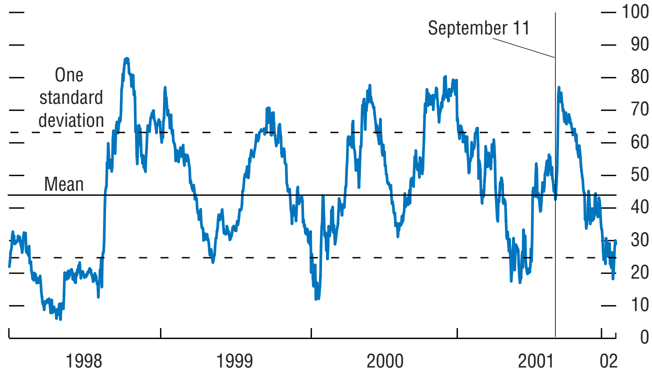
CHAPTER II RECENT DEVELOPMENTS IN INTERNATIONAL CAPITAL MARKETS

Changing perceptions of the economic slowdown and the prospects for recovery dominated global market developments during the fourth quarter of last year, and continue to do so in 2002. Markets had reacted strongly to the events of September 11, before staging a sharp rally from the beginning of the quarter as global risk aversion subsided (see Figure 2.1).[1] The heightened market uncertainty associated with the events surrounding September 11 initially translated into high levels of risk aversion at the beginning of the fourth quarter. Measures of risk aversion steadily dissipated during October and November, with a consensus emerging that, in hindsight, financial markets overreacted to the potential impacts of the September 11 events. The subsequent rally, in conjunction with a strong revision of views on economic recovery and its strength and scope, was also influenced by several technical factors and ample liquidity on the part of investors.

Figure 2.1. Global Risk Aversion

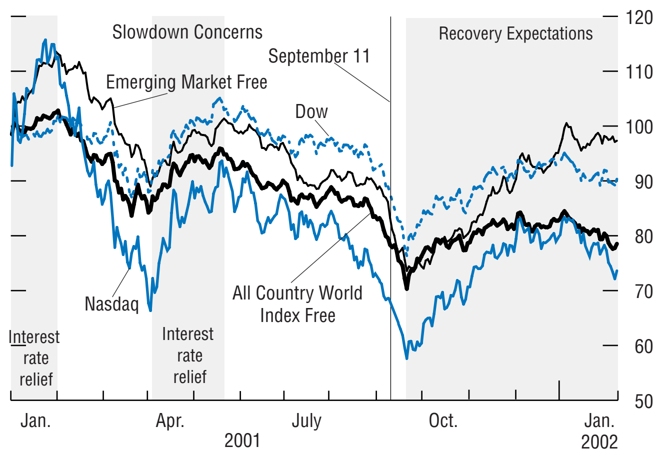


Source: JP Morgan Chase.

The Recovery Rally

During October and November, financial markets rose markedly to price in an imminent recovery in global activity, led by the United States, though opinion remained divided on the timing and speed of the recovery (see Figure 2.2). These expectations of economic recovery combined with a decline in the "political" risk premium, reflecting progress in the operation in Afghanistan, and led to a decline in measures of global risk aversion to well below pre-

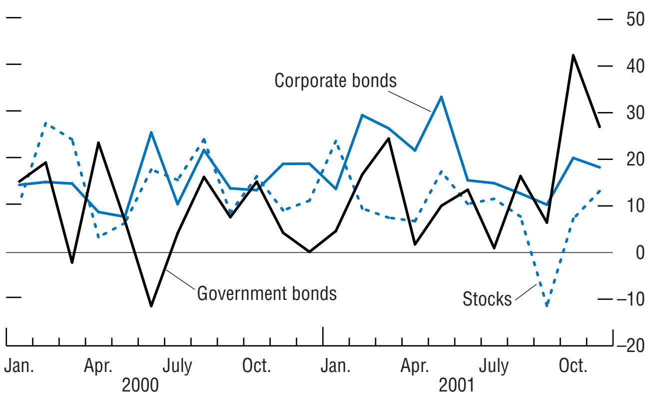
Figure 2.2. Global Equity Markets
(January 2001 = 100)



Source: Bloomberg L.P.

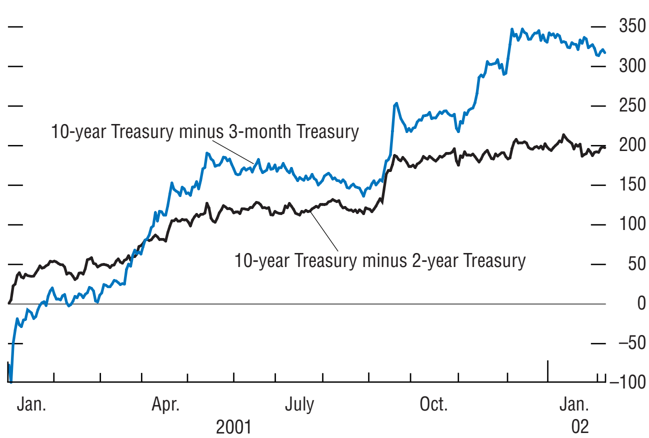
[1]JP Morgan's Liquidity and Credit Premia Index (LCPI). This index attempts to measure risk aversion more broadly, and, therefore, captures not only risk appetite but also the liquidity premia demanded in U.S. financial markets. See the IMF's *Emerging Market Financing* (November 14, 2001) for a detailed discussion.

Figure 2.3. Net Purchases by Foreigners from U.S. Residents
(In billions of U.S. dollars; data through Novermber 2001)



Source: U.S. Department of the Treasury.

Figure 2.4. U.S. Treasury Yield Differentials
(In basis points)



Source: Bloomberg L.P.

September 11 levels and into markedly benign territory. Oil prices remained low, supporting a benign outlook for inflation. Equity markets rallied first, followed by a sharp sell-off in U.S. bond markets, while spreads in high-yield (sub-investment grade) and emerging market bonds (except Argentina) narrowed. Foreign investors in the United States reduced net purchases of both stocks and bonds in September as global risk aversion rose (see Figure 2.3). By October, however, they began participating in both the U.S. equity and bond market rallies, and by November, as risk aversion declined further, they reduced purchases of bonds while adding to their purchases of U.S. stocks.

With the sharp movement in asset prices to price in an imminent economic recovery raising questions about whether financial markets were being too optimistic, the dynamics of the turnaround in global market sentiment are of interest. While changes in market perceptions regarding the U.S. growth outlook and the budget deficit were the fundamental factors causing the steepening of the U.S. yield curve, several technical factors had triggered, and later reinforced, this trend (see Figure 2.4). One technical factor was the rebalancing by asset allocation funds (mostly insurance company related) from their government bond portfolios, which had impressively overperformed in the aftermath of September 11, toward their equity portfolio. This rebalancing aimed at restoring funds' preferred weightings between equity and fixed income that had become skewed by up to 15 percentage points. Simultaneously, many investors overweighted their portfolio holdings of U.S. Treasuries in the aftermath of September 11, expecting an aggressive monetary policy response by the U.S. Federal Reserve. These long positions initially proved highly profitable. However, following the turnaround in the U.S. stock market, they became increasingly unattractive, and by the second week of November the liquidation of these long positions contributed to a surge in the yield on U.S. 10-year benchmark bonds (36 basis points on November 15 alone). Furthermore,

Table 2.1. Total Return Performance of Mature Equity Markets
(In percent)

	Jul. 1–Sep. 10	Sep. 10–Sep. 21	Sep. 21–Dec. 31	Sep. 10–Dec. 31
MSCI US$ index	–10.7	–11.6	18.2	4.5
Cyclical sectors	–17.2	–16.1	27.5	7.0
Defensive sectors	–2.5	–6.7	8.6	1.3
Banks and financials	–11.8	–12.5	21.8	6.6
MSCI EU$ index	–10.0	–13.9	23.8	6.7
Cyclical sectors	–11.3	–17.4	31.4	8.6
Defensive sectors	–9.4	–7.7	15.4	6.5
Banks and financials	–8.5	–20.7	29.8	2.9
MSCI Japan$ index	–14.4	–4.1	–6.2	–10.1
Cyclical sectors	–17.9	–8.1	3.1	–5.3
Defensive sectors	–9.6	4.9	–12.7	–8.4
Banks and financials	–6.3	–1.9	–29.6	–30.9

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

Table 2.2. U.S. Corporate Bond Total Returns
(In percent)

	Sept. 10–Sept. 26	Third Quarter	Fourth Quarter	2001	Year-to-Date[1]
AAA	0.9	4.8	0.5	9.4	1.2
AA	0.8	4.6	0.9	10.7	1.3
A	0.5	4.4	0.7	11.0	0.9
BBB	–0.1	3.7	0.8	10.5	0.4
BB	–4.9	–1.9	4.4	11.1	–0.3
B	–6.2	–4.9	6.5	2.6	0.9
C	–9.7	–8.3	7.0	4.3	–0.2

Source: Merrill Lynch.
[1]February 8.

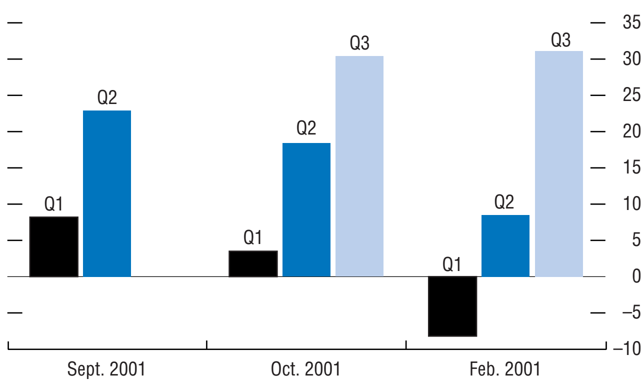
portfolios including mortgage backed securities (MBS) faced a significant increase in the duration of their holdings as a result of the decline in interest rates (by as much as 40 percent). In order to bring the duration of their portfolios back, MBS holders sold longer maturity U.S. Treasury bonds, such as the benchmark 10-year, thereby contributing to the spike in yields.

During the fourth quarter, *equity market performance* also reflected perceptions of recovery. Morgan Stanley's All Country World Index—Free (ACWIF) gained 9 percent, the S&P 500 rose 10 percent, while the Nasdaq posted a record quarterly return of 30 percent. An indication of investor expectations driving the rally is provided by the fact that cyclical sectors (mainly consumer durables, commercial services, and technology) significantly outperformed defensive sectors during the rally, indicating investors were positioning for an imminent recovery (see Table 2.1). A similar pattern was also in evidence in European markets, whereas there is little evidence of Japanese equities pricing in a strong economic recovery. The impact of the crisis in Argentina, however, sparked a sell-off in Spanish stocks, especially banks and telecom companies. The strong rebound in *emerging equity markets* (see Figure 2.2), viewed as a "high beta" (that is, more than proportional comovement) play on the state of the global economy, exactly on cue with global equity markets, also suggests investor positioning on expectations of a global recovery. Technology was by far the best performing sector, with returns for the sector exceeding the average for other sectors by more than two standard deviations. This equity market rally occurred despite continuing downward revisions to near term *corporate earnings forecasts* (see Figure 2.5). The rally lost some steam in early December and January, coinciding with Enron's bankruptcy filing, which raised, among other things, doubts about the reliability of corporate income statements.

The increasing appetite for risk in the fourth quarter was clearly apparent in *credit markets,* where, for example, in the United States the pronounced flight to quality of the third quarter in the aftermath of September 11 was more than reversed (see Table 2.2). In sharp contrast to the third quarter, where returns were positively related to credit ratings, returns in the fourth quarter were inversely related to credit ratings. European investment grade corporates performed similarly, with evidence of flight to quality in the third quarter (while AAA corporates posted a 3.3 percent return, BBB corporates had a –0.7 percent return) followed by a partial reversal in the fourth quarter.

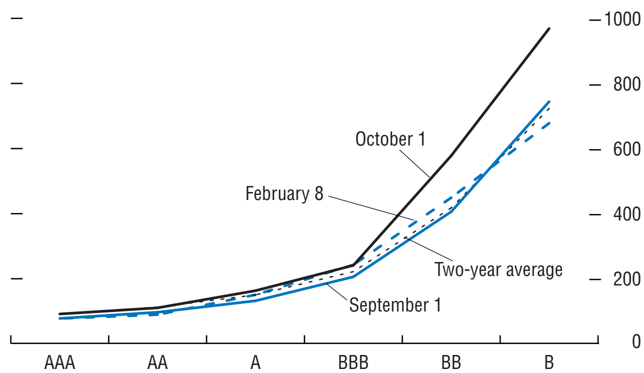
The post-September 11 steepening of the "*credit quality curve*" (average spreads measured against average credit quality of issuers) was fully reversed by early December (see Figure 2.6). By

Figure 2.5. S&P 500 Earnings Growth Forecasts for 2002
(Percent change, year-on-year)



Source: Thomson Financial First Call.

Figure 2.6. U.S. Treasury Credit Curves
(Spreads in basis points)



Source: Merrill Lynch.

early January, reflecting expectations of economic recovery and a further move down the credit spectrum, the credit quality curve had flattened relative to pre-September 11 levels. However, high-yield spreads remain high by historical standards, consistent with market expectations (reinforced by the bankruptcies of Enron, Kmart, and Global Crossing) of continued high rates of corporate defaults. For the year as a whole, investment grade bonds posted their best year since 1995, while high-yield bonds turned in a modestly positive performance after a dismal 2000.

In *primary markets*, U.S. high (investment) grade corporate bond issuance reached a record weekly level of $27 billion by the end of October, reflecting pent up demand to issue as a result of disruptions in the aftermath of September 11, and an increased demand to issue debt in the low interest rate environment (see Figure 2.7). With the rally in credit markets losing steam by late November, and many issuers having prefinanced their needs, high-grade issuance fell well below average levels by the end of the year, picking up again in early January. High-yield issuance, in contrast, was slow to recover, not reaching weekly average levels over the previous year until December and was slow to pick up again in January.

The fourth quarter saw a pickup in *syndicated lending* in the mature markets. Lenders, however, remained discriminating regarding credit quality, with U.S. bank lending standards continuing to tighten. Refinancings continued to dominate deal flows as borrowers sought to take advantage of lower interest rates, and the interest rate cycle was perceived as reaching a turning point (see next subsection). Reflecting the impact of the global slowdown and the sharp fall off in mergers and acquisitions and telecom financing, however, 2001 volumes were significantly lower than in 2000, with Euroloan volumes down roughly 30 percent. This decline in activity, and reliance on refinancings, is reportedly placing pressure on banks, with (stand alone) investment banks suffering disproportionately, as commercial banks increasingly tie the less lucrative extension of their balance sheets to the provision of more profitable fee-driven business. The move to a "one-stop shop" reflects not only the strengthened position of commercial banks with a large balance sheet in the context of the global slowdown, but also the advances made by some of these banks in developing their mergers and acquisitions and investment banking businesses in recent years.

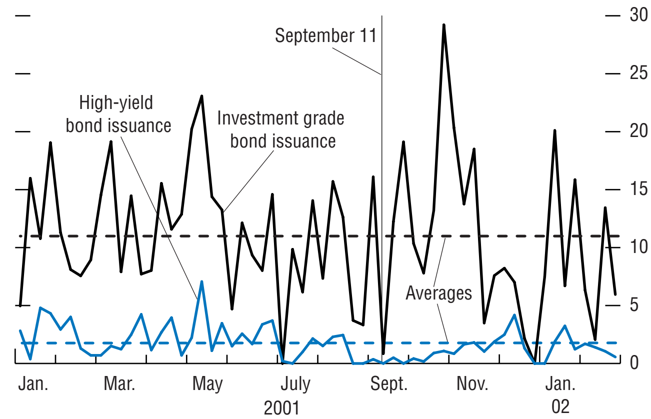
In *foreign exchange markets*, consistent with the view that global economic recovery was not only imminent but would be led by the United States, the U.S. dollar strengthened (see Figure 2.8). At the same time, data confirmed further weakening in Japan, and the yen suffered a sharp sell off to levels not seen since 1998. The euro, while weakening against the dollar, strengthened sharply against the yen during the quarter.

What Are Markets Anticipating About Recovery?

The speed and magnitude of the turnaround in global markets during the fourth quarter of 2001 on expectations of a turnaround in the global economy, led by the United States, were remarkable. Such a turnaround raised questions about whether the equity market rally, and in particular the performance of telecom, media, and technology (TMT) stocks, was justified by fundamentals, and the extent to which it represented a liquidity-driven "bear market rally" and even a "new tech bubble."

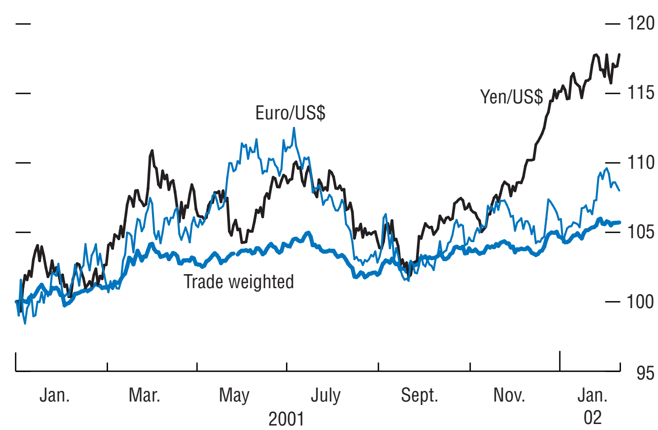
On the one hand, many view the run up in equity markets as appropriately pricing in the recovery, brought forward by the decisive monetary and fiscal policy responses, and view the recent positive economic data as ratifying these expectations. Box 2.1 examines the anticipation of economic recovery by equity markets in past recessions. Many argue that precisely because the cyclical downturn partly reflects the bursting of the tech bubble, recovery will be fast since the half-life of technology investment spending is estimated at only 18 months com-

Figure 2.7. U.S. Domestic Bond Issuance
(In billions of U.S. dollars)



Source: Bloomberg L.P.

Figure 2.8. The U.S. Dollar



Source: Bloomberg L.P.

Box 2.1. Anticipating Economic Turnarounds: The Record of the Stock Market

How well have stock markets done in anticipating recovery from past recessions?

The first four Figures document the historical behavior of stock markets during the six recessions since 1970, where the National Bureau of Economic Research's (NBER) definitions of recessions are denoted by the shaded areas. Since 1970, U.S. recessions have lasted between 7 to 17 months and averaged about 12 months.

The data suggest that in the previous five recessions, equity markets have in fact had a *relatively "good" record in anticipating the end of recessions*. That is to say, historically, at least in the United States, equity markets began rising in anticipation of recovery, that is, before the end of recessions, and, critically, these expectations of recovery were validated, that is, the recessions ended soon after.

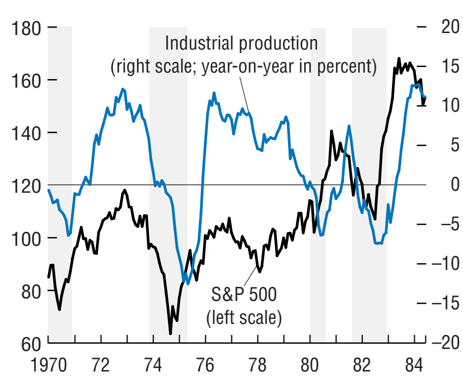
By how much did the recoveries in stock markets precede the economic recoveries? Troughs in equity markets preceded the end of recessions as defined by the NBER on average by 4.4 months, and turning points in industrial production by a similar 4.2 months. The beginning of the equity market recovery rallies generally occurred ahead of turnarounds in corporate earnings, which occurred on average slightly more than a quarter later (based on quarterly data; see the Table). If the recession of 1981–82, where earnings

Comparing Troughs: Stock Market Troughs Versus Industrial Production and Corporate Earnings' Troughs

		Lags in Months		Lags in Quarters
Recession Dates[1]	U.S. Stock Market Trough[2]	End of recession	Industrial production trough	Earnings trough
Dec. 1969 to Nov. 1970	June 1970	5	4	2
Nov. 1973 to Mar. 1975	October 1974	5	7	1
Jan. 1980 to Jul. 1980	April 1980	3	3	2
Jul. 1981 to Nov. 1982	July 1982	4	2	–1
Jul. 1990 to Mar. 1991	November 1990	5	5	2
Mar. 2001 to present	October 2001	. . .	. . .	. . .
Average Past Recessions		4.4	4.2	1.2

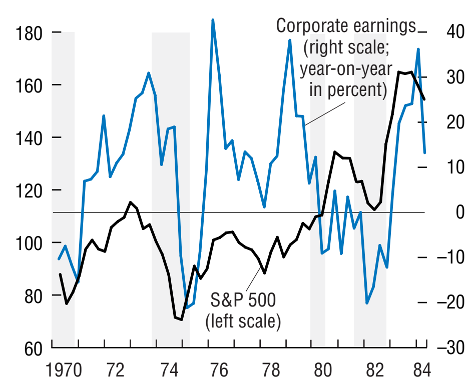
Sources: IMF staff estimates; and Thomson Financial First Call.
[1]National Bureau of Economic Research.
[2]S&P 500.

S&P 500 and Changes in Industrial Production[1]



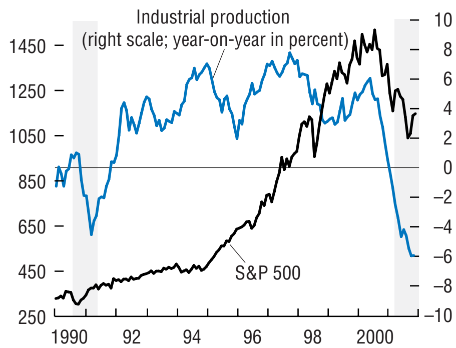
Source: Primark Datastream.
[1]Shaded areas mark U.S. recessions.

S&P 500 and Changes in Corporate Earnings[1]



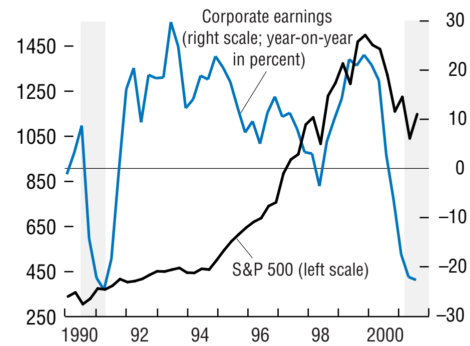
Sources: I/B/E/S; Primark Datastream.
[1]Shaded areas mark U.S. recessions.

S&P 500 and Changes in Industrial Production[1]



Source: Primark Datastream.
[1]Shaded areas mark U.S. recessions.

S&P 500 and Changes in Corporate Earnings[1]



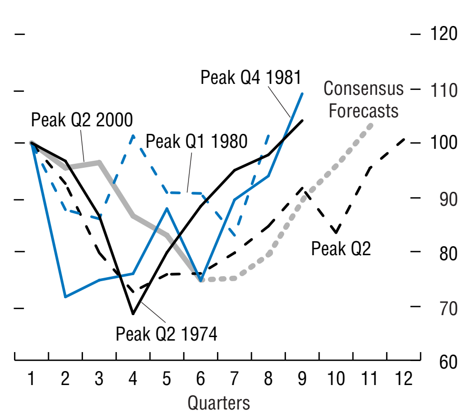
Sources: I/B/E/S; Primark Datastream.
[1]Shaded areas mark U.S. recessions.

actually began to rebound before the stock market trough, is excluded, the average was 1.75 quarters. These averages can be viewed as the average time it took for the recoveries in equity markets to be validated by actual developments in the real economy. In reality, of course, these should be viewed as minimum times for the equity market rebound to be validated by data since it is only after the availability of (several) post turning point data that the trough would clearly become apparent.

Turning to the current recession:

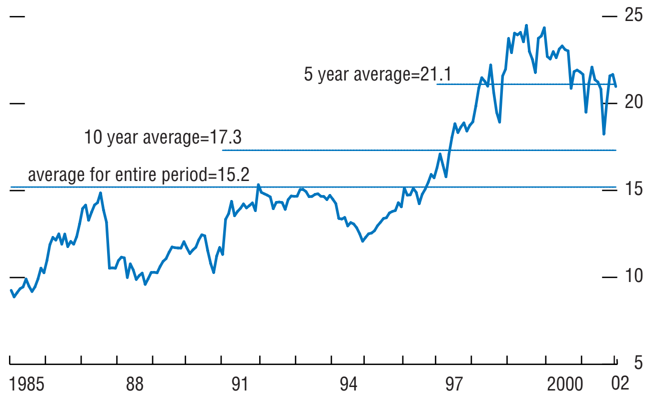
- The equity market has already had one false start in April–May 2001, in predicting an economic recovery.
- For the present rebound in equity markets to be validated by developments in the real economy in accordance with past historical experience, *industrial production would need to have reached a turning point* (trough in year-on-year growth) *between November of last year and February of this year.*
- Similarly, *corporate earnings would have to turn around in the first quarter of this year.* Historically, corporate earnings (see the fifth Figure) have troughed four to seven quarters (measured along the *x*-axis) following their pre-recession peak (an index value of 100). Current market expectations on earnings are for stable earnings in the first quarter of 2002 (seven quarters into the downturn), and a recovery during the second quarter, which is in line with earnings experience from past recessions. Based on historical trends, industrial production and earnings need to turn around this quarter. If this turnaround does not materialize, there is a risk of a market correction.

U.S. Corporate Earnings (Actual) Index



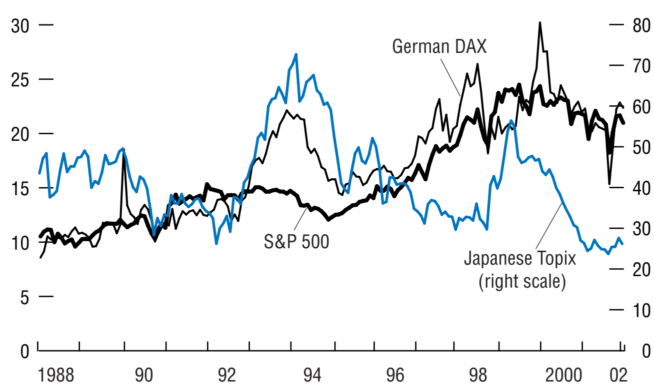
Source: I/B/E/S.

Figure 2.9. Twelve-Month Forward Price-Earnings Ratio for the S&P 500



Source: I/B/E/S.

Figure 2.10. Twelve-Month Forward Price-Earnings Ratio for the Group of Three



Source: I/B/E/S.

pared to several years for traditional physical capital. The optimists argue that the run up in TMT sector equity prices is justified by changes in fundamentals, with signs that excess capacity in the sector is being worked off, and the "winners being picked," thereby creating the necessary conditions for fast profit growth in the sector. Others view the September 11 events as having created a (V-shaped) kink in an otherwise unaltered U-shaped recovery and, therefore, not representative of broader recovery. These market participants see the equity market rebound as pricing in a quick rebound in earnings growth that is faster than was evident in previous business cycles. The pessimists argue that the overcapacity built up during the TMT bubble will in fact take longer (than previous business cycles) to work off, as it would only follow a recovery in other sectors.

With the expectations of imminent economic recovery driving financial markets since the last quarter, many policymakers are cautioning that markets may be getting ahead of themselves. While, as Box 2.1 notes, equity markets have had a "good" record in anticipating the timing of recovery, the combination of rising equity prices and falling earnings estimates has pushed the *12-month forward price-earnings ratio* for the S&P 500, as well as for other countries (e.g., Germany), to higher than average levels (see Figures 2.9 and 2.10). This has led to concerns about the sustainability of growth assumptions priced into the stock market valuations.[2]

In other markets, many market participants view the sell off in the *U.S. bond market* in the second week of November as having been considerably exaggerated by technical factors as noted above. Similarly, there is a consensus that "capitulation" selling in the federal funds futures market resulted in a disconnect in the form of a very pronounced U shape for federal funds futures—

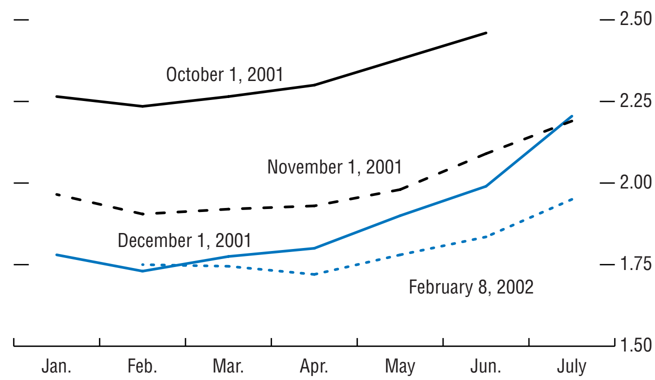
[2]See, for example, IMF, *International Capital Markets* (various issues through 2001).

that is, economic recovery would be so rapid that there would have to be a very quick turnaround (tightening) in U.S. monetary policy (see Figure 2.11).

In particular, by December 1, federal funds futures were pricing in further cuts by the U.S. Federal Reserve, followed by a rate hike in March this year. However, interpreting the signals from futures data may be misleading as once again technical factors have distorted pricing in the markets. Few in fact expected that U.S. economic recovery will be so rapid that rates would have to be raised by March. A fall-off in speculative capital for year-end reasons is the main explanation attributed to the lack of position taking and the disconnect in prices. The disconnect has now diminished, with expected rate increases now shifted out to June, though most would argue that even this would be too aggressive. Futures markets are in fact pricing in a tightening of short rates by aggressive amounts across the Group of Seven (with the exception of Japan), and 150 basis points by the end of the year in the United States (see Figure 2.12).

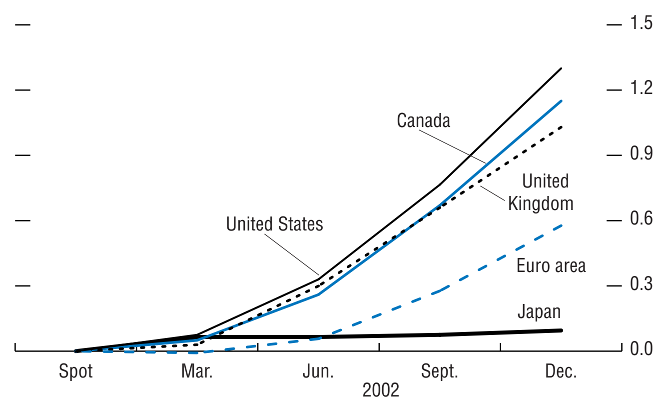
We argued above that a variety of technical factors contributed to some extent to the sharp sell off in government bond markets in November of last year. While these technical factors have continued to unwind and prices have corrected, the current pricing in of rapid central bank rate hikes, and especially the extent of tightening priced in, still appears disproportionate relative to current economic data, and it is hard to argue that technical factors continue to cause a persistent mispricing. The view presented by some in the market, and one that we would subscribe to, is that rather than the market pricing in a rapid recovery in economic activity as its baseline scenario, the *bond market sees risks that the recovery may actually be stronger than anticipated in the United States.* Forward rates for other mature economies suggest less of a tightening. The *spike in forward short rates then actually represents a risk* premium incorporating the uncertainty of a stronger-than-baseline recovery.

Figure 2.11. Expected Policy Rates: Federal Funds Futures
(2002, in percent)



Source: Bloomberg L.P.

Figure 2.12. Expected Changes in Forward Rates in the Group of Seven[1]
(In percent)



Source: Bloomberg L.P.
[1]Data as of February 8, 2002.

Table 2.3. Emerging Market Financing
(In billions of U.S. dollars)

	1999	2000	2001	2001 Q3	2001 Q4	2001 Oct.	2001 Nov.	2001 Dec.	2002 Jan.
Issuance	163.6	216.4	164.9	29.4	42.8	7.2	17.4	18.2	12.7
Bonds	82.4	80.5	89.4	11.7	22.1	4.1	11.4	6.5	9.9
Equities	23.2	41.8	11.2	1.0	2.6	0.4	1.3	1.0	1.7
Loans	58.1	94.2	64.2	16.7	18.1	2.7	4.8	10.6	1.2
Issuance by region	163.6	216.4	164.9	29.4	42.8	7.2	17.4	18.2	12.7
Asia	56.0	85.9	68.0	7.5	18.1	2.8	8.7	6.6	5.2
Western Hemisphere	61.4	69.1	54.4	11.4	12.5	2.1	3.9	6.5	5.3
Europe, Middle East, Africa	46.3	61.4	42.5	10.6	12.2	2.3	4.8	5.0	2.2

Source: Capital Data.

Emerging Market Financing

In the fourth quarter of 2001 in particular, emerging markets followed the broad trends set by price movements and perceptions about a U.S. economic recovery in mature markets. In spite of Argentina-related turmoil, emerging bond markets had a strong performance, while equity markets outperformed their mature market counterparts. In primary bond markets (see Table 2.3), issuance picked up in November, and has been healthy so far since the beginning of 2002. Syndicated lending remained supportive, despite a worldwide drop in mergers and acquisitions.

Emerging Bond Markets

Having faced a tumultuous year, the EMBI+ closed 2001 with a surprisingly small decline, which was wholly driven by the poor performance by Argentina (see Table 2.4 and Figure 2.13). Even Brazil, whose spreads had over the year been highly correlated with those of Argentina, posted a positive return after rallying by over 16 percent during the fourth quarter. Other Latin sovereign credits did even better, and Ecuador and Colombia were, respectively, the second and third best performers during 2001. Russia was the best performer throughout the year, continuing to benefit from both a strong fundamental outlook and also the EMBI+ reweighting. For those investors who had retained significant underweights in Argentina, 2001 represents the third year of relatively strong performance, which is likely to attract renewed crossover investor interest going into 2002. In 2002, following the preceding end-of-year rally, market participants generally viewed many of the emerging market credits as having gone too far too fast and a round of profit taking ensued. Venezuela and Colombia

Table 2.4. Performance of Emerging Bond Markets[1]
(In percent)

	Fourth Quarter	2001	Year-to-Date 2002[2]
Argentina	–57.1	–66.8	2.4
EMBI+	–0.9	–0.8	2.7
Venezuela	–3.4	5.5	–4.4
Brazil	16.3	7.2	1.3
Poland	1.6	10.6	2.0
Morocco	5.7	11.1	2.0
Mexico	6.5	14.2	3.4
Korea	1.9	14.5	1.4
Panama	6.7	17.9	2.8
EMBI+ Adj. Argentina	11.4	19.8	2.7
Qatar	6.4	21.4	3.9
Turkey	16.1	21.7	3.7
Nigeria	10.3	22.4	5.8
Bulgaria	15.3	25.7	–1.3
Peru	10.7	26.2	5.9
Philippines	15.3	27.6	1.9
Colombia	6.1	30.8	–0.7
Ecuador	20.0	36.1	6.7
Russia	19.1	55.8	6.4

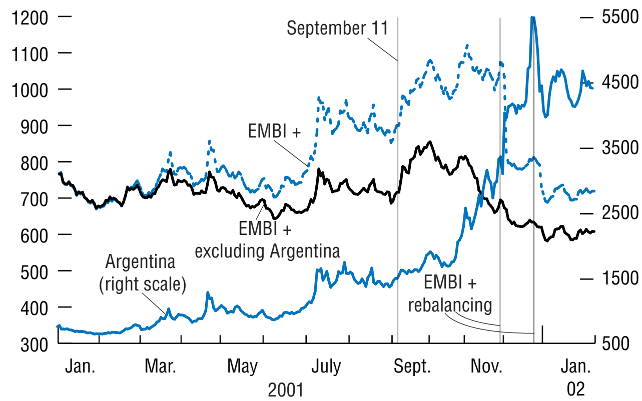
Source: JP Morgan Chase.
[1]Total return is equal to the return from price appreciation and received coupon payments that are reinvested.
[2]February 8, 2002.

were in particular focus during this latest sell-off.

In December, Argentina completed one of the largest bond swaps to date. It exchanged $41 billion of original dollar and peso-denominated government bonds for guaranteed loans paying a below market coupon and which represented a maturity extension for many participating bondholders. By replacing a largely non-tradable loan in exchange for a bond, the swap reduced significantly the amount of debt eligible for inclusion in the EMBI+, with significant effects on the emerging market bond asset class as a whole (Box 2.2). JP Morgan adjusted Argentina's EMBI+ weight for the exchange in two steps. The first step, which took place on December 5, adjusted for the bonds that were swapped by simply reducing the face value of the bonds tendered into the exchange and brought Argentina's weight to 5 percent from 10.6 percent. In the second step, on December 31, the index was adjusted taking into account liquidity requirements—that is, some bonds had to be automatically excluded if the face value of the outstanding bonds fell below $500 million, or they became illiquid. This last adjustment brought the Argentine weight to 2.6 percent, thus allowing investors to safely have zero allocations to the credit without incurring large risks of underperforming the benchmark in the (unlikely) event of a large rally in Argentine bond prices.

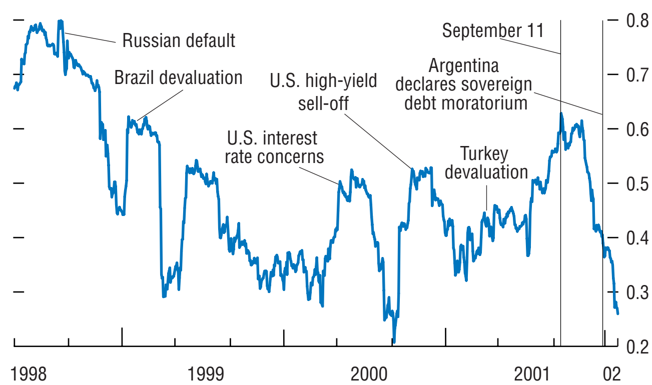
A salient feature of the quarter was the *continued absence of any significant contagion from events in Argentina* (see Figure 2.14). Past issues of the quarterly *Emerging Market Financing* have highlighted the following reasons for why contagion could have been expected to be more moderate this time around (see IMF, 2001a and b). Heightened credit concerns about Argentina came at a time of much lower exuberance in emerging markets, with net emerging market fundraising substantially below its 1997 peak. In the case of Argentina, investor concerns had been building for some time, thereby allowing dedicated investors to take underweight positions in risky credits (initially including Brazil)

Figure 2.13. Emerging Market Spreads
(In basis points)



Source: JP Morgan Chase.

Figure 2.14. Average Cross-Correlation of Emerging Debt Markets

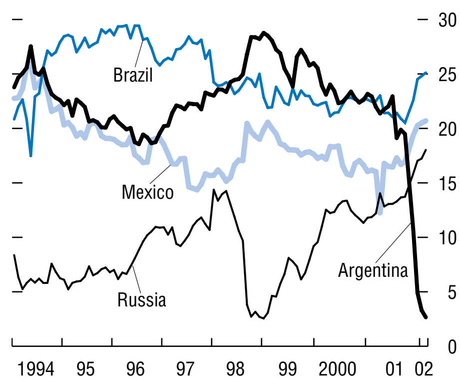


Source: IMF staff estimates.

Box 2.2. Argentina and the Asset Class

Argentina's large stock of foreign currency denominated bonds had been an important source of market concern about potential contagion in the run up to a default. Recently, Argentina had the highest or second highest weight in the EMBI+, and the sovereign was also the largest emerging market issuer in the euro-market. Even during non-crisis times, dedicated investors benchmarked to the EMBI+ kept a "structural" underweight toward Argentina, in an attempt not to concentrate their portfolios excessively in one credit. Given Argentina's large weight, however, these investors could not reduce their portfolio allocations to zero in Argentina without running the risk of larger-than-tolerable index tracking error. Hence, there was a fear that losses in Argentina would force dedicated investors to liquidate profitable overweight positions elsewhere (Russia and Brazil). This "common ownership" motivation for contagion was further exacerbated by concerns that a default on a quarter of the benchmark index could frighten end-investors, thereby triggering a withdrawal of capital from the asset class. In the euro and yen markets, Argentine bonds were largely held by less sophisticated "buy-and-hold" retail investors who were not benchmarked to any index. The extent of contagion from the default hence differed across the three segments:

Historical EMBI Weights
(In percent)



Source: JP Morgan Chase.

- *In the case of dollar-denominated emerging market bonds*, investor discrimination was supported by the falling weight of Argentina in the market cap weighted EMBI+. This allowed dedicated investors to automatically reduce their exposure to Argentina further. The debt swap in early December created further support for the decoupling of Argentina from the rest of the asset class. There had already at that time been signs of speculative investors and the street "front-running" the eventual change in dedicated investors' portfolio allocations. In the end, Argentina's weight in the EMBI+ fell to 2.6 percent. The retrenchment by dedicated investors away from Argentina benefited those index constituents that stood to gain most from the reweighting (notably Brazil, Mexico, and Russia, see the figure) and hence negated any contagion effects at that stage.
- The "common ownership" explanation for contagion played a larger role for contagion across Latin credits within the investor base for *euro-denominated emerging market bonds*. When capitulation selling of Argentine bonds by mainly Italian, German, and Spanish retail investors occurred, these investors also largely exited other Latin American sovereign bonds. Following the Argentine default, the euro-denominated market is currently in a state of disarray, as the large-scale exit of retail investors has pushed the spreads of several euro-denominated emerging market bonds beyond those of comparable dollar-denominated bonds. As a result, the overall appetite for Latin American emerging market bonds has substantially declined, both in terms of supply (it is no longer price competitive relative to dollar issuance) and demand. It remains an open question whether the classic European retail demand will again invest, in any size, in higher risk emerging markets.
- In Japan, retail demand for any form of higher risk bond issue has suffered from both the Enron and Argentine defaults. The Samurai market remains firmly shut despite

appearances to the contrary in the quarter. In the wake of Argentina–related credit concerns and then the actual default, the market is expected to remain closed for some time to other low-rated credits. The Philippine shibosai (privately placed Samurai) went to European investors who were comfortable with the 97.5 percent credit enhancement by the Japanese Export Import Agency NEXI (2.5 percent risk on the underlying Philippines risk was enough to deter Japanese investors), while mid-December's Thai Samurai was taken up mainly by Japanese banks operating in Thailand to fulfill local reserve requirements. As a result, there has been so far no issuance of any emerging market bond since mid-December.

In conclusion, Argentina's impact on the emerging market bond class has been more substantial in the euro and yen markets, where retail investors held on in the somewhat optimistic belief that emerging market sovereigns would not default. While these two markets will have to go through a transformation, it is indeed possible that these necessary changes will in the end lead to a more developed and sophisticated institutional investor base for emerging market bonds with similar characteristics to that of the dollar segment, which has weathered the Argentine default quite well.

and to overweight those that were seen as relatively immune. This increase in investor discrimination has been a positive development and shows maturation in at least the dollar-denominated segment of the asset class. We have in the past attributed the increase in investor discrimination to the rising relative importance of dedicated and local investors, and to the decline in importance of leverage in the system. Of course, in the past the major episodes of contagion in emerging markets have been a result of surprises, while Argentina's default at the end of December clearly was not.

Turning to the fourth quarter of 2001, we attribute the surprising lack of secondary market spillovers from Argentina additionally to the supportive global environment for fixed income products, the EMBI+ reweighting due to the Argentine bond swap, and market beliefs throughout October and November that the exchange rate regime would either remain as is or involve a stabilization, thereby supporting Argentine bond prices in the secondary market.

Our measure of contagion,[3] the average cross-correlation of individual country returns in the EMBI+, continued to fall throughout December and January, despite the increased turbulence in Argentina, and is currently around 0.3, below even the long-term average of 0.4. With respect to individual cross-country correlations, Argentine sovereign bonds continue to decouple from most other emerging market sovereigns (see Figure 2.15). However, the pair wise correlation with Venezuela has clearly been high, as Venezuela faces increasing investor concerns against a backdrop of political turmoil and oil price weakness. Looking ahead, the risk of contagion has certainly not disappeared completely and there remains a concern about contagion either though the foreign exchange markets, as seen during a few days in January, or through

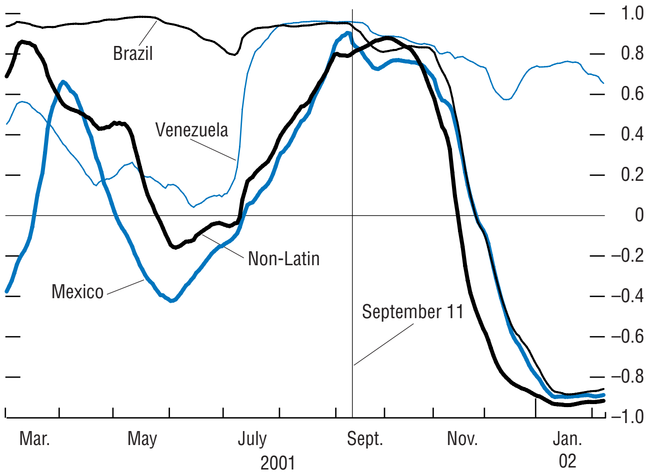
[3]The measure uses the average cross-correlation of spreads for a rolling 50-day window on the external debt of nine emerging markets (Argentina, Brazil, Ecuador, Mexico, Panama, Peru, Poland, Russia, and Venezuela). A criticism of similar measures can be found by Forbes and Rigobon (2000), who point out that in measuring contagion, increases in volatility during crisis periods can bias correlations upwards. However, Baig and Goldfajn (2000), argue that it is unclear the Forbes and Rigobon correction should be made, as the same factors that result in increased volatility (thin markets, panic, margin calls) are precisely the factors responsible for contagion and controlling for one, causes a loss of power for the other.

primary markets (renewed closures) or a fall off in foreign direct investment (FDI) flows to emerging markets.

Turning to *primary markets*, following the recovery in global financial markets and decline in risk aversion, *capital markets reopened in November* to emerging market issuers following the longest bond market drought (11 weeks) since the Russian crisis (13 weeks). As expected, those issuers highest up the credit spectrum were able to re-access markets first, using plain-vanilla structures in the case of sovereigns, and political risk insurance in the case of non-investment-grade corporates. After near-record bond issuance in November, issuance levels remained robust in December, allowing a substantial amount of pre-financing for emerging market borrowers. In the last quarter, bond issuance reached $21.1 billion, which is about halfway between the healthy issuance level of the second quarter and the dismal third quarter of 2001 (Figure 2.16). As anticipated, investment-grade issuers dominated the quarter and accounted for 62 percent of total bond issuance (SingTel issued $2.3 billion), while, at least initially, non-investment-grade issuance was dominated by credits that could be seen as diversification plays (such as the Dominican Republic, Guatemala, or Bulgaria) or were seen as enjoying the support of the international community—for example, Turkey. The fourth quarter also marked the recovery of euro-denominated issuance, following both Turkey's and the City of Moscow's return to the market. Dollar-denominated issuance also took a larger share, while bond issuance denominated in Japanese yen fell back closer to its average historical quarterly level (see Table 2.5). For 2001 as a whole, the recovery in issuance during the last quarter brought total issuance to nearly $90 billion (excluding exchanges) exceeding the levels of 1998–2000, but was nonetheless still below the $100 billion plus issuance of 1996 and 1997.

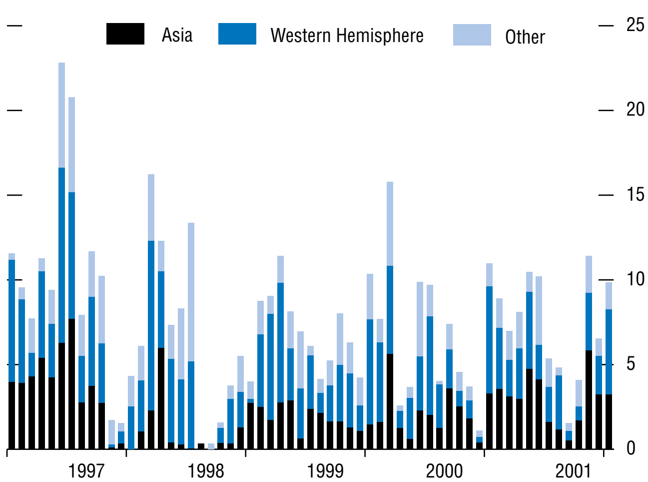
Since the beginning of the year, emerging market bond issuance has remained at relatively healthy levels and $1 billion plus bond issues

Figure 2.15. Emerging Market Spread Correlations with Argentina[1]



Source: IMF staff estimates.
[1]80-day rolling correlations.

Figure 2.16. Monthly Bond Issuance
(In billions of U.S. dollars)



Source: Capital Data.

Table 2.5. Currency of Issue
(Shares in percent)

	1998 Fourth Quarter	1999				2000				2001			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
U.S. dollars	83	62	67	59	53	62	51	65	60	57	72	63	73
Euro	0	26	28	36	37	33	28	18	21	31	17	7	20
Yen	1	2	1	1	8	3	17	14	13	7	6	19	6

Source: Capital Data.

by both Brazil and Mexico were seen as validating perceptions of continued market access for these creditors, despite the deteriorating situation in Argentina.[4] Investor demand has been largely driven by higher-than-normal cash levels among dedicated investors at the start of the year, and increased allocations by U.S. crossover investors to higher-rated emerging market issuers after three years of good performance, particularly for the majority of investors who stayed underweight Argentina. Given the amount of pre-financing achieved during the last two months of 2001, however, the typical January surge in bond issuance has been less pronounced, with issuance so far running at about 80 percent compared to January 2001. While dollar emerging market bond issuance is well under way, the European retail investor base is widely seen as being in disarray following the default in Argentina and we have yet to see the first Latin euro-denominated emerging market bond this year (see Box 2.2). In the case of the Japanese Samurai market, the traditional retail investor base has also suffered substantially from Argentina's default, and it remains unclear when the market will reopen to new issuers. The absence of the "safety valve" presented by the euro and yen markets in the past will make emerging market issuers, especially Latin American ones, more vulnerable to any abrupt market closures in the dollar segment.

[4]Other sovereign issuers in 2002 have included Costa Rica, Croatia, the Philippines, and Turkey.

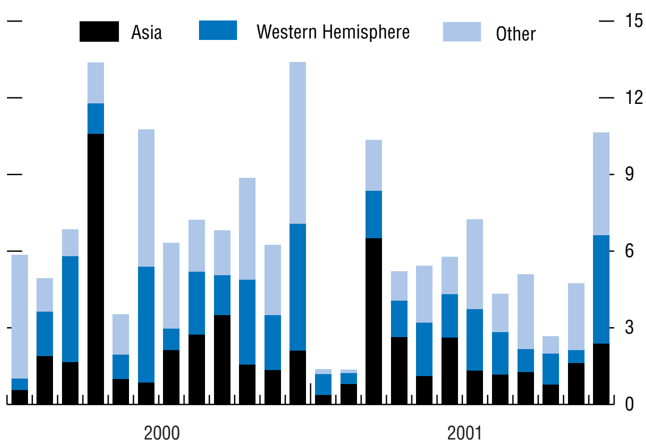
Looking ahead, with many of the "traditional" emerging market sovereign issuers having completed large parts of their financing needs for 2002, we expect market access to continue to roll down the credit spectrum to corporate issuers. In the absence of negative surprises on the U.S. recovery or from Argentina, we expect sovereigns to focus increasingly on early prefinancing of 2003 and debt management operations.

Syndicated Loans

Expectations of an imminent recovery in global activity, particularly by U.S. and European investors, combined with the desire of lenders to fulfill their annual internal lending targets, helped push lending to the emerging markets up to $18.1 billion in the fourth quarter, compared to $16.7 billion in the third (see Figure 2.17). Asian players, however, remained skeptical about prospects for a U.S.-led global economic recovery, with creditworthy borrowers expressing little demand for investment capital, and new borrowing primarily related to balance sheet restructuring or consolidation. As testimony to the increased differentiation of market participants and limited contagion, eight Brazilian corporates borrowed a total of $1.6 billion, although much was for refinancing purposes or secured. Elsewhere, Chilean, Mexican, and Venezuelan corporates were recipients of substantial funding.

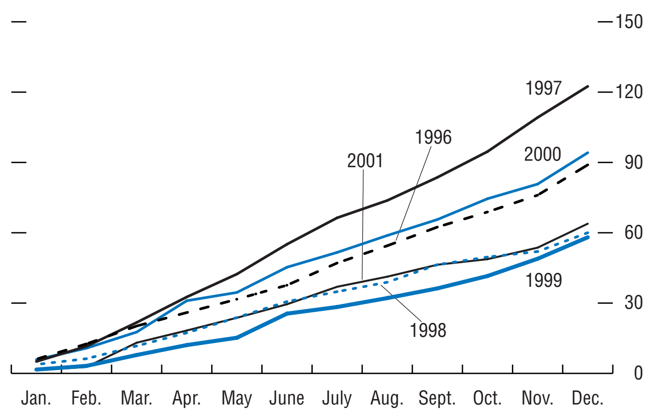
For the year as a whole, 2001 loan volumes were sharply lower than in 2000 and closer to

Figure 2.17. Loan Issuance
(In billions of U.S. dollars)



Source: Capital Data.

Figure 2.18. Cumulative Gross Annual Issuance of Hard Currency Loans
(In billions of U.S. dollars)



Source: Capital Data.

Table 2.6. Total Dollar Return Performance of Emerging Equity Markets
(In percent)

	Q1	Q2	Q3	Q4	2001	Year-to-Date* 2002
Regions						
EM Free	–6.2	3.1	–22.1	26.3	–4.9	2.3
Asia	–0.1	–1.6	–20.1	32.8	4.2	4.6
LatAm	–3.5	7.1	–24.0	21.8	–4.3	–2.8
EMEA	–22.0	4.5	–25.8	36.3	–17.7	–2.0
Mature market comparators						
ACWI Free	–12.8	2.3	–15.0	9.1	–17.3	–4.5
S&P 500	–12.1	5.5	–15.0	10.3	–13.0	–2.8
Dow	–8.4	6.3	–15.8	13.3	–7.1	–6.7
Nasdaq	–25.5	17.4	–30.7	30.1	–21.1	–5.1

Sources: Bloomberg L.P.; and Morgan Stanley Capital International.
*February 8.

trends in 1998–99. With demand for new money limited amid concern about the global slowdown and a dearth of mergers and acquisitions activity, the volume of lending reached $64.2 billion in 2001 compared with $94.2 billion in 2000 (see Figure 2.18).

On the *pricing* front, the syndicated lending market in Asia remains characterized by a high degree of competition between banks to lend to the handful of top tier corporates and financial institutions, while shutting out lower tier borrowers. With little demand for new money, banks competed to lend to borrowers, making pricing very tight at the top end, while rationing out those entities that may be most in need of capital. As a result, syndicated loan spreads remained broadly flat in Asia at low levels, while spreads declined in Latin America, reflecting this quarter's distribution of lending among Latin corporates (see Figure 2.19).

Emerging Equity Markets

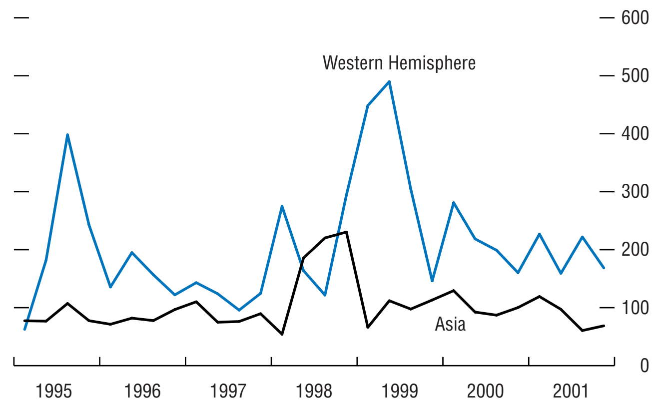
Emerging equity markets recovered on cue with their mature market counterparts as a "high beta" play on global growth and reflecting their higher (than global markets) concentration in TMT stocks (see Table 2.6). Emerging equity markets comfortably outperformed their mature market counterparts, with returns resembling those of the Nasdaq. Cyclical sectors including technology led the rally. The initial rally, particularly in tech heavy markets such as Korea and Taiwan Province of China, was led by foreign investors increasing exposures to Asian equities in order not to underperform in the event of a global rally. Local investors were notably absent from the rally. Asian emerging markets received the bulk of substantial foreign investor flows into emerging equity markets during October and November (see Figure 2.20). While having similar earnings growth forecasts as in mature markets, Asian equities are still seen as cheap, encouraging investors to maintain neutral to overweight positions in Asia.

Primary market issuance in the fourth quarter (of $2.6 billion compared with $1 billion in the third) was again dominated by Asian names, but 2001 as a whole was only slightly higher than 1998 but lower than the succeeding two years. Issues were mainly privatization deals from China, along with banking sector issuance from Singapore and the tobacco sector in Korea.

Foreign Direct Investment

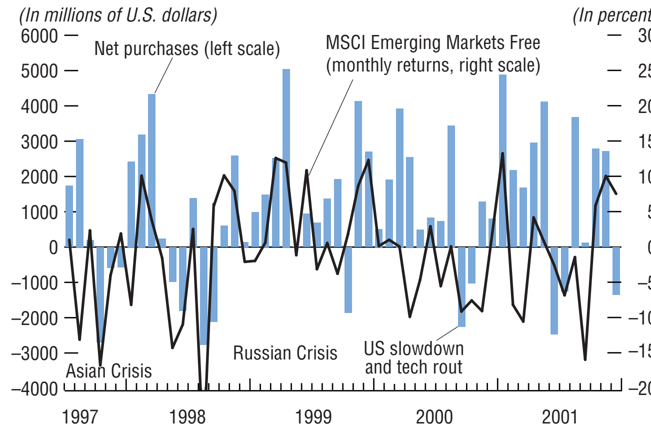
In 2001, despite an estimated 42 percent drop in global FDI to $760 billion, and an estimated 45 percent drop in cross-border mergers and acquisitions activity, net FDI flows to emerging market countries are estimated to have held steady at $163 billion (see IMF, 2001c) (see Figure 2.21). Reflecting an ongoing trend, FDI flows to emerging market countries remained highly concentrated, with 10 countries accounting for nearly 70 percent of net FDI flows to emerging markets, and China, Brazil, and Mexico alone accounting for about one-half of net FDI flows. Looking ahead, net FDI flows to emerging markets are expected to fall further as mergers and acquisition activity is expected to remain slow to recover, while the high cost of equity capital in emerging equity

Figure 2.19. Loan-Weighted Interest Margin
(In basis points, 1995–2001)



Source: Capital Data.

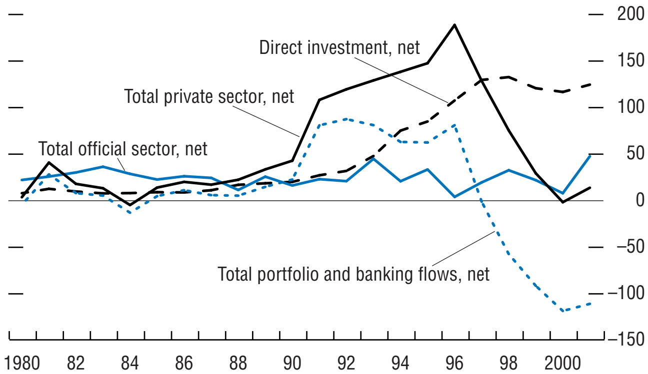
Figure 2.20. Net Foreign Purchases and Monthly Returns on Emerging Equity Markets[1]



Sources: IMF staff estimates; Central banks; and Bloomberg L.P.
[1]August data exclude $8.9 bn for Mexico the purchase of Banamex by Citigroup.

markets will hinder privatization-related FDI inflows.

Figure 2.21. Capital Flows to Emerging Economies
(In billions of U.S. dollars)



Source: IMF, *World Ecomonic Outlook.*

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