.

However, emerging market equities were hit hard by the decline in March–May 2000 of the Nasdaq and other broader indices. Despite a modest recovery in late May and June, emerging market equity prices at end-June were still about 10 percent below their end-1999 levels. While technology, media, and telecommunications stocks fell more than other sectors over

Figure 3.8. Bond Market Developments



Sources: Bloomberg Financial Markets L.P.; Capital Data; and IMF staff calculations.

⁹Figures for average returns in emerging markets are based on the MSCI Emerging Markets Free (EMF) indices.

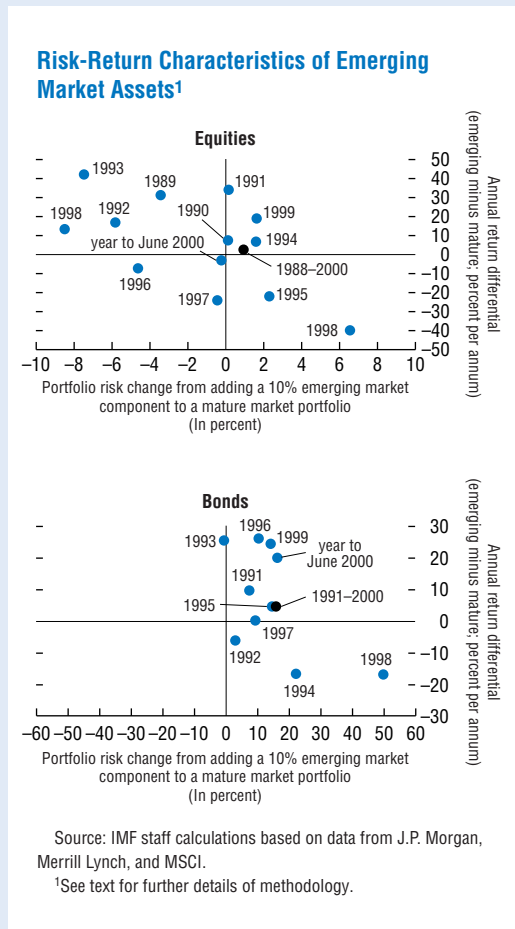
Box 3.4. Emerging Market Assets: For the Brave?

To better understand the attractiveness of emerging market assets, one can look beyond simple measures such as Sharpe ratios and consider their role within portfolios including other assets. This box uses a mean-variance framework to illustrate the contribution of emerging market assets to portfolios that consist predominantly of mature market assets.¹ The main finding of the box is that the volatility of returns on emerging market assets has been such that historically they would not generally have provided any risk reduction, so that the case for their inclusion into portfolios must generally be based on the higher returns that they are thought to offer—and have indeed yielded over the full sample periods examined here. However, volatility has recently fallen substantially from the levels seen during the emerging markets crises. If these falls are maintained, then the case for the inclusion of emerging markets assets for risk reduction will be substantially strengthened, and they might then be regarded more as core asset classes.

The experiment that we conduct is as follows. We examine the performance of hypothetical portfolios with a 90 percent weight for mature market assets and a 10 percent weight in emerging market assets—these portfolios notionally represent the portfolios of mature market investors who are considering adding a small but nontrivial emerging market component to their portfolio.² We then calculate the percentage

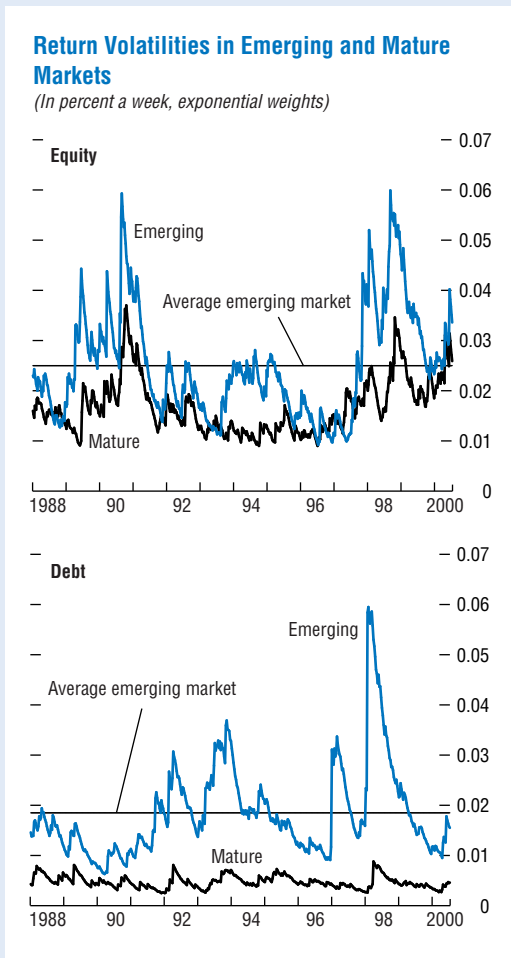
¹The Sharpe ratio is defined as the mean excess return on an asset (the return in excess of the risk-free asset) divided by the standard deviation of the asset's excess return. It is a useful tool for assessing the relative attractiveness of different assets if only one asset is to be chosen, but it is of limited use in a portfolio of many assets. It may be noted, however, that for the full sample periods examined here, the emerging market debt and equity benchmark indices have lower (i.e., less attractive) Sharpe ratios than the corresponding mature market indices, which helps to explain the mean-variance portfolio results obtained here.

²For equity, we consider biweekly returns on the MSCI indices for mature market equities and (investable) emerging market equities. For bonds, we consider monthly returns on the EMBI Global index



change in portfolio standard deviation that results from moving from a 100/0 mature/emerging portfolio mix to a 90/10 portfolio mix. Of course, the results of mean-variance analyses are extremely sensitive to the time period chosen. Accordingly, and since asset allocation is often reviewed on an annual basis looking at the experience of the previous year, we analyze every year since 1988 (for equity) and 1991 (for debt) to get a perspective on how the attractiveness of

and an equally weighted portfolio of U.S. investment-grade and non-investment-grade corporate debt (based on the Merrill Lynch indices); the latter are two asset classes that are frequently considered competitor assets for emerging market debt.



emerging market assets may have changed over time, as well as the full sample period, to get a perspective that is as general as possible.

The results are shown in the first figure, which shows the percentage change in portfolio risk from adding emerging markets, as well as the return differential between mature and emerging market assets. For equities, emerging markets were attractive assets over 1988–94, offering higher returns in every year and reduced or unchanged portfolio risk in all but one year. They were much less attractive over 1995–98, yielding lower returns and generally not reducing portfolio risk. They were again more attractive assets in 1999, offering higher returns with

little impact on portfolio risk. For the full sample, emerging markets equity would have yielded 3 percent higher annual returns, while adding modestly (1 percent) to portfolio risk. The results for debt show that in almost every year emerging markets would have added substantially to portfolio risk, while sometimes yielding much higher returns and sometimes much lower returns. Over the full sample, emerging market debt would have typically added 16 percent to portfolio risk, while outperforming the mature market portfolio by 5 percent a year. The reason emerging market debt adds so much to portfolio risk is that its monthly returns are about four times as volatile as monthly returns on U.S. corporate debt.³

That is, the historical data for both debt and equity suggest that the case for including emerging markets into a portfolio of mature market assets should typically be made based on their prospective higher returns, rather than on any likely risk reduction. This is particularly true for emerging market debt, which has returns that are far more volatile than other fixed income asset classes. This provides some rationale for the fact that emerging market debt has so far not been considered a core holding in fixed-income portfolios.

Of course, if emerging market return volatility falls over time, the attractiveness of emerging market assets would be significantly enhanced. In the second figure we present historical data for the volatility (estimated using exponen-

³For daily or weekly returns, the sharp difference in volatilities of emerging market debt and U.S. corporate debt is partly illusory and reflects the low turnover of corporate debt. This is the reason that monthly returns are used for the analysis. Further, the difference in volatilities and the same overall results hold for longer horizons, such as three-month returns, which should be even less subject to nontrading data problems.

In the case of equity, over the full sample period it is possible to reduce portfolio risk by adding a much smaller proportion of emerging markets than 10 percent (up to about 1 percent). For debt, however, even the smallest addition of emerging markets adds to portfolio risk.

Box 3.4 (concluded)

tially declining weights) of the two benchmark emerging market indices. These volatility measures rose to record high levels during the crises, more than twice the full-sample average for equity and more than three times for debt. In both cases volatility has since fallen substantially and in the case of debt it is now around its long-term average. By contrast, there has recently been a rise in emerging equity market volatility to levels

somewhat above its long-term average. However, this has occurred at a time when mature market volatility has risen sharply, and the relative gap between the two volatilities in mid-2000 was below the long-term average. Thus, for both equity and especially debt, there are positive recent developments in the volatility of the asset class that should make them more attractive to a wider investor base.

March–May, the weakness in emerging market equities was broadly based. In particular, the two sectors showing the largest falls in the first half of 2000 were “old economy” sectors (industrials and materials) with two “new economy” sectors (information technology and telecommunications services) being the only major sectors showing (albeit modest) gains.

In addition to the impacts of higher valuations on technology, media, and telecommunications stocks and of ample liquidity in many markets, the recovery in emerging market equity prices and flows in 1999 reflected an improvement in the prospects for emerging market companies. Aggregate emerging market earnings growth in 1999 was about 40 percent, with the strongest growth in Asia (reflecting losses for many stocks in 1998), fairly weak growth in Latin America, and healthy growth in other regions (Table 3.6). As of June 2000, aggregate earnings growth was expected to remain strong at about 45 percent in 2000, with growth expected to remain very healthy in Asia and Europe, the Middle East, and Africa, and to accelerate in Latin America. By contrast, mature market earnings growth was estimated at about 16 percent in 1999 and forecast to increase somewhat to 21 percent in 2000.

As of June 2000, emerging market equities were on average valued at substantially lower earnings multiples than mature markets—about 13 times projected 2000 earnings versus about 26 times for the mature markets. Even after the

recent declines, standard valuation indicators for “new economy” technology, media, and telecommunications stocks have been significantly higher than valuations for “old economy” stocks, and market participants have noted that old economy companies were finding it difficult to raise money in the primary market. By contrast, with the exception of the period of Nasdaq weakness, new economy stocks have found easy access to capital markets. Perhaps the most noteworthy example was the initial public offering for tom.com, a Hong Kong SAR-based Internet service provider, which was 670 times oversubscribed; at end-June the share price had fallen 65 percent below its earlier peak. While valuations of Internet-related stocks are subject to enormous uncertainty, it

Table 3.6. Earnings Growth and Valuations Indicators in Emerging Markets

	Aggregate Earnings Growth		Forward-Looking P/E Ratio ¹ June 2000
	1999	2000 (Forecast)	
Emerging markets			
All Countries	41	45	13
Asia	79	55	14
Latin America	4	42	12
Europe, Middle East, Africa	24	31	12
Mature markets	16	21	26

Sources: Goldman Sachs and Morgan Stanley Dean Witter.
¹Price/earnings (P/E) ratio for entire market, based on projected 2000 earnings.

Box 3.5. Technology, Media, and Telecommunications in the Emerging Markets

Over the past year, booming (then crashing) equity valuations have focused attention on the “new economy” sectors of technology, media, and telecommunications. While initially largely a U.S. phenomenon, this boom spread quickly, including to the emerging markets.

In terms of market capitalization, estimates suggest that the technology, media, and telecommunications sectors accounts for a higher proportion of emerging markets than of many mature markets. As of June 2000, these sectors accounted for about 41 percent of emerging markets stocks included in the MSCI EMF indices, which is less than for the United States but higher than the average level (about 36 percent) for the mature markets in aggregate. Technology, media, and telecommunications stocks were most important in Asia and Latin America, and less important in Europe, the Middle East, and Africa. In each region, telecom stocks accounted for a similar or larger share of market cap than the typical share in mature markets: this reflects the fact that telecoms have been among the largest privatizations in many emerging markets. Information technology stocks are virtually absent from Latin America, Europe, the Middle East, and Africa (except for some Israeli software companies). However, in Asia this sector is comparable to the mature markets, reflecting a hardware sector (notably, semiconductor companies in Taiwan Province of China, and Korea) that is far larger than in the mature markets, but a software sector that is much smaller (with the exception of some large Indian companies). Media stocks are comparable in importance to the mature markets only in Latin America, and are mostly absent in Asia and the Europe, Middle East, and Africa region.

The technology, media, and telecommunications sectors also account for a substantial and

Share of Technology, Media, and Telecommunications in Fundraising in International Markets

(In percent, excluding financing by central and local governments)

	1997	1998	1999	2000 (1st half)
Emerging Markets				
Bonds	9	12	16	18
Equity	28	28	57	77
Loans	10	18	15	39
Total	12	17	23	44
Mature Markets				
Bonds	3	5	8	13
Equity	33	49	54	75
Loans	20	21	24	33
Total	10	12	14	22

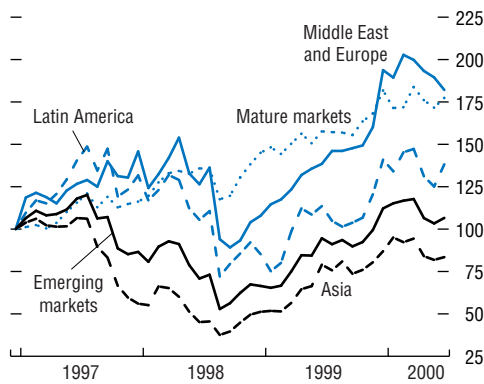
Sources: IMF staff analysis based on data from Capital Data.

rising proportion of new issuance in international markets by emerging market entities. Excluding financing by sovereigns, local authorities, and state governments, issuance by emerging market technology, media, and telecommunications companies in the first six months of 2000 accounted for about 77 percent of equity issuance, 18 percent of bond issuance, and 39 percent of new loans. The far higher share in the equity market reflects both some large telecom privatizations (most notably the \$5.6 billion initial public offering for China’s Unicom) and the high valuations placed on such stocks that imply lower cost financing from equity offerings than is available in the bond and loan markets. Overall, technology, media, and telecommunications financing accounted for about 44 percent of new nongovernment financing in early 2000 (up from 12 percent in 1997), which is substantially higher than the 22 percent share if held in mature markets financing (up from 10 percent in 1997).

appears that valuations of Asian Internet stocks prior to the decline were almost as stratospheric as those on the Nasdaq and some other mature markets. Further, the plans of several U.S.-based

companies to establish tracking stocks for the earnings of their Latin American Internet operations or to float these Internet operations would suggest that these operations carried val-

Figure 3.9. Total Returns on Equity¹
(December 1996 = 100)



Source: Bloomberg Financial Markets, L.P.
¹Morgan Stanley Capital International Indices.

uation multiples at least as high as their U.S. operations.

In addition to increased new issuance by emerging market companies in international markets, there have also been substantial secondary market purchases of emerging market equities by nonresidents. Table 3.7 shows net foreign investment flows into equity markets for a selection of countries for which high frequency data are available on a timely basis. These data show that net flows into Asia fell sharply in 1997 but approximately doubled in both 1998 and 1999 to return close to the peak levels of 1996. By contrast, the sharp fall in flows into Latin America occurred later (in 1998), and despite very strong growth in 1999, inflows remained below earlier peak levels. Flows into Asia were extremely strong in the first quarter of 2000. Flows turned negative in most countries in April as global markets fell, although the weakness was short-lived, and inflows resumed in several countries in May and strengthened in June.

The increased foreign purchases of emerging market equities discussed above are part of a global trend toward increased cross-border ownership (see Box 3.6). Indeed, the distinction between emerging and mature market equities may be rapidly disappearing. For several years it has been argued in the mature markets—particularly in Europe as the single currency has emerged—that sectoral influences on individual stocks are becoming more important than country influences. This reasoning is being reinforced by the trend of global asset managers and investment houses to cover stocks by industries or sectors, rather than countries. This trend has also begun to extend into the management of emerging market assets, although—as in the mature markets—country factors obviously remain important. Global equity funds that might previously have used a mature market index as their benchmark, with occasional forays into emerging markets, are now using truly global indices (such as the MSCI ACWI index) that include emerging markets. The result of the inclusion of emerging markets into

Table 3.7. Net Flows into Selected Emerging Equity Markets¹*(In billions of U.S. dollars)*

	Latin America	Asia	Other	Total
1996	11.9	18.0	1.3	31.2
1997	10.6	5.7	5.8	22.0
1998	2.3	8.1	7.9	18.4
1999	7.8	19.1	6.7	33.6
2000 1st half	1.1	11.9	0.5	13.5
1999 1st quarter	0.4	5.1	0.8	6.3
2nd quarter	3.0	7.1	1.7	11.8
3rd quarter	3.2	-0.1	3.0	6.1
4th quarter	1.3	7.0	1.2	9.5
2000 1st quarter	0.7	9.4	0.1	10.2
2nd quarter	3.3	2.5	0.4	2.5
2000 January	0.6	2.4	0.0	2.9
February	0.2	2.5	0.1	2.9
March	-0.1	4.5	0.0	4.3
April	-0.9	-0.9	0.3	-1.5
May	0.1	0.8	0.1	1.0
June	1.2	2.6	0.0	3.1

Sources: Goldman Sachs; national central banks and stock exchanges; and IMF, *World Economic Outlook*.

¹“Latin America” includes Brazil, Chile, Mexico; “Asia” includes India, Indonesia, Korea, the Philippines, Taiwan Province of China, Thailand; and “Other” includes South Africa and Turkey.

global benchmarks implies that the investment decision for such managers will start from a baseline of a certain proportion in emerging markets (5.8 percent in the ACWI Free index in June 2000), which can then be increased or decreased, rather than a baseline of zero, which might then be increased but with little long-term commitment by the manager to the emerging market asset class.

At the same time that international and global funds are becoming more global, investors—both individual and plan sponsors—are withdrawing money from specialized emerging market funds. For example, in the U.S. mutual fund industry, there have recently been outflows from country funds and regional funds specializing in emerging markets, and some such funds have closed down. This trend is consistent with emerging market equities becoming less of an exotic asset class and more of a mainstream one. It has been helped by the continuing

growth in the number of American Depository Receipts (ADRs) and Global Depository Receipts (GDRs) from emerging market countries, which have made it easier and cheaper for investors to buy leading emerging market stocks (see Box 3.6). Indeed, some analysts have argued that the shift toward truly global benchmarks will not result in any substantial increase to total allocations to emerging markets since holdings are already—at least for U.S. and U.K. funds—close to global benchmark levels.¹⁰ That said, even if the average level of total allocations is not substantially changed, the trend to global benchmarks should increase the stability of allocations to emerging markets.

Indeed, in many respects, emerging market equity is a substantially more mainstream asset class than emerging market debt. In part this reflects the longer history of the asset class—equity indices have been constructed by the International Finance Corporation since the early 1980s, while the leading debt indices from J.P. Morgan date only from the early 1990s. As a result, decisions by plan sponsors and investors considering switching into emerging market equity can be based on a substantially longer performance history. More importantly, the relative risk (as compared with the corresponding mature market assets) of emerging market equity is much lower than emerging market debt, as is illustrated by the volatility measures shown in Box 3.4. In addition, equityholders who are residual claimants on the firm must be comfortable with a substantial degree of risk, and it may be only a modest “stretch” for a mature market investor to move from risky mature market equity to modestly riskier emerging market equity. By contrast, investors in debt frequently seek bonds that are close to risk free—at least in terms of credit risk—and there is a major difference between predominantly investment-grade mature market debt to emerging market debt, which is generally not rated investment grade (and evokes the memory of some recent exam-

¹⁰See Mariscal and Hargis (1999).

Box 3.6. Emerging Market Equity Going Global

Along with the development of local bond markets (discussed in Box 3.1), there has recently been an internationalization of emerging equity markets. These two apparently contrasting trends can actually be viewed as two separate examples of the desire of emerging market corporates and sovereigns to diversify their investor base and liability mix.

Recent Trends in the Internationalization of Emerging Market Equity

There has recently been a rapid “internationalization” of emerging equity markets that may be changing the way that investors will think about emerging equity markets. This has taken several forms.

- Many emerging market companies have issued depository receipts that subsequently can be traded on a foreign exchange in parallel with the local exchange (this development is one that has been occurring for at least a decade and is discussed in the next section).
- Some companies have taken the step of changing the country of their domicile and have listed on the exchange of their new country of domicile. This has happened recently in the case of some South African companies that have moved to the United Kingdom, reportedly to try to reduce the risk premium associated with being from an emerging market country.
- Other newly listed emerging market companies have had their initial public offerings in mature markets, bypassing local markets completely. For example, Internet companies from Israel and Latin America have recently chosen to list directly on the U.S. Nasdaq market.
- Other established emerging market companies have been taken over by mature market companies and have subsequently been removed from the local exchanges, so that the only way that investors can gain exposure to these assets is buying that exposure “bundled” with mature market exposures. This has occurred or has been proposed in

the case of some oil, banking, and telecom stocks from Latin America.

- Several mature market companies are considering spinning off or creating tracking stocks for their emerging market operations, although with these new stocks still listed in mature markets. This “unbundling” can be considered the reverse of the previous trend and is being considered by several U.S. companies with Latin American internet operations.

Of course, many of these trends are not peculiar to emerging markets but are being seen by even some large mature markets. The implications of these trends include the following:

- Clearly—and particularly due to the growth of the depository receipt market, which is discussed below—companies operating in emerging markets are seeing rapidly increasing proportions of foreign ownership. This is not necessarily a negative implication, and it is being balanced to some extent by increased ownership of mature market equities by residents of emerging market countries.
- While many of these developments are driven by the maximization of the valuation of the company and are good for shareholders, these developments can potentially have negative implications for stock exchanges in emerging stock markets. Policymakers in many countries (emerging and mature) are becoming concerned that liquidity in their domestic markets is drying up and that price determination is increasingly moving offshore. Some have responded by establishing links with other markets while other local exchanges have sought to boost their attractiveness by lowering trading costs or extending trading hours.
- It is becoming less obvious how to define an emerging market stock. For example, once companies have moved their domicile or listing abroad, they generally are not eligible for inclusion in the indices produced by one or both of the major emerging market

index providers (MSCI and S&P/IFC).¹ One response to this problem would be to define companies in terms of the country in which the largest share of earning is derived, a response that would clearly have major implications for many companies in all parts of the world. Alternatively, these trends may accelerate the demise of thinking about stocks in terms of their country of location and the shift toward thinking in terms of the industry or sector that the company operates in. The trend away from separate mature and emerging country benchmarks to global benchmarks makes sense in light of these trends.

Depository Receipt Market

The strongest force behind the globalization of emerging equity markets is the growth of the depository receipt market, predominantly American Depository Receipts (ADRs), Global Depository Receipts (GDRs), and European Depository Receipts (EDRs). Depository receipts are certificates representing ownership of shares in a company domiciled in one country (e.g., an emerging market) that are held by a depository that issues a certificate that can be traded in another country (e.g., the United States) and that represents a claim on the underlying shares. ADRs are the first such instruments, dating back to 1927,² and there are four different types of sponsored ADR programs (i.e., programs initiated by the issuer) that differ in legal and regulatory requirements as well as how and where they can be traded. In addition, there are unsponsored programs, created and offered to investors without the issuers' participation.

The past decade has seen strong growth in the number of sponsored depository receipt

programs, from 352 programs from 24 countries in 1990 to over 1,800 programs from 78 countries at the end of 1999. More than 50 of these countries are emerging markets. Some 520 depository receipts were listed on exchanges with the remainder traded over-the-counter.

(Unlisted ADRs in the United States are issued under Rule 144A, which limits trading to qualified investors and does not require compliance with U.S. generally accepted accounting practice or comprehensive SEC reporting—by contrast, listed ADRs frequently involve enhancement of disclosure by the company seeking to have its ADRs listed.) Over 1990–99, \$133 billion was raised through depository receipt programs, with privatizations accounting for \$44 billion. The total market capitalization of all companies with ADR programs at end-1999 exceeded \$6 trillion, a substantial amount given the total market capitalization of companies in the MSCI ACWIF index of about \$21 trillion.

Prior to 1990 there were few depository receipt programs from emerging markets. However, since 1992 emerging market companies have accounted for a majority of new programs and capital raised in most years, with 1998 a notable exception amid the crises in emerging markets (see first figure).³ In 1999, total capital raised by emerging market companies rose to about \$13 billion, compared to an average of \$7 billion over 1990–99, and only \$3.1 billion in 1998. In recent years, depository receipt issuance has typically accounted for 60–70 percent of total equity raised in international markets by emerging market companies.

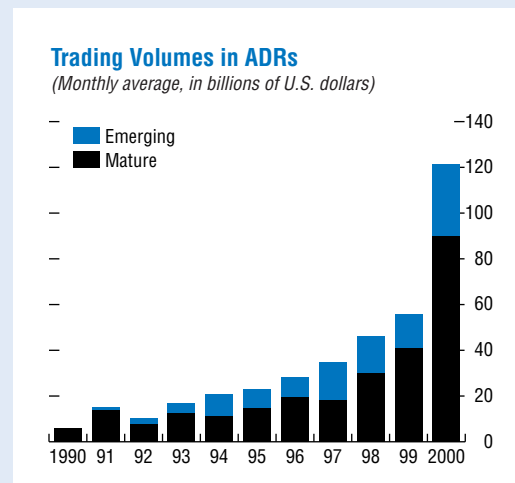
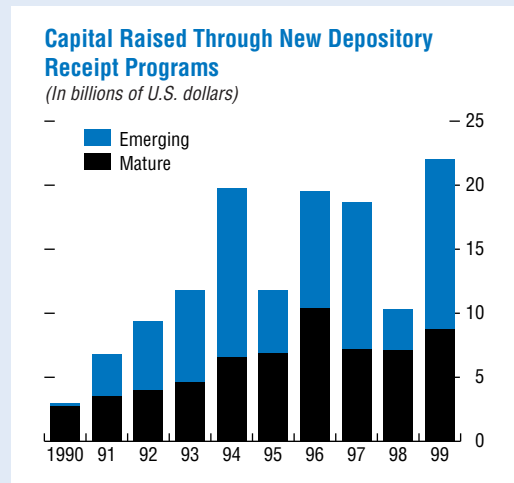
There has been a strong regional shift in new programs over the years, with an early dominance of Latin America in the first part of the decade, toward a preponderance of new programs from Asia in 1999, when its share of capital raised by emerging markets was slightly more than three-fourths. This development is concur-

¹See Mariscal and Hargis (2000) for further details on index inclusion rules and on special problems presented by “pan-regional” companies such as Latin American Internet companies.

²The first ADR was created in 1927 by J.P. Morgan to provide an opportunity for Americans to invest in the British retail company Selfridge's.

³The figure and the subsequent depository receipt numbers are based on a large sample of companies provided by the Bank of New York (as of end-1999, this sample included 1,438 of the 1,800 programs).

Box 3.6 (concluded)



rent with the strong pickup in capital raising in the technology, media, and telecommunications sector, which accounted for almost half of the capital raised by emerging markets in 1999.

Monthly trading volumes in emerging market depository receipts doubled in the first three months of 2000 compared to 1999, reaching \$32 billion (see the second figure). Turnover in depository receipts is equivalent to 14 percent of average total monthly dollar turnover in emerging stock markets.⁴

While investing in the underlying shares may be feasible for large and sophisticated investors that have established custodial and trading arrangements in foreign markets, a wide range of investors appear to have a preference for depository receipts, including managers of mutual funds, high net-worth individuals, and emerging market investors. Depository receipts account for up to 10 percent of the equity portfolios of some large U.S. mutual fund families, and a substantially greater proportion (40–70 percent) of some mutual fund families that specialize in international investment. The reasons to invest in depository receipt programs rather than in ordinary shares include reduced transactions and holding costs from the avoidance of custody fees

in all the originating countries (especially true for relatively small retail portfolios), and the fact that settlement and safekeeping in the United States with payments in dollars means ADRs are considered U.S. securities. This allows funds restricted to the U.S. markets to obtain exposure to foreign companies. In addition, the depositories serve an important role of providing access to information about the programs to potential investors, in addition to their more obvious administrative services.⁵ By contrast, the main argument for using ordinary shares is that in some cases the local markets are more liquid and can handle the greater volumes required by large investors. As noted above, the ability to transform underlying shares into ADRs (and vice versa) means that the relative importance of the local and depository receipt markets can evolve. Numerous factors including investor preferences and the liquidity of the local markets affect this process, but local policymakers can help to maintain the role of the local market by ensuring that the local market infrastructure (broadly defined) remains comparable with foreign markets.

⁴Aggregate domestic turnover data are taken from Standard & Poor’s “Emerging Stock Markets Review.”

⁵For more information about ADRs, see for example the web pages of some of the large depositories: Bank of New York (www.adrbny.com), Citibank (www.citibank.com/adr), and J.P. Morgan (www.adr.com).

ples of default). This greater acceptance of emerging market equity has been reflected in substantial demand for global equity benchmarks that include emerging markets as opposed to little demand for global debt benchmarks that include emerging markets.

Developments in the Syndicated Loan Market

Financing by emerging market borrowers in the syndicated loan market recovered modestly in 1999. After falling more than 50 percent in 1998, new syndicated lending increased by 5 percent in 1999, although its share in total financing declined from 41 percent in 1998 to 37 percent in 1999, compared with 55 percent in 1995. The growth in lending that was seen in 1999 was fully accounted for by growth in the Middle East, and modest growth in Asia and Europe was offset by a decline in loans to Latin America. Loans to Asia, which previously accounted for nearly one-half of new syndicated lending, remained far below precrisis levels, although there were indications of growth in lending to Asian borrowers in the first six months of 2000.

The loan market continues to evolve, with many of the trends noted in last year's *International Capital Markets* report continuing (IMF, 1999). The convergence of interest rates on loans toward the level of yields on bonds has continued, with average rates on loans continuing to rise in 1999 to levels where loans seem no longer to serve as a loss-leader for other banking business. There is also increased flexibility of pricing in the syndication process, and an increasing proportion of loans now appear to be "club loans" (loans with participation allocated directly between a small number of banks) rather than traditionally syndicated loans where the process of syndication to a large number of banks might take several months. Attempts to increase the tradability of loans have spread from Latin America to Asia, and Moody's rated its first syndicated loan in Asia in late 1999. Nonetheless, it appears that secondary market trading of loans is still very limited compared

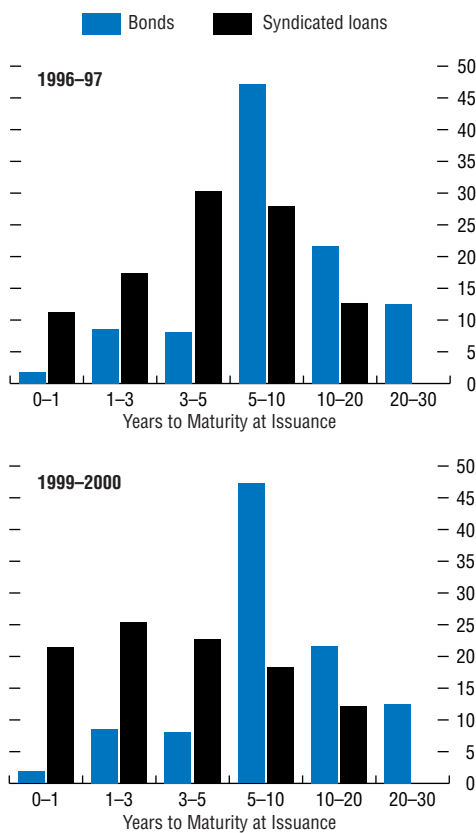
with some mature market countries, most notably the United States, where nonbanks account for nearly one-half the market. Since there is still relatively little nonbank participation in syndicates or secondary market trading of loans, the syndicated loan market remains primarily a bank market. It can therefore be expected to evolve further over the next few years as the Basel Committee's planned revision of the capital adequacy standards for mature market banks takes shape.

It appears that a shift may be under way from the use of the loan market for backup, project, or trade financing toward "event-driven" financing. In the mature markets in Europe, there has been a shift, with the loan market being increasingly used to provide bridge financing for merger and acquisition transactions (often in the telecommunications, media, and technology sectors). Borrowers have found the loan market to be more attractive in terms of flexibility of structure and speed of arrangement; loans can be arranged for short maturities and deals can be arranged quickly by a small number of banks, without going through a long book-building process for an immediate bond issue. Further, banks have found the attractive fees and short maturity of this business to be attractive. This trend appears to be spreading to the emerging markets, with the first large such loan being the use of the syndicated loan market to raise \$9 billion in two 364-day tranches (and a facility for a further \$3 billion) for the financing of Pacific Century CyberWorks' (a Hong Kong SAR-listed Internet and media company) bid for a majority share of Hong Kong Telecom.

The shift toward bridge financing for merger and acquisition financing will reinforce the trend to shorter maturities in the syndicated loan market. In recent years the average maturity of new loans has been decreasing relative to the bond market (Figure 3.10). For example, over 1996–97, the largest proportions of new syndicated lending were in the 3- to 5-year and 5- to 10-year maturities, but by 1999–2000 the largest category was the 1 to 3-year maturity. By

Figure 3.10. Maturity Distribution of Bond and Syndicated Loan Financing

(In percent of total bond or loan financing for the respective periods)



Source: IMF staff analysis based on data from Capital Data.

contrast, the bulk of bond market financing had remained in the 5- to 10-year and 10- to 20-year maturities. Overall, the average maturity of bond market issues has risen from about 6 years at the start of the 1990s to about 10 years, while the average maturity in the loan market has fallen from about 6 years at the start of the 1990s to 3–4 years. Thus, on a maturity-adjusted basis, the decline in the share of syndicated loans in total financing is somewhat greater than shown in Table 3.4. This decline in the importance of the syndicated loan market as a source of long-term finance is not surprising in light of the global shift to securitized financing. Indeed, the trend to reduced long-term loan financing is unlikely to be reversed unless there is growth in secondary market trading of loans so that banks, which are subject to increasing pressure to maximize the return on their capital, do not remain the only major class of holders of emerging market syndicated loans.

Conclusion

Overall, the past year has seen some favorable developments in emerging market financing. The recovery in financing flows to emerging markets in 1999 and the first half of 2000 is encouraging. The mix of flows has continued to change, with continuing strong foreign direct investment, a recovery in portfolio flows, and net repayments to international banks. Emerging market asset prices in mid-2000 were mostly modestly higher than a year earlier, reflecting some unwinding of the (probably excessive) pessimism toward emerging market economies that had grown out of the recent crises. Further, although there is a substantial unfinished structural reform agenda in many countries, macroeconomic policies are generally stronger, with notable fiscal reforms in several key emerging markets.

However, the weakness in emerging market asset prices over March–May 2000 in the midst of weakness in the mature markets was a sharp reminder that emerging market assets remain heavily dependent upon mature market develop-

ments. This dependence on the mature markets reflects both the impact of mature market economic developments on the debt-servicing ability and cash flows of emerging market sovereigns and corporates, and also the impact of changes in the risk perceptions and tolerance of investors from the mature markets on emerging market yield spreads and discount rates. While the correlation of returns on emerging market assets with mature market assets is undeniable and the emerging markets would be hurt by a “hard landing” in the United States and other large economies, the correlations are far from perfect (as is discussed in Box 3.3). Thus, the performance of emerging market assets will still be substantially dependent upon economic policies followed in countries and the financial health of individual emerging market borrowers.

While emerging market assets remain among the more volatile asset classes, the volatility of returns has continued to retreat from crisis levels, which will enhance their attractiveness to investors. In the case of debt, the volatility of returns has fallen substantially and yield spreads have fallen to levels comparable with similarly rated mature market bonds. Nonetheless, emerging market bonds are still a “frontier” asset class because most emerging market borrowers do not yet carry the investment grade “stamp of approval.” By contrast, equities are becoming more closely integrated into the mainstream, and the share of emerging market assets in the international portfolios of many funds is now close to the levels implied by shares in global market capitalization. This development is linked to the substantial internationalization of emerging markets equity discussed in Box 3.6. In the case of equity, the shift to truly global benchmarks is well advanced and emerging markets are starting to become core holdings in international portfolios rather than assets, which are subject to opportunistic purchases and potentially rapid withdrawals. In the case of debt, this process has barely begun, but Mexico’s elevation to investment grade and the likely greater stability in demand for Mexican assets may provide some useful messages for policymakers in other countries.

Concurrent with the decline in volatility on emerging market assets to more normal levels, there have been some favorable developments in the investor base and in the financing sources of emerging market borrowers. The widening of the investor base is most obvious in the case of the greater participation by domestic and European institutional investors. While the risk tolerance of some of these new investors is yet to be tested through a full cycle, a wider investor base—provided it has realistic expectations about the return and risk on its holdings—will help support the stability of financing to emerging markets. In addition, by most accounts, leverage remains low by the standards of 1997 and the first half of 1998. Finally, at the same time as the investor base is widening, emerging market borrowers are diversifying their financing sources, with greater use of domestic currency financing and longer-term funding. These trends are a reflection of the macroeconomic situation (especially higher liquidity in emerging markets) but also an indication that borrowers and lenders have learned lessons from the financial crises of the late 1990s about the risk of foreign currency exposures and short-term funding. These trends are still in their early stages, and it remains to be seen if the growth in domestic debt markets (especially in Asia) can be sustained when liquidity conditions tighten and domestic interest rates are less attractive to borrowers. Nevertheless, these developments offer the hope of greater stability in the financing flows to emerging markets and greater prudence in the financing of borrowers in emerging markets.

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