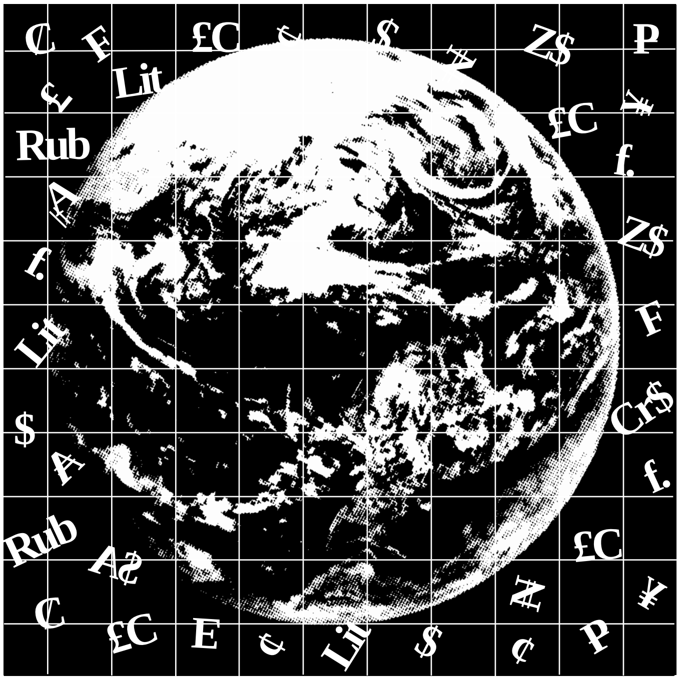
Emerging Market Financing

Quarterly Report on Developments and Prospects



February 13, 2001

By a Staff Team led by Bankim Chadha

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The quarterly *Emerging Market Financing* report is an integral element of the IMF's surveillance over developments in international capital markets. It has been published beginning with the report for the second quarter of 2000. The report draws, in part, on a series of regular informal discussions with a broad set of private financial market participants.

The report is prepared in the IMF's Research Department. The project is directed by Bankim Chadha, Chief, Global Markets Unit. Co-authors of the report are Gabrielle Lipworth and Christopher Morris, Senior Economists; Anna Ilyina, Subir Lall, and Jens Nystedt, all Economists; Martin Edmonds, Senior Financial Systems Officer; Anne Jansen, Senior Research Officer; and Christian Carrillo and Peter Tran, Research Assistants. Sheila Kinsella provided expert drafting assistance.

The report has benefited from comments and suggestions from staff in other IMF departments, as well as from Executive Directors (following their discussion of the Emerging Market Financing report on February 9, 2001). The analysis and views are those of the contributing staff and should not be attributed to Executive Directors, their national authorities, or the IMF.

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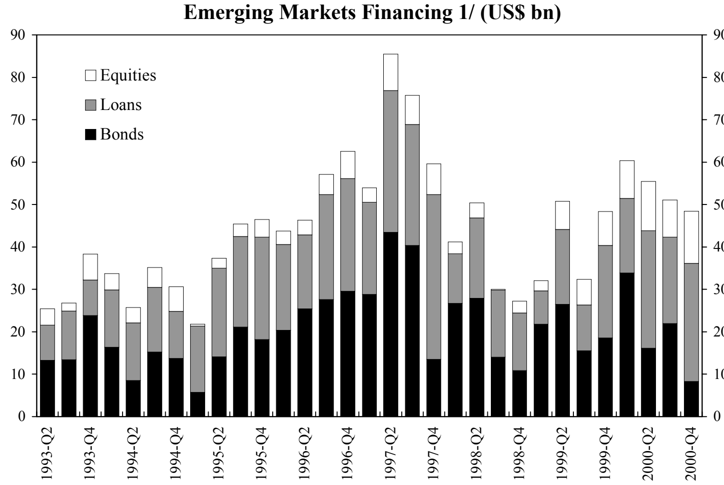
I. Overview

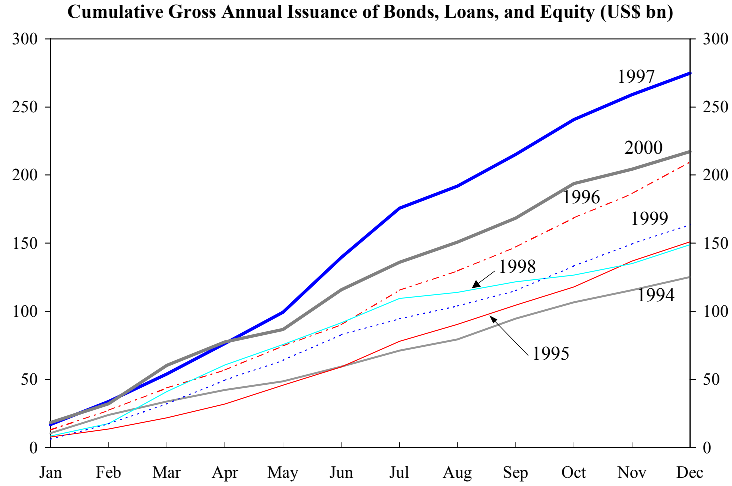
Heightened expectations of a slowdown of the US economy, a downgrading of the long run earnings potential of the technology media and telecom (TMT) sector, and a deterioration in US credit markets took their toll on emerging bond and equity markets in the last quarter of 2000. As emerging market spreads widened sharply along with those in US high yield markets, tighter external liquidity conditions focused investor attention intensely on prospects for the two largest emerging market borrowers on international bond markets—Argentina and Turkey. Emerging equity markets, again led by Asia, underperformed their broader counterparts in the mature markets.

Emerging Markets Financing 1/ (US$ bn)



Despite an almost complete drying up in bond issuance for much of the quarter, total emerging markets fundraising on international capital markets held up relatively well, supported by a surge in equity placements from China and a robust syndicated loan market. The overall pace moderated only slightly from that of the previous quarter. For the year as a whole, fundraising, which by the end of the third quarter had already exceeded the annual amounts raised in 1998 and 1999, reached its second highest level, behind only the peak boom year of 1997.

Cumulative Gross Annual Issuance of Bonds, Loans, and Equity (US$ bn)



We analyze two salient features of emerging markets financing which were manifest once again in the last quarter of 2000:

- *Periodic bouts of high correlations in individual country returns on emerging debt markets, characterized by some observers as episodes of "contagion." We find that average correlations are higher in bad than in good times, that they have fallen off systematically since the Asian and Russian crises, and that the timing of recent episodes was closely associated with deteriorations in the external environment and preceded the buildup of individual country concerns in the fourth quarter.*

- *Periodic closures of emerging debt markets to new issues. For the 9 such periods identified in the 1990s, we find that the occurrence of these episodes does not have a clear relationship with the average level of spreads. Their occurrence has been associated instead with periods of rapid spread increases, while stability and a resolution of market uncertainty have been key to reopenings.*

Following the announcement of multilateral financing packages for Argentina and Turkey in December, and especially the surprise cut in US interest rates in early January, conditions in emerging bond and equity markets improved. A number of borrowers were quick to come to market with new bond issues, while equity markets rallied strongly. In our view, the outlook for emerging market assets and financing remains, as it has in the last three quarters of 2000, closely tied to developments in the external environment. For the latter, we concur with the view that there are two scenarios, identified respectively by the prospects for a "soft" versus "hard" landing of the US economy. Changing expectations of the relative probabilities of these two scenarios unfolding are likely to keep markets volatile. In our view, expectations of a relatively "soft" landing will lead to a continued easing of external financing conditions for emerging markets and—history indicates—increased discrimination among the better performers. Expectations of a "hard" landing will prompt a move up the credit spectrum in debt markets and could spark another downgrading of the TMT sector, thereby tightening external financing conditions for emerging markets. Our baseline outlook for this year sees a moderation in bond financing, selective equity placements, and a supportive syndicated loan market.

					2000							2001
	1997	1998	1999	2000	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Oct.	Nov.	Dec.	YTD.
					(in billions of US dollars)							
ISSUANCE	**274.8**	**149.0**	**163.6**	**216.8**	**60.4**	**55.4**	**52.1**	**48.8**	**25.3**	**10.7**	**12.8**	**11.0**
Bonds	126.2	79.5	82.4	82.0	33.8	16.1	23.0	9.0	4.5	3.7	0.8	10.6
Equities	26.2	9.4	23.2	41.7	8.9	11.6	8.8	12.3	11.9	0.3	0.1	0.0
Loans	122.5	60.0	58.1	93.2	17.6	27.7	20.4	27.5	8.9	6.7	12.0	0.4
ISSUANCE BY REGION	**274.8**	**149.0**	**163.6**	**216.8**	**60.4**	**55.4**	**52.1**	**48.8**	**25.3**	**10.7**	**12.8**	**11.0**
Asia	115.7	34.2	56.0	86.0	19.5	26.1	19.9	20.4	15.8	3.4	1.1	3.5
Western Hemisphere	89.2	65.7	61.4	70.4	23.7	13.9	19.0	13.8	4.3	3.7	5.8	6.1
Europe, Middle East, Africa	70.0	49.0	46.3	60.5	17.1	15.4	13.2	14.7	5.2	3.7	5.9	1.5
SECONDARY MARKETS												
Bonds:												
EMBI+ (spread in bps) *	510	1,037	703	756	674	712	677	756	745	805	756	674
Merrill Lynch High Yield (spread in bps)	311	555	453	871	584	615	664	871	757	874	871	739
Salomon's Broad Investment Grade (spread in bps)	30	58	55	89	81	87	83	95	91	97	95	80
U.S. 10 yr. Treasury Yield (yield in %)	5.8	4.7	6.3	5.1	6.0	6.0	5.8	5.1	5.8	5.5	5.1	5.1
Equity:						*(in percent)*						
DOW	22.6	16.1	25.2	-6.2	-5.0	-4.3	1.9	1.3	3.0	-5.1	3.6	0.9
NASDAQ	21.6	39.6	85.6	-39.3	12.4	-13.3	-7.4	-32.7	-8.3	-22.9	-4.9	12.2
MSCI Emerging Market Free	-13.4	-27.5	63.7	-31.8	2.0	-10.8	-13.4	-13.5	-7.3	-8.8	2.3	13.6
Asia	-49.0	-12.4	67.6	-42.5	4.0	-14.0	-22.3	-17.3	-9.8	-4.4	-4.1	19.5
Latin America	28.3	-38.0	55.5	-18.4	3.2	-8.1	-6.0	-8.5	-3.5	-9.2	4.5	13.8
Europe/Middle East	42.6	-27.4	76.7	-23.4	3.0	-9.7	-3.9	-14.3	-6.1	-18.4	11.8	3.3

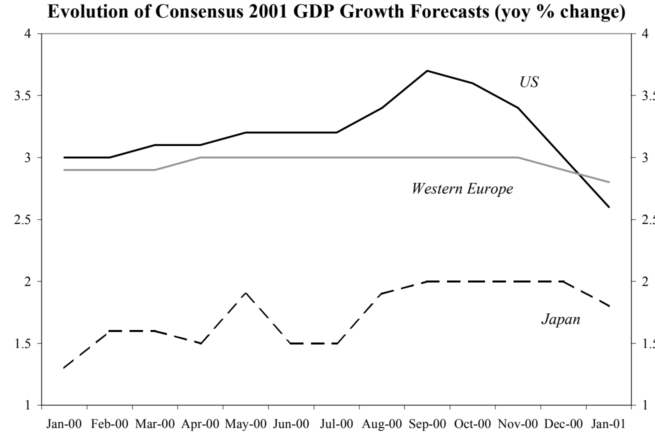
Sources: Bloomberg; Capital Data Ltd; International Finance Corporation, and Emerging Markets Data Base.
* On April 14, the EMBI+ was adjusted for the London Club agreement for Russia. This resulted in a one-off (131) bps decline in average measured spreads.
1/ Issuance data are as of January 30, 2001 close-of-business London and Secondary markets data are as of January 31, 2001 cob New York

II. Recent Developments

A. The External Environment

The **US growth cycle** and the **potential of the "new economy"** phenomena have been at the center of investor concerns on international financial markets for some time. The fourth quarter of 2000 saw **bad news on both fronts**: expectations of the **long-awaited growth slowdown gained momentum**, while there was a substantial **downgrading of the TMT sector**.

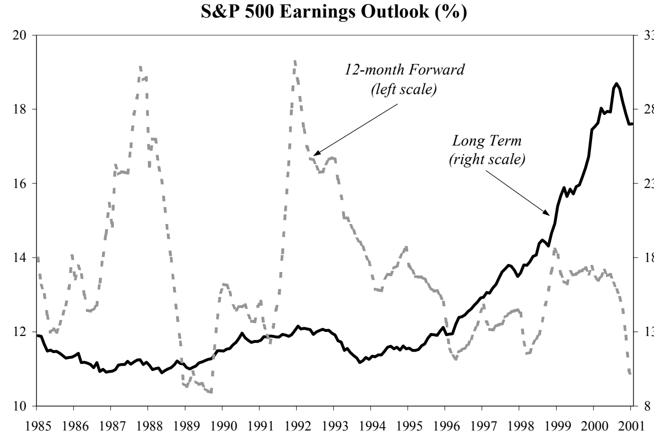
Evolution of Consensus 2001 GDP Growth Forecasts (yoy % change)



Source: Consensus Economics

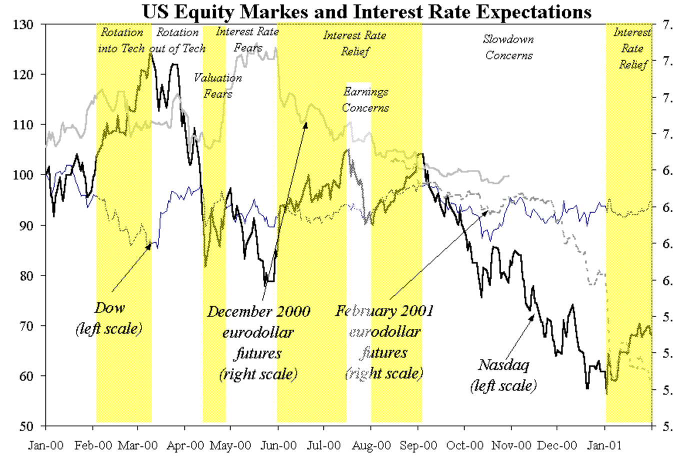
Consensus **forecasts** for **US GDP growth began to be revised down** in October, and have since been revised successively down in each month (see chart). While the outlook for growth in Europe and Japan remained broadly unchanged early in the quarter, it too was revised down in December and January, suggesting a **global slowdown**. In US equity markets, which had begun factoring in a slowdown somewhat earlier, forecasts of **earnings**-per-share **growth** (12-month forward) **tumbled**, falling from around 16% in mid-August to around 9.5% by mid-January (see chart). More importantly, **expectations of "long run"** (5-year) **corporate earnings growth** in the US, which have steadily ratcheted up on the "new economy" view since 1995, experienced their **first sustained correction**.

S&P 500 Earnings Outlook (%)

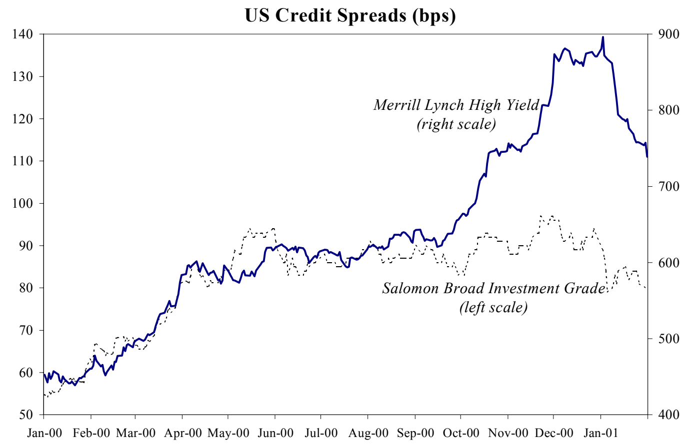


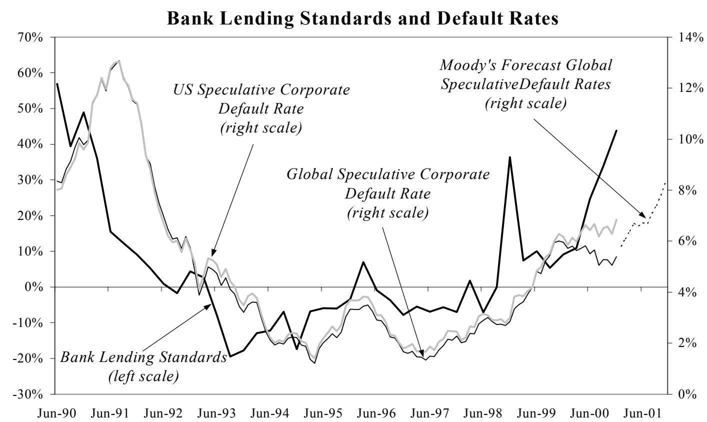
The **reappraisal of the new economy phenomena** resulted in a **steep sell off of the TMT sector in equity markets**, with the Nasdaq plunging (-32.7%) in the fourth quarter. The broader market, outside the sector, remained relatively resilient, with the Dow actually rising 1.3% over the quarter as the impact of lower discount (interest) rates mitigated the impact of lower earnings growth.

US Equity Markes and Interest Rate Expectations

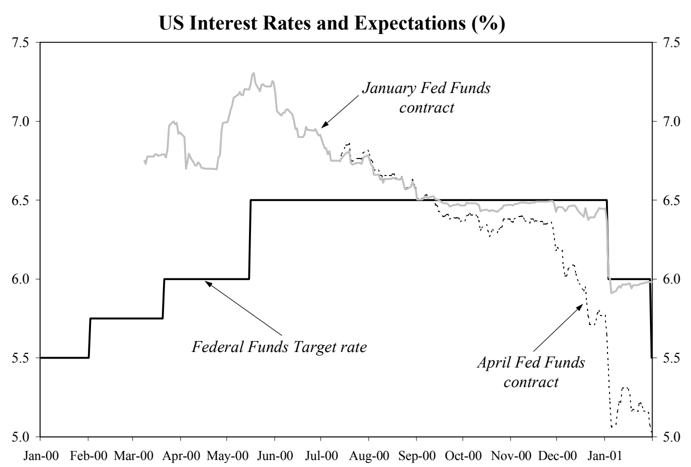


In US **credit markets**, increased expectations of the impending slowdown exacerbated a **broad-based deterioration** in perceived credit quality. Spreads in the **high grade** market widened further, while the **high yield** sector experienced continued outflows (of some $1.6 bn) in the fourth quarter, with spreads reaching levels last seen in 1991 at the time of the recession and following the collapse of Drexel Burnham Lambert, the largest market-maker in the sector (see chart). Widening high yield spreads reflected in part the broad **downgrading of the TMT sector** as in equity markets. **Tightening bank lending standards** (see chart) heightened concerns about the ability of high yield issuers to service or roll over their debt. The **default rate** for speculative issuers, which has **risen** from a low of 1.3% in May 1997 to reach 5.4% at end-November 2000 is forecast **to rise further in 2001**, to 7-9%, a level also not seen since 1991.





Sources: US Federal Reserve; Moody's.

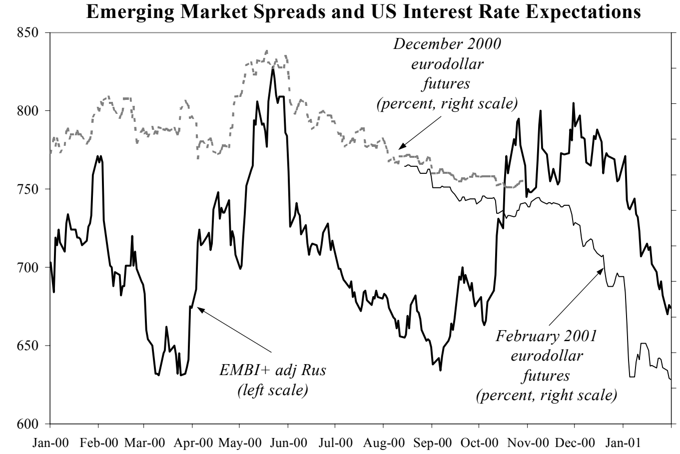


The anticipated slowdown in the US fueled **expectations of interest rate cuts**, and by September 2000 yields on Fed Fund futures maturing in December onwards had fallen below the Fed Funds target rate (see chart). These expectations were reinforced in December by its subsequent shift to an easing bias. While the **surprise intra-meeting 50 bps interest rate cut** in early January was at **first interpreted by markets as suggesting greater weakness than previously assumed**, with **expectations of cuts** by end-January and end-April this year simply **augmented by the actual cut**, **markets then rallied** selectively. The Nasdaq has rallied 21.0% since then, while credit spreads in both the high grade (-7 bps) and high yield markets (-133 bps) narrowed, and the latter received its first significant inflows ($2.1 bn month-to-date) since the Russia-LTCM crisis. The Dow on the other hand has risen slightly (2.3%).

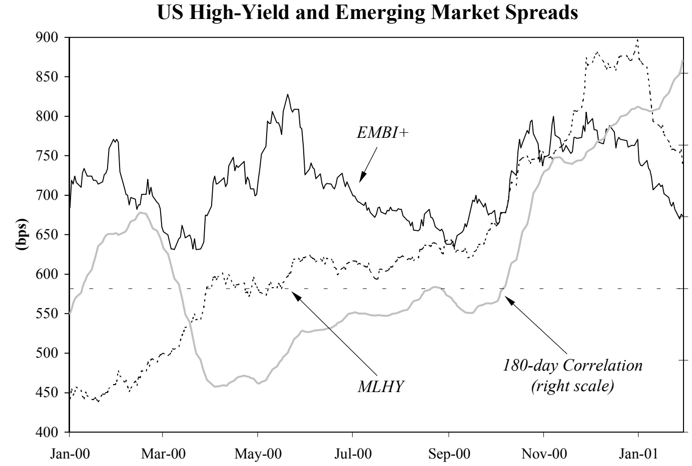
B. Emerging Bond Markets

With heightening expectations of a slowdown in the US in September prompting a move up the credit spectrum, **emerging bond markets** were **hostage to the external environment** during the fourth quarter of 2000. The EMBI+ spread, which had continued to narrow on relief about interest rate increases in the US during much of the third quarter, **decoupled further from yields on interest rate futures** in the fourth quarter as declines in the latter began to reflect concerns about slower growth (see chart). Widely viewed as competing asset classes by US investors, the **sell off in the high yield** sector in October—as the TMT sector got downgraded, rumors about the large exposure of a major investment bank to the high yield sector circulated, and the manager of the one of the largest bond funds recommended investors avoid the sector—**pulled emerging market spreads wider** by 65 bps in a **broad-based sell off** across emerging market credits.

Emerging Market Spreads and US Interest Rate Expectations



US High-Yield and Emerging Market Spreads



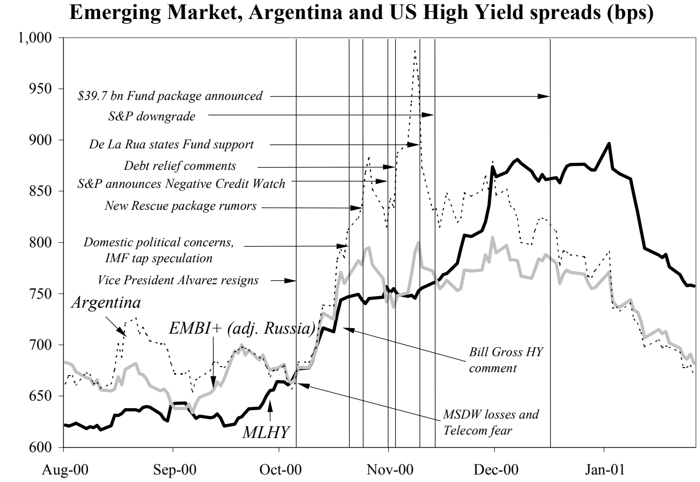
The sharp widening of the EMBI+ in turn, and as has often been the case in the past, **closed primary markets** to **new issuance** (see below, and the Staff Appraisal for a characterization of such periods of closure). This closure, in turn **focused attention** in the external debt markets on prospects for **Argentina**, the **country with the largest financing needs** (see Box 1), and in local markets on **Turkey** (see Box 2), where participation by international bond investors was substantial. With country-specific concerns—fiscal concerns in Argentina, and the banking and exchange rate systems in Turkey—having placed both countries squarely on the radar screen of investor concerns for some time, **country-specific developments then took center stage in November**, further exacerbating the sell off. The EMBI+ widened another 63 bps, peaking on November 30 at 805 bps. **Spillovers** to other emerging market credits during this period (see Staff Appraisal below for a discussion) remained **limited.** Following **announcements of multilateral support** packages for the two countries, especially Argentina, **investor concerns eased**, with the EMBI+ spread tightening 49 bps in December.

For 2000 as a whole, emerging market spreads **finished the year 53 bps wider**. Spreads

Box 1. A Chronology of the Sell Off in Argentina

Argentina, (tied with Brazil as) the **largest component of the benchmark EMBI+** (22.6%) index for the emerging debt markets, was, as recently as September, **projected** to be the **largest emerging markets issuer** in the international debt markets **in 2001**, with **around $20 bn** in new international bond issues expected. During the fourth quarter, Argentina suffered **a massive sell off**, with average spreads on the sovereign's debt widening from around 650 bps in early October to almost 1000 bps in early November. While some investors had expressed concerns from time to time, with the emerging debt markets having a **reputation for periodically exhibiting herd behavior**, it is of interest to examine what triggered the sell off. Was it developments in **the external environment, domestic fundamentals, or simply herding?** (see chart) Isolating Argentine-specific investor concerns from movements in the broader market is hampered by Argentina's substantial weight in the EMBI+. Nevertheless, the differential in the two spreads does provide some indication. Note that:

Emerging Market, Argentina and US High Yield spreads (bps)



- Though Argentina's spreads had been trading wider since mid-August, by **mid-September**, they were **at EMBI+ levels**.
- Through the **subsequent period of rapid widening of US high yield** spreads, Argentine spreads **widened in sync with the EMBI+**.
- This **sharp widening of the EMBI+ closed primary markets** to new issuance, **focusing attention on** prospects for the **largest issuers**.
- **Argentina-specific developments** (heighteing political concerns on October 20) **then began to dominate** secondary markets, and the sovereign's **spreads decoupled**, **rising well above the EMBI+** and above **the highest level at which the sovereign has historically been able** (with one exception) **to issue** in the dollar market.
- **Rumors of a financial package**, led by the Fund and the US Treasury, circulated on October 26, initially **sparking another sell-off** on concerns about the potential for "non-voluntary" private sector involvement in the package.
- **A dramatic improvement** in investor sentiment **began on November 10**, following President De la Rua's announcement of new fiscal reforms and a strengthened adjustment program supported by the Fund. The subsequent S&P downgrade (November 14) had no impact. The eventual official announcement of details about the actual multilateral financing package (December 18) served to maintain the tightening trend of secondary market spreads.

To summarize, a **deterioration in the external environment** resulted in a sharp across-the-board widening of emerging market spreads, **closing the primary markets to new issuance**. This naturally **focused investor attention** on the **largest and most vulnerable borrowers, bringing investor concerns to a critical level. Country-specific concerns and developments then further exacerbated** the sell off.

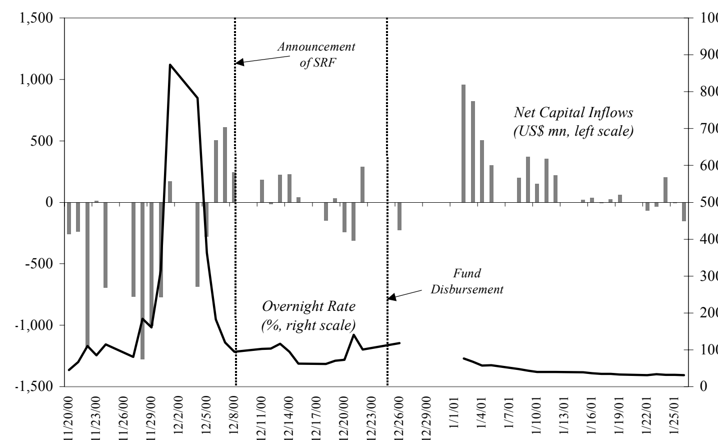
Box 2. Evolution of the Crisis in Turkey

Developments in Turkey, the emerging market with the **second largest external financing requirement** for 2001, unfolded in the **context of tight external liquidity conditions** and followed **shortly after the buildup of concerns about Argentina**. In late November, a liquidity squeeze in the Turkish banking sector shook the overall **confidence of foreign and subsequently domestic investors**, unleashing a full-blown liquidity crisis in Turkey's financial sector.

The crisis was triggered by the rumored **withdrawal of external credit lines to Turkish banks and, in turn by two large Turkish banks to a mid-sized bank** investing heavily in the government securities market, combined with a scaling back in its funding in the international syndicated loan market. As a result**,** the bank was forced to sell a large chunk of its T-bill holdings, pushing yields above the stop-loss levels of foreign investors and other local banks, thereby triggering a massive closing of positions and prompting primary dealers to suspend trading in government paper.

Foreign investors' concerns about domestic banks' net foreign exchange exposures, and the quality of their forward cover **exacerbated the rush for the exit**. In the week of November 20, foreign exchange outflows amounted to roughly $2.5 bn, while overnight rates rose sharply (see chart). An **initial injection of liquidity by the CBT led to a slight easing of tensions, but ongoing injections raised concerns about the sustainability of the exchange rate regime**, leading to an acceleration of foreign exchange outflows in the following week. The CBT's decision to end its emergency injections of liquidity and return to the quasi-currency board arrangement led to a violent response. In the context of ongoing foreign exchange outflows, overnight rates soared to close to 2000%.

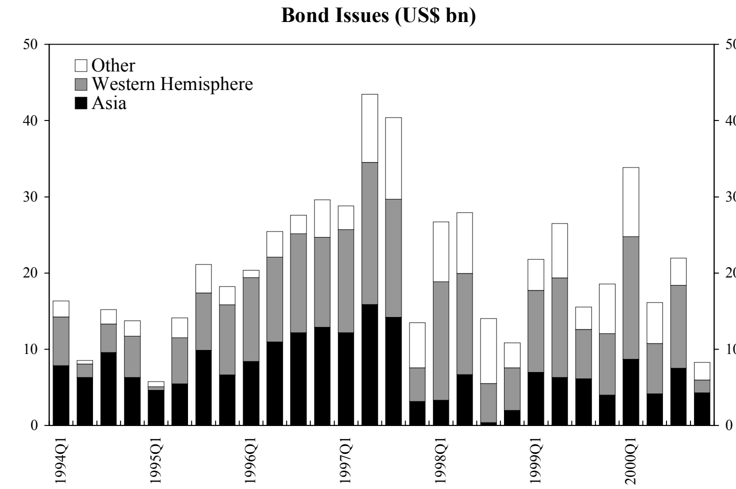
Capital Flows and Interest Rates



From the onset of the crisis until the announcement of the SRF on December 6, **external debt spreads widened** by 174 bps, **trading in T-bills came to a virtual halt** in the absence of buyers (yields at around 90% compared to mid-30% in early November), and the **equity market lost over 35%**. In all, Turkey lost close to $7 bn of reserves, of which roughly two-thirds is estimated to be attributable to foreign investors, bringing gross foreign exchange reserves to $18.3 bn.

Tensions in financial markets eased considerably following the announcement of the Fund-led program ($10 bn), with subsequent foreign exchange outflows relating to the need for Turkish banks to close positions by year-end rather than a fear of devaluation. The advent of the New Year witnessed a substantial easing in liquidity due to renewed foreign exchange **inflows**, which **reached $4 bn** (through January 29), bringing gross reserves to $26.3 bn (including IMF disbursements), above pre-crisis levels, and leading to a sharp reduction in overnight rates. Domestic debt has experienced more modest gains, with the yield of the benchmark bill down to around 52%, while external debt is trading at a spread of 693 bps (Jan 26) compared to roughly 630 bps pre-crisis.

narrowed only in Ecuador and Russia (by 1,938 bps and 1,260 bps respectively), as they benefited from successful bond exchanges and higher oil prices. Nigeria's spread widened the most (+699 bps) while spreads for Turkey, Colombia, and the Philippines, all widened by more than 300 bps. Despite a **poor total return** (1.7%) **during the fourth quarter**, even in the face of large capital gains on underlying Treasuries (5.2%), **for the year as a whole, emerging debt markets were the best performing asset class**, outperforming other fixed income classes as well as emerging and US equity markets. **Russia and Ecuador achieved total returns of more than 50%**, while only the Philippines (-4.4%) and Turkey (-1.7%) posted negative returns.



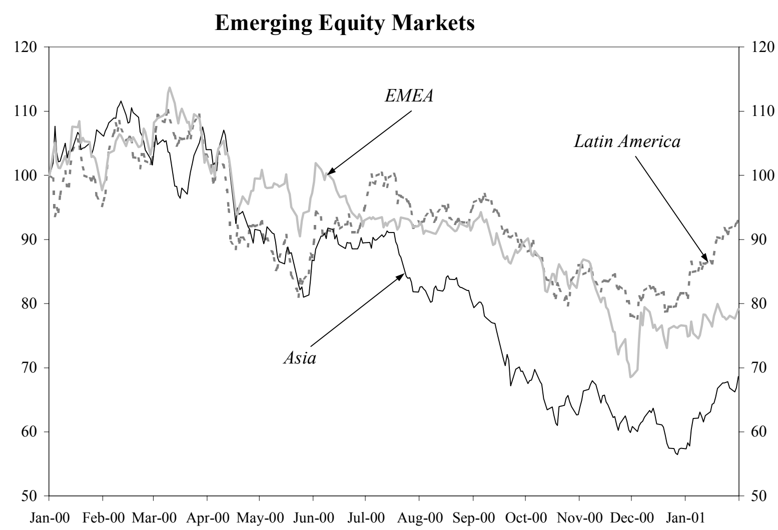
Emerging markets **issuance dropped off sharply** from $23.9 bn in the third quarter to $9.0 bn in the fourth, a **quarterly low not seen since the Tequila Crisis** in 1995. **Monthly issuance** of $0.8 bn in December was the **lowest since the Russian crisis**. Among sovereigns, only Lebanon issued a dollar-denominated eurobond during the quarter, though, as has traditionally been the case, this was aimed at, and purchased almost entirely by, local banks. Turkey and Brazil both issued in the **Samurai** market, while Malaysia successfully issued its first **euro-denominated** bond (€650 mn), again highlighting the **importance of these markets as an alternative source** of funds in times of pressure in the (much larger) dollar market. Reflecting the loss in market access for many key Latin sovereign and corporate issuers, **Asian issuance dominated** the quarter (48.5%), as many corporates from the region continued to raise capital **in the form of convertibles**. **For the year as a whole,** despite the depressed fourth quarter, **total bond issuance matched 1999 levels**, largely reflecting the record post-Y2K quarterly issuance in the first quarter of 2000.

The external environment dominated allocation decisions of the investor base during the quarter. **Many crossover investors that could withdraw from emerging debt markets, did so**. Similarly, **dedicated** emerging market fund managers **adopted defensive positions** by going underweight high headline risk countries and increasing holdings of cash. Subdued issuance during the fourth quarter, while amortizations on outstanding emerging market bonds continued to be collected, saw dedicated investors **accumulate cash cushions not seen since the Russian crisis**.

Following the **Fed's interest rate cut** in early January, emerging debt markets **rallied across the board**, with the EMBI+ spread tightening 97 bps to 674 bps, and **primary markets reopened**. On secondary markets, the **main beneficiary** was **Argentina**, whose spread narrowed so that it is **now trading at a lower spread than either Brazil or the EMBI+** for the first time since last October. On primary markets, by January 29, $11 bn was issued by emerging markets, slightly **exceeding the record post-Y2K boom issuance level last year**. Brazil and Mexico came to market with $1.5 bn eurobonds, followed by some large corporate issues from Telmex ($1 bn) and Hutchinson Whampoa ($2.5 bn convertible). In the euro-denominated market, Brazil's €1 bn eurobond issue was followed by a number of smaller sovereigns, Colombia, Jamaica, Romania, and Poland. In the last week, Turkey in its first issue since the crisis, placed a €500 mn 3-year eurobond. Issuance from Argentina took the form of two smaller sized euro denominated bonds from the Province of Buenos Aires and Banco Hipotecario.

C. Emerging Equity Markets

Emerging equity markets (-13.5%) **continued to underperform their counterparts in the mature markets** (Dow 1.3%, S&P 500 –8.1%) in the fourth quarter of 2000, but **substantially outperformed the Nasdaq** (-32.7%). For the third consecutive quarter, emerging Asia was the worst performing region (-17.3%), though losses were also significant in emerging Europe, Middle East and Africa (EMEA) (-14.3%), but less so in Latin America (-8.5%). The decline across emerging markets during the quarter was broad-based, with all the major emerging equity markets falling, with the exceptions of Poland (18%) and the Czech Republic (7.2%).



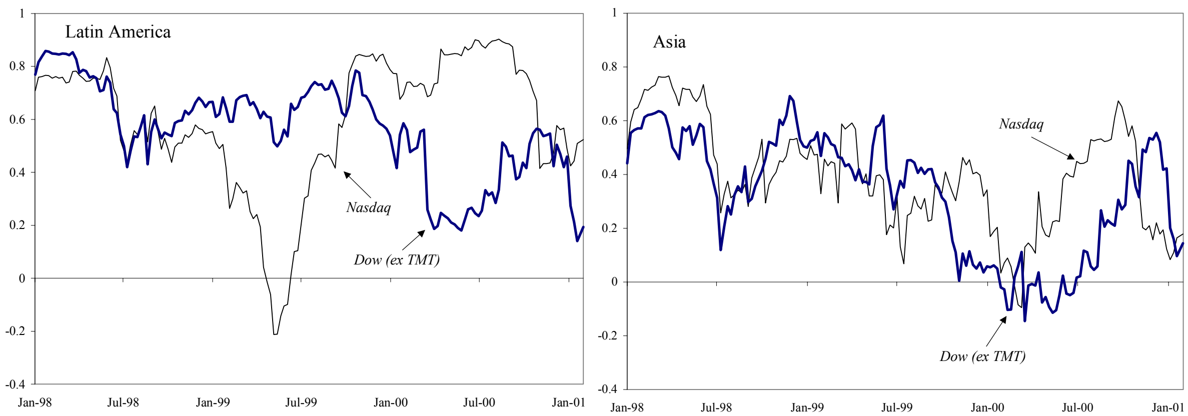
Q4, 2000	Market Change (qoq, in %)	TMT Change (qoq, in %)	Contribution of TMT (in % points)	Contribution of TMT (% of total)	TMT Share (%) (as of 9/30/00)
MSCI US	-8.7	-39.4	-10.8	**125**	27
MSCI EMF	-13.5	-23.2	-7.7	**57**	33
Asia	-17.3	-24.9	-10.9	**63**	44
LatAm	-8.5	-16.7	-4.3	**50**	26
EMEA	-14.3	-19.6	-5.7	**40**	29

The **global downgrading of TMT stocks reverberated through** the emerging markets, which have substantial concentrations in the sector. Declines in the **TMT sector were responsible for at least half, and up to two-thirds in Asia, of the decline** in emerging equity markets during the fourth quarter of 2000 (see table). Unlike the mature markets, however, where declines in the TMT sector (more than) accounted for all the losses in the broader equity markets, the sector **did**

not account for all the losses in the emerging markets, indicating the **role of other factors**, in particular the perceived **vulnerability of emerging markets to a global economic slowdown** combined with negative news about domestic fundamentals in some countries.

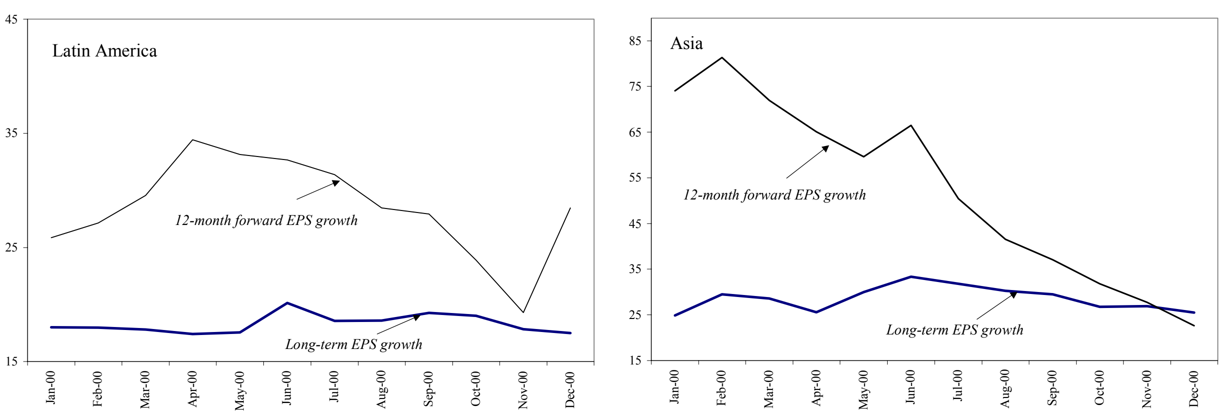
The importance of **factors other than the global downgrading of the TMT sector** in impacting returns on emerging equity markets is also **indicated by** a sharp **decline in the correlation of returns with the Nasdaq** during the quarter (see charts below). On the other hand, the correlation of returns **with the Dow** (ex TMT) **increased** moderately during the quarter.

Correlations of weekly returns between regional and US Equity Markets, 1998-2001



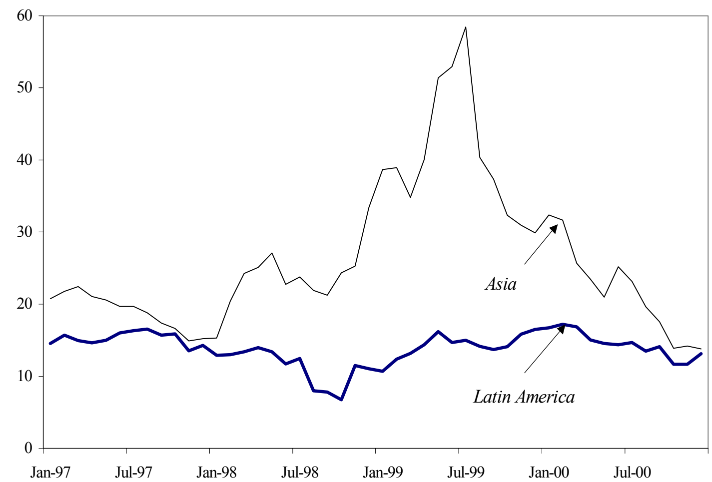
Expectations of the global slowdown were reflected in **downward revisions to forecast earnings growth in the emerging markets** (see charts below). In Asia, forecast earnings growth, as had been the case all year, continued to be revised down from unusually high levels reflecting the recovery from the crisis, to long run levels. It is notable, though, that by December 2000, (12-month) forward **earnings growth in Asia was being forecast to fall below long-term levels**. In Latin America, the pattern was less clear cut, with the sharp downward revisions in October and November being reversed in December.

Forecast Earnings growth

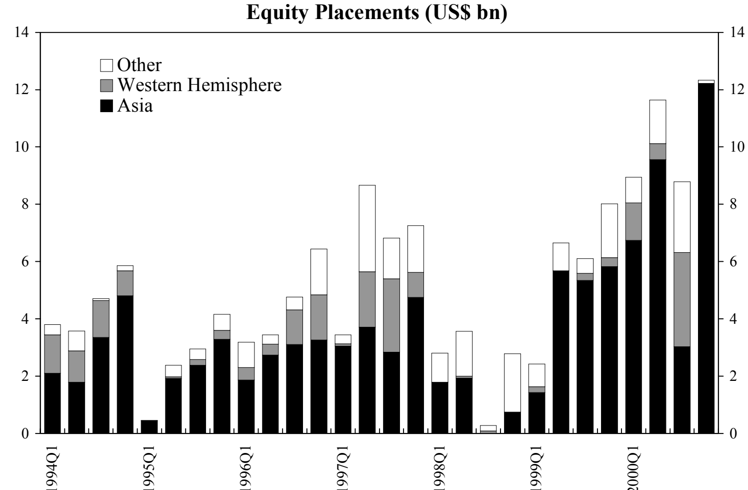


The sharp decline in **Asian equity markets** during 2000 brought **valuations**, as measured by trailing price earnings (P/E) ratios by December, to levels at or **below those seen at the time of the Asian crisis** in November 1997. Though Latin America has historically been more closely tied to changes in US growth expectations, this time around markets clearly perceive **Asia as relatively more vulnerable to the downturn in global demand** since recovery from the crisis during 1999-2000 was in considerable part export-driven, and a large portion of Asian exports to the G7 countries are TMT-related.

12-month trailing P/E ratios



Equity Placements (US$ bn)



Despite the dismal performance of emerging equity markets, and especially the TMT sector which has been an important driver of international **equity issuance, placements by emerging markets set a new record of $12.3 bn** in the fourth quarter of 2000. The surge helped take emerging market equity issuance for the **year as a whole to a new peak**. Jumbo privatization issues from China Petroleum & Chemical Corporation (Sinopec) ($3.5 bn) and China Mobile Ltd. ($6.9 bn) **were responsible for the majority** (85%) **of issuance in the quarter, and issues from China a substantial portion** (50%) for the year. China Mobile's equity issue was the **largest ever equity capital placement from non-Japan Asia**, beating the previous record set by China Unicom ($5.7 bn) in the second quarter of the year. Both the Sinopec and China Mobile deals in the fourth quarter were oversubscribed and **advance orders were secured from strategic investors** (around 50% of the shares offered by Sinopec were sold to Exxon, Amoco and Royal Dutch/Shell and $2.5bn out of $6.6 bn worth of China Mobile's shares were taken up by Vodafone). Investor interest in issues from China has been driven by a **variety of factors**: the view the country would be **relatively immune from a global slowdown** as growth has been domestic-demand led; the **"WTO bet"**; jumbo issues have been attractive to institutional investors because of their **liquidity**; and the participation of **strategic investors** in many of the issues.

Following the **Fed's rate cut in early January**, **emerging equity markets rallied strongly,** gaining 13.7% to date, with markets in Argentina, Korea, the Philippines, Taiwan Province of China and Thailand up over 20%, whereas China, Mexico and Russia are up between 15-20%. Though country-specific factors, such as the rise in financial stocks in Thailand following the new government's plans to accelerate debt restructuring played a role, the **broad-based rally indicated concerns about slowing global demand were moderating** and/**or being more than offset by the impact of declines in discount** (interest) **rates**.

D. Syndicated Lending

The syndicated loan **market remained robust for emerging markets** in the fourth quarter, despite increased credit concerns by banks, which saw a marked tightening in bank lending standards in the US. The overall volume of **lending increased** from $20.4 bn in the third quarter to $27.8 bn in the fourth, buoyed as we anticipated last quarter by lending to sovereign or quasi-sovereign entities. Despite the concentration and credit fears about the telecom sector in mature markets, telecom-related lending to emerging markets remained robust, and high oil prices continued to spur deals in the oil and gas sector. For the year as a whole, **syndicated lending in 2000 amounted to $93 bn**, well above levels in 1998 and 1999 and **only somewhat below the record 1997 level**.

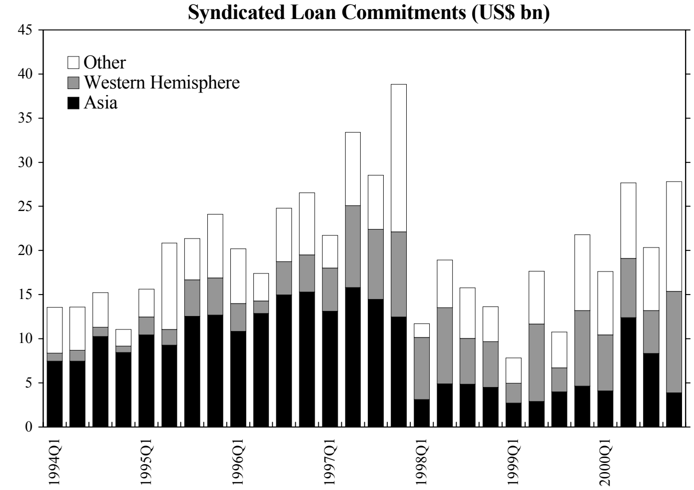
Box 3. Redefinition of Aggregate Loan Volumes

As of this quarter we are redefining our aggregate of internationally syndicated term loans for emerging market borrowers. We now **include only loans in the major international currencies** and **exclude those in local emerging market currencies**. Historical data reported have accordingly also been revised.

There has been a notable increase in reported "internationally" syndicated loans in local currencies. While international banks do participate in these syndications to varying degrees, and cross-border flows would best be captured by adjusting these on a pro rata basis, the definition adopted here retains the benefits of simplicity and ease of reproducibility. We note that it produces a systematic underestimate of internationally syndicated loans to emerging markets.

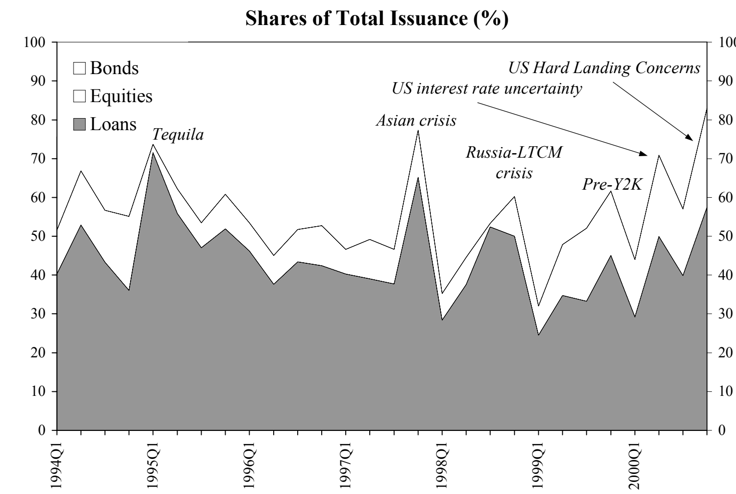
In terms of regional composition, the **share of borrowing by emerging European countries picked up** in the fourth quarter of 2000. Syndicated lending to Turkey amounted to over $3.6 bn despite the crisis, with domestic banks being particularly prominent borrowers. Elsewhere, Russian corporates received over $2 bn in oil and gas-related deals, while a Polish telecom deal amounted to over $1.8 bn. Latin America also gained relative to Asia in the quarter, with Chile ($3.7 bn), Mexico ($3.4 bn) and Brazil ($2.1 bn) receiving the largest shares.

Syndicated Loan Commitments (US$ bn)



Robust volumes in the fourth quarter **reflected**:

- Banks taking a "longer term" view of the credit quality of borrowers, performing what we have referred to in the past as the **lender-of-next-to-last-resort function**. As illustrated by the chart, syndicated lending as a share of total emerging market financing on international capital markets has risen sharply around each of the emerging market crises and in the run up to Y2K. As previously noted, Q2 2000 also witnessed a spike in the share of syndicated lending relative to bond and equity financing associated with the volatility in mature equity markets and US interest rate uncertainty. Again in the fourth quarter, syndicated lending spiked in the context of the sell off in US High Yield and Argentina- and Turkey-related concerns.



- A **spate of sovereign loans** in the quarter, amounting to a total of $2.8 bn. Of note, the Republic of Turkey borrowed $1 bn, the Philippines $400 mn, Qatar $400 mn, Croatia $400 mn, Colombia $250 mn, Thailand $175 mn, and Romania $138 mn. Despite the prominence of sovereign activity in the fourth quarter, the jury is still out as to whether this pickup forms part of a broader trend or whether the confluence of a large number of many lumpy deals in the quarter was purely coincidental.

- An **increase in lending to the telecom sector**. Contrary to expectations, international banks increased their emerging market telecom exposures through year-end, despite a heightened awareness of the concentration of credit exposures to the telecom sector in mature markets. Interestingly, Asian telecoms are generally considered a defensive play, reflecting the fact that operators have high government shareholder participation and are thus viewed as quasi-sovereign credits. Elsewhere, banks' exposure to the telecom sector primarily involved financing or refinancing second generation GSM licenses, or was related to the privatization of fixed line operations unlike in the mature markets where the primary focus has been the financing of Universal Mobile Telecommunication System (third generation) licenses.

- Continued high **prices of oil and natural gas**, which provided further impetus to lending to the sector. Russia's Blue Stream Pipeline secured close to $2 bn, Mexico's PEMEX borrowed $625 mn, while in the Middle East, Oman Gas Company and the state of Qatar obtained funding amounting to $410 mn and $400 mn, respectively, for oil and gas-related deals. Elsewhere, improved perceptions of credit quality related to high oil prices, enabled Argentine, Brazilian, and Libyan, corporates to come to market.

As noted above, banks stepped in during the fourth quarter of 2000, performing a lender-of-next-to-last-resort function. They did, however, **step back from Argentina** where heightened credit concerns (see box 1) led to a drying up of lending early in the quarter. Notably, lending to Argentine corporates only resumed following the turnaround in investor sentiment that began November 10. Even then, in at least one case, the deal was downsized (to $75 mn from $140 mn), and completion was contingent on the use of political risk insurance. In **Turkey**, the recent liquidity crisis (see box 2) cast a **shadow over the loan market's blanket approach** to lending to Turkey's financial sector. The crisis came at a time that syndicated loans to Turkish financial institutions and corporates had been massively oversubscribed, in some cases more than doubled, and at a time that loan spreads to Turkish banks had declined to pre-Asian crisis levels. While the better credits continued to obtain funding in the loan market, international banks appear to have become more discriminating, notwithstanding the government's guarantee of Turkish banks' liabilities. In fact, the **Euroloan market remained resilient** in the midst of the crisis, with numerous syndications to top tier (or their sister) banks being completed. In addition, $1.6 bn in financing for a power generation project was syndicated, though with 90% export credit agency cover.

III. Staff Appraisal

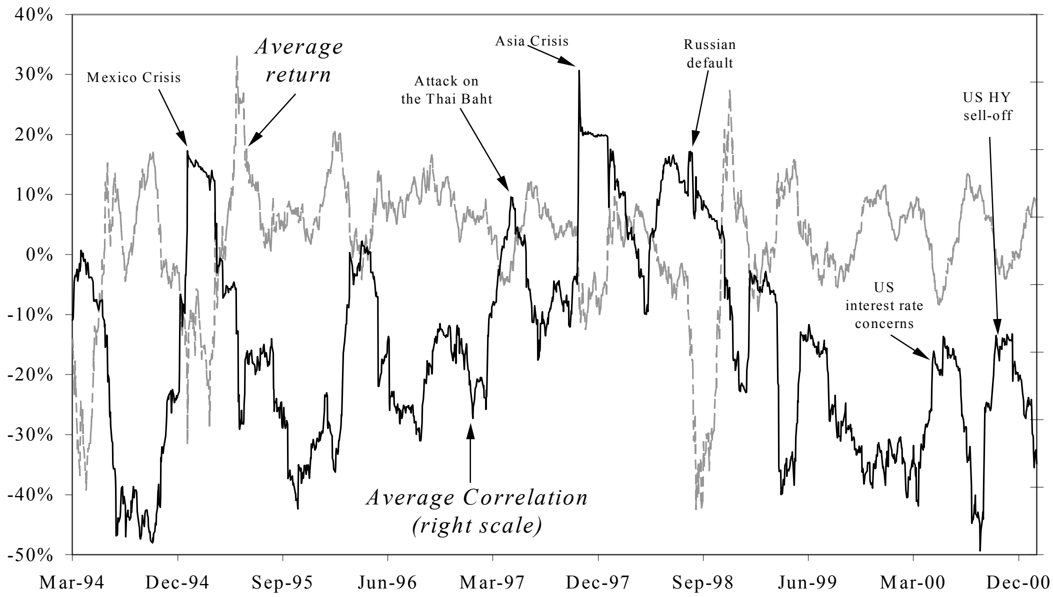
In past quarterly reports we have discussed the fact that **emerging markets remain an "opportunistic" asset class**, with the investor base dominated by **"crossover" investors** from other asset classes. We have emphasized that this aspect of emerging markets has made them particularly **vulnerable to booms and busts**, sometimes causing, and always exacerbating, cycles. During these (several) episodes of large swings, secondary market asset prices have often reflected what many observers have characterized as **indiscriminate behavior**, with investors distinguishing little among individual credits, instead lumping countries in the asset class together. **Primary markets** have similarly exhibited a tendency to **close abruptly**, with issuers forced to wait for, and exploit, "windows of opportunity."

The last quarter saw the second episode in the year of a sharp across-the-board sell off in emerging debt markets, which some observers viewed as **"contagion"** across the emerging markets emanating from Argentina. The last quarter also saw two **periods of closure** of the emerging debt markets to new issues, bringing the total for the year to three such periods. We analyze below these two related facets of emerging market financing. First, we examine the comovement (cross correlation) of individual country returns on emerging debt markets. The magnitude of such comovements provides an indication of the extent of **investor discrimination** among emerging markets. Relating the measure to the timing of external and individual country developments helps shed light on the **causes of the broad-based sell offs** in emerging debt markets last year and, especially **in the last quarter when a deterioration in the external environment coincided closely with individual country concerns**. Second, we **characterize periods of drought in emerging debt markets**. We then discuss the outlook and risks for emerging markets financing on international capital markets.

A. "Contagion" and Discrimination in Emerging Debt Markets

There are a number of methodologies one could use to examine the comovement of country returns as has been done in the now vast literature on contagion. The chart below presents one simple measure. It reports the **average** (unweighted mean) **cross-correlation of daily returns of the key constituent countries of the EMBI+** benchmark index since its inception at the beginning of 1994, and the average (unweighted mean) country return, both with a 50-day window. A high average cross-correlation indicates investors are either broadly buying *or* selling across all emerging market credits.

Emerging Debt Markets: Average Return and Correlation



What do the cross correlations indicate? Periods of broad-based selling or buying of emerging markets are **consistent with a number of factors**: investor reactions to developments in **common** (the same) **individual country fundamentals**; **real and financial linkages** across countries; **common external shocks**; and **investor discrimination** or lack of it. The magnitude in and of itself cannot establish the individual contributions of these factors. However, note that in contrast to the EMBI+ index which is a market-cap weighted index of emerging market spreads and is, by construction, highly concentrated in the major credits (Brazil, Argentina and Mexico, the top three, account for around two-thirds of the index), the average cross correlation we construct is calculated as an *un*weighted average of the 36 cross correlations among nine major emerging market credits (Argentina, Brazil, Ecuador, Mexico, Panama, Peru, Venezuela, and Poland and Russia), so that a **reasonable degree of diversity in individual country fundamentals** can be expected at any point in time. It is unlikely, therefore, that common individual country fundamentals have a major impact on the measured cross correlation across all emerging markets. Similarly, the **impact of real and financial linkages should be ameliorated** by the presence of Russia and Poland alongside the major Latin countries. Note that of the 36 cross correlations that are averaged at each point in time, the cross correlation of returns on Russia and Poland with other countries represent 15 (42%) of them.

This leaves, in our view, **common external factors and lack of investor discrimination as key potential explanators** of high cross correlations of returns. With regards to the impact of common external factors, one would expect similar qualitative reactions to particular external shocks. For example, an increase in US interest rates can be expected to be accompanied by a widening of emerging market spreads. One would expect, however, investors to discriminate between countries on the basis of individual countries' respective vulnerability to such shocks. To continue the example, the relative impact of a rise in US interest rates should be determined by the extent to which a country needed to borrow on international capital markets and how closely tied its exchange rate was to the US dollar (which would determine the impact on domestic interest rates). Common external shocks that impact all emerging markets the same way should raise the average cross correlation, but one would hope—in a world of discriminating investors—not unduly so. Finally, in interpreting the chart, note that the length of window chosen affects how long the correlations persist. Therefore, it is upward movements in the measure, rather than how long they persist, that have information.

There are several **notable features** of the chart:

- The average **cross correlation has always been positive**, with a mean value during 1994-2000 of 0.51, suggesting a **substantial tendency for returns on individual countries to move together**.

- The high mean cross correlation over the sample reflects **large spikes associated with the major emerging market crises**: the Tequila in early 1995 (when the average cross correlation reached 0.8); the attacks on the Thai baht in early May 1997 (0.72); the October 1997 Asian crisis (0.92); and the Russian default (0.82).

- Individual country returns have tended to **move in sync** (cross correlations rise) **during bad times** (when returns are low or negative), **but considerably less so during market rallies** (when returns are positive). This suggests ***less* investor discrimination during sell offs**. This is consistent with the **"crossover" nature of the investor base which tends to head for its home markets—out of the asset class—in the face of bad news**, **rather than seeking refuge in the better credits within the asset class**. The asymmetry is also consistent with **leveraged position taking**, where losses prompt margin calls and broad-based liquidation across the asset class, but gains do not.

- The average cross **correlation has fallen off substantially since the crises** of 1997-98. At the time of the floating of the Brazilian *real* in January 1999, for example, the peak occurred around 0.6. **High correlations of asset-price movements across the emerging markets** during the crises of 1997-98 wreaked havoc on value-at-risk models employed by international financial institutions and investors. The substantial losses these high correlations inflicted prompted a revaluation of the benefits of portfolio diversification across the emerging markets, and **contributed to reductions in total capital** devoted to the asset class. The **systematic decline in cross correlations since the crises has been encouraging since it suggests increased potential for diversification between emerging markets** and could encourage increased allocations to the asset class. We see three factors as having played a role:

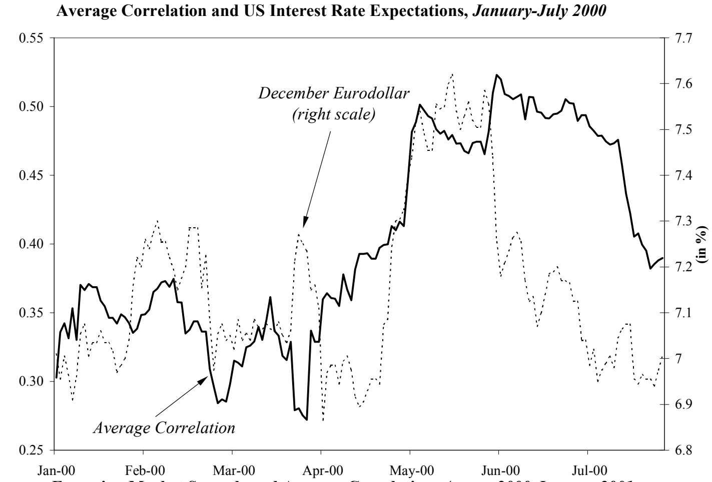
- o **Leverage among the investor base has diminished since the Asian and Russian crises**, so that the need for across-the-board liquidations in response to margin calls due to losses in the face of bad news have been fewer.

- o The **upgrade of some countries** in the EMBI+—such as Mexico—**to investment grade** has increased the two-tier system which has always been a feature of debt markets. This has, in principle, increased the diversity of the overall investor base for emerging market debt as the **proportion of high grade investors has gone up**. An increased diversity of the investor base, with segments responding to different conditions in different home markets, should be expected to result in divergent behavior.

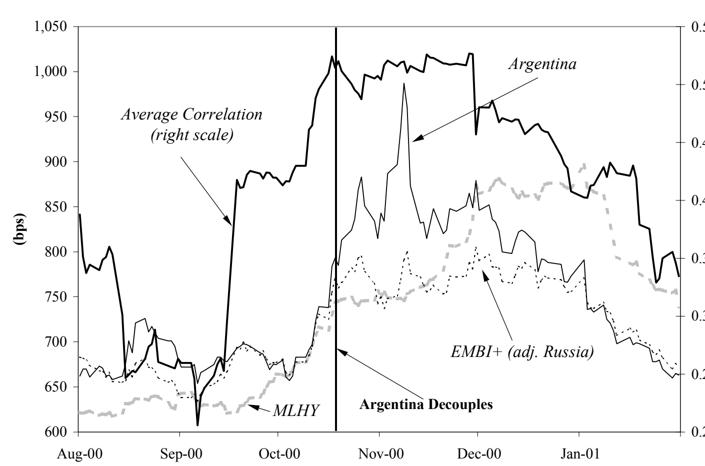
- o Finally, there has **not been a "full-blown" crisis in a major emerging market for some time now**. It remains an open question how high the correlations would go if there were another full-blown crisis in a major emerging market.

- There were **two spikes** in the average cross correlation **in 2000** (see charts which provide a blow-up of these two episodes). These spikes were also noticeably lower (around 0.53) than seen previously. Looking in more detail at them, the **first episode coincided closely with revisions to expectations of US monetary policy**, suggesting they played the **key role**. During the **second episode**, a variety of factors coincided relatively closely with the sell off in Argentina. **Was there contagion from Argentina to other emerging markets?** As discussed above (see Box 1), the

Average Correlation and US Interest Rate Expectations, *January-July 2000*



Emerging Market Spreads and Average Correlation, *August 2000-January 2001*

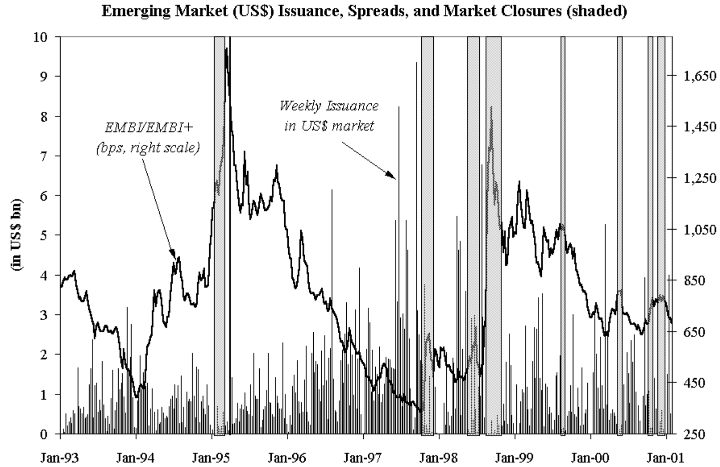


deterioration in the external environment preceded the buildup of investor concerns about the sovereign to a critical level. Again viewing investor concerns about Argentine specific risks as captured by its spread relative to the EMBI+, it is notable that **by the time Argentine spreads rose above the broader market, the average cross correlation had already risen**. Note that in this second episode, there were two phases. The first (with the correlation rising from 0.2 to 0.44) can be identified with concerns about Peru, the pricing in of a global slowdown, and the Chase-JP Morgan merger. We identify the second phase (with the correlation rising from 0.44 to 0.53) with the sell off in US high yield. **As Argentine concerns then grew** (peaking on October 25 and then again on November 9), the **average correlation remained relatively flat**. The evidence, therefore, suggests **"contagion" within the emerging debt markets preceded the buildup of particular concerns about Argentina to a critical level** and was in **response to the deterioration of the external environment** discussed above.

B. Droughts in Emerging Bond Markets

The emerging **debt market has been by far the largest provider of** (gross and net) **financing to emerging markets in the 1990s**. It has, however, been a **volatile source** for fundraising, with a salient feature being **periods of abrupt closure** (see chart).

Emerging Market (US$) Issuance, Spreads, and Market Closures (shaded)



There are a number of ways in which one could define market closure. Allowance needs to be made for deals in the pipeline that get completed anyway, and for a variety of special factors relating to the issuer or aspects of the investor base that allow certain borrowers to make placements in the worst of times. After examining the frequency distribution of weekly emerging markets debt issuance, we define weeks of market closure as ones where the issuance level is less than 20% of the period's trend issuance level. Excluding seasonal slowdowns, such as at year-end, we **identify nine periods of market "closure" since 1993** (see table). **Key features** of these periods are:

US Dollar Market Closures for Emerging Market Debt, 1993-2000

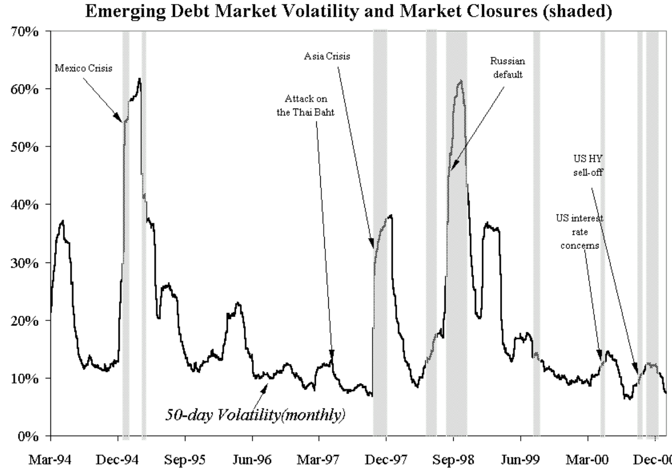
Event	Start	End	Duration (weeks)	EMBI/EMBI+ Spreads (weekly in bps) Min	Max	Average
Mexico Crisis	1/9/95	2/10/95	5	1,131	1,266	1,195
Tequila Crisis	3/20/95	3/24/95	1	1,627	1,752	1,690
Asia Crisis	10/13/97	12/5/97	8	341	640	500
Pre-Russia Crisis	5/18/98	7/3/98	7	497	666	559
Russia/LTCM Crisis	8/10/98	10/30/98	13	662	1,524	1,143
Argentine Debt Relief Concern	8/9/99	9/3/99	4	1,014	1,067	1,044
US Interest Rate Uncertainty	5/8/00	5/19/00	2	752	806	788
US High-Yield Crisis	10/9/00	10/20/00	2	678	766	725
Argentina and Turkey Sell-Offs	11/13/00	12/15/00	5	763	790	776

- The **duration of market closures has varied** substantially, from one relatively brief period of 1 week (at the time of the Tequila) to the most severe and prolonged drought of 13 weeks (at the time of the Russian crisis).

- The **first five droughts in emerging market international bond issuance were associated with episodes of emerging market crises** or uncertainties in the periods building up to them (such as the drought that preceded the Russian crisis). But there have been **droughts even in the absence of emerging markets crises**. There have been **four droughts since** the Russian crisis, three of them **associated with developments in the external environment**. These have not been as long as those associated with the severest crises, though at 5 weeks the most recent drought compares with that at the time of the Mexican crisis. **Spread widening during these most recent episodes has been notably less pronounced**.

- There is a surprising **lack of a clear relationship between the average *level* of emerging market spreads and droughts in emerging markets issuance**. At one extreme, the spread on the EMBI+ averaged around 1700 bps during the brief 1 week closure at the time of the Tequila. At the other, the EMBI+ spread averaged only 500 bps during the 8 week drought brought on by the Asian crisis.

Emerging Debt Market Volatility and Market Closures (shaded)



- However, periods of **market closure occur during or following periods of rapid spread widening**, and **market volatility** has been a key factor in market closures (see chart), with markets having a **tendency to reopen when spreads stabilize or narrow**.

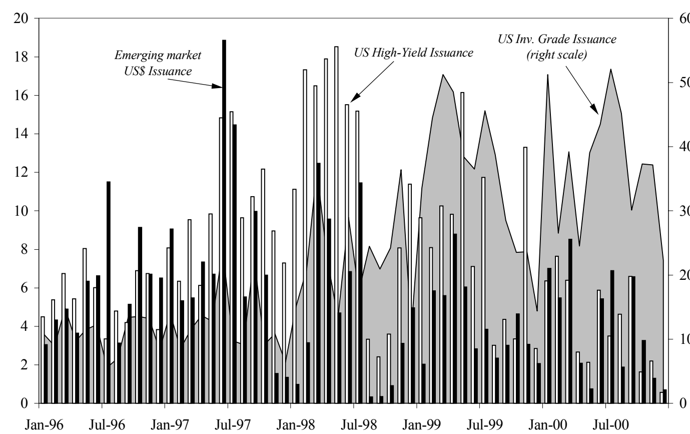
- While there has **typically been a key discrete event that closes the markets**, there has typically ***not* been a clearly identifiable discrete event that reopens them**.

- The last two characteristics are consistent with the following **dynamic**. A discrete event, such as a crisis in a major emerging market or a change in the external environment, that causes **a sharp change in spreads, prompts issuers and investors to wait before issuing**. While issuers are loathe to lock in higher rates, investors are concerned about taking mark-to-market losses on new issues if spreads widen further. Whether or not the outlook is worse, a resolution of the uncertainty about that outlook appears key for a reopening of the market. That is, issuers tend to accept higher borrowing rates with time, and once investors become convinced things will not worsen they become willing to buy. **Volatility of the secondary markets is, therefore, key to market closures, and its**

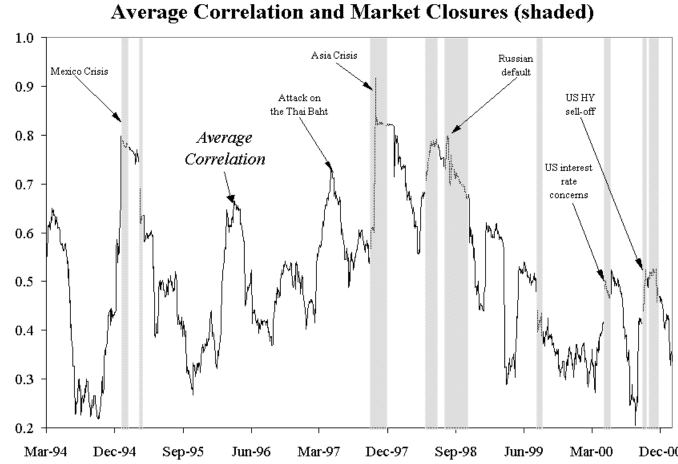
dissipation key to reopenings. Financial **innovations to bridge the issuer-investor gap** created by uncertainty have been successfully tried in the past, such as Argentina's floating, auction determined, spread notes which helped reestablish emerging market access following the Asian crisis, and the use of warrants following the Russian crisis. Such innovations have not, though, been adopted widely suggesting a revealed **preference by markets for waiting out periods of uncertainty**.

As one would expect, droughts in issuance have **also been a feature of other lower-tier credit markets** such as the US high yield market, but **much less so of the high-grade market** (see chart above). Conditions in the US high grade and high yield markets—**the "external issuance environment"—has played a clear role** in determining the receptiveness for emerging market issues. At the time of the Brazilian crisis, for example, while emerging market issuance fell markedly, US high-yield issuance remained stable, setting the stage for early re-access, and the slowdown in issuance at the time does not in fact qualify as a drought under our definition. The chart also shows that the most **recent period of closure of emerging debt markets coincided with very low issuance in the US high yield market. Both reopened following the Fed's surprise cut in January**.

Bond Issuance (in US$ bn)



Average Correlation and Market Closures (shaded)



Finally, **droughts in emerging markets issuance** have been **closely associated with spikes in the average cross-correlation of individual country returns** discussed above as a measure of indiscriminate investor behavior, that is, **periods of broad-based selling of emerging market debt in secondary markets** (see chart).

C. Outlook and Risks

The **outlook for emerging market assets and financing remains**, as it has in the last three quarters, **inextricably linked to developments in the external environment**. A key question is **whether the effects of an easing of monetary policy in the US will outweigh concerns about, or actual further, slowing**. Following the continued deterioration of the external environment (global earnings slowdown, downgrading of the TMT sector, deterioration in US credit markets) during the fourth quarter, the **surprise cut in US interest rates in early January helped reopen emerging debt markets** for new issuance, and **equity markets rallied**. While the **reaction** of financial markets has **so far been positive**, suggesting the **effect of interest rate cuts is offsetting** the impact of lower growth, substantial **uncertainties remain about the speed and magnitude of a slowing in the US** economy. These uncertainties suggest the **durability of current emerging markets access** to international capital markets **remains fragile**.

Going forward, we would concur with the well-known view that there are two **scenarios:**

- Financial markets continue to see a relatively **"soft" landing** in the US, or at least that Fed easing will be sufficient to avoid more than a brief, shallow recession before inducing a **turnaround** in the economy.

- The present **slowing growth cycle worsens** into a **"hard" landing** for the US economy with output falling sharply and markets perceiving Fed easing as insufficient, possibly because of constraints posed by poor inflation performance or a depreciation of the dollar.

Changing expectations on the relative probabilities of the two scenarios unfolding are **likely to keep markets volatile**. In our view, the **broad implications of these two scenarios** for emerging market assets and financing are as follows. Under the **first, external financing conditions for emerging markets will continue to ease** and—as shown above, history indicates—there will be **increased discrimination between countries viewed as the better performers**. Under the **second scenario**, **external financing conditions are likely to tighten for emerging markets**. In a hard landing scenario, we see the impact on emerging debt markets of **investors moving up the credit spectrum** dominating the impact of lower borrowing costs, widening secondary market spreads, and a drying up of primary markets to new issues, very much as occurred in March-April of last year and again in the last quarter. In equity markets, we see the potential for a sharp cyclical slowing in US productivity growth as sparking another downgrading of the long-term earnings **potential of the TMT sector**. Moreover, a sharp slowdown in US economic activity has implications for oil and commodity prices, with the former having been an important support for the net oil exporting emerging markets (60% of the EMBI+). An increased probability, or the unfolding of, **a "hard" landing in the US represents the greatest risk** for emerging market financing.

Beyond these broad implications, there are a number of issues specific to emerging bond, equity and loan markets that will impact secondary market performance and the volume of financing on international capital markets, which we discuss in turn below. Our **baseline outlook** for overall financing to emerging markets is predicated on the current external environment in financial markets continuing to prevail. We still see, however, **moderate bond financing flows** and **selective equity issuance** during 2001, with the **syndicated loan market remaining supportive**.

On emerging **bond markets**:

- Emerging market issuers, having learnt to **exploit windows of opportunity** and, when possible, to pre-finance, were **quick to come to market in January** following the Fed's surprise cut in interest rates, with some (Mexico) completing all, and others (Brazil, Poland) a significant part, of their financing needs for 2001 (see table). **Total financing by the major sovereign borrowers** on international capital markets this year is, however, **expected to fall**. With the multilateral assistance packages for **Argentina and Turkey** reducing required fundraising by the two largest issuers, sovereign issuance is estimated to decline this year to around 60% of last year's levels. With scheduled amortization payments doubling, **net sovereign issuance is set to fall** from $28.9 bn in 2000 to $6.9 bn.

Emerging Market Sovereigns' Financing Needs (in US$ bn)

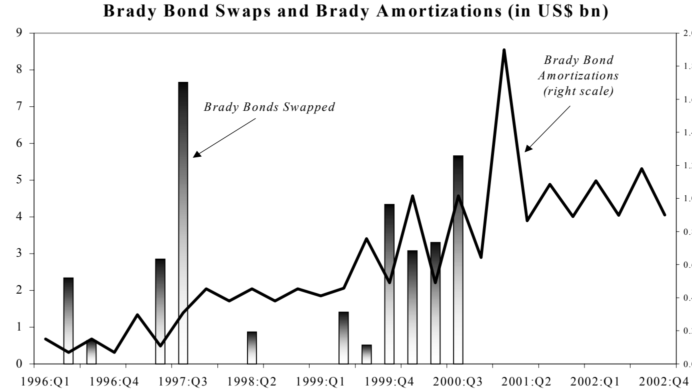
	2000		2001			
Countries	Amort	Issued 1/	Amort	Financing Needs (excl. prefunding) 2/	Issued YTD 3/	Covered
Turkey	1.5	7.5	2.6	5.8	0.5	8%
Argentina	3.7	9.7	5.4	5.0	1.0	20%
Brazil	0.3	8.9	3.4	4.0	2.4	61%
Mexico	0.7	4.9	1.4	1.6	1.5	96%
Colombia 4/	0.4	1.8	0.6	1.4	0.7	46%
Poland	0.3	0.6	0.2	1.1	0.7	64%
Malaysia	0.2	1.1	0.2	1.0	0.0	0%
Philippines	0.2	1.7	0.7	1.0	0.0	0%
Venezuela	0.8	0.5	0.9	1.0	0.0	0%
Other 5/	0.0	0.4	1.1	1.5	0.8	49%
Total	8.0	36.9	16.4	23.3	7.5	32%

1/ Excludes eurobonds issued in Brady bond swaps.
2/ Average of market estimates.
3/ February 2, 2001
4/ Does not account for $1.3 bn in World Bank guaranteed bonds.
5/ Includes Chile, Bulgaria, Panama and Russia.

- The rapid **growth of local corporate debt markets** in much of Asia, Brazil and Mexico, continued declines in the dedicated emerging market investor base reducing a natural source of international investor sponsorship, and continued investor aversion to TMT bond issues, have all **reduced the prospects for international corporate issuance**. The **main exception** is likely **Asian convertible bonds** as long as equity markets remain volatile.

- Liability management will remain an important focus for emerging market sovereigns in 2001. **Last year saw a record number of Brady-eurobond swaps**, which retired $12 bn of Brady bonds (see chart). There remain substantial incentives to carry out swaps: amortizations due on (remaining) Brady bonds are set to increase this year; swaps can be used to extend maturities; the potential for NPV savings; and the freeing up of collateral. These incentives, combined with the fact that financing needs of several sovereigns with large outstanding stocks of Brady bonds are moderate, suggest **Brady-eurobond swaps** (or outright buybacks) can be expected **to meet or exceed 2000 levels**.

Brady Bond Swaps and Brady Amortizations (in US$ bn)



- The **turmoil** of the last quarter **slowed** the shift by global fixed-income fund managers from benchmarking their performance against the Lehman Aggregate index (0.8% allocation to emerging markets) to the Lehman Universal (4% allocation to emerging markets), a **key positive structural change** for the emerging debt markets **investor base** we highlighted last quarter. The widely **expected upgrade of Mexico** by S&P to investment grade during the first half of 2001, however, is **likely to increase high-grade investor participation**. It will provide further impetus for the **rotation out of Mexican assets by dedicated emerging markets investors** and free up capital to the **benefit of the remainder of the emerging markets**. A key uncertainty about the **euro and yen investor bases**, which proved important "safety valves" for issuance in the dollar sector during 2000 stems from their **predominantly retail character**. Most observers see limits to these pockets of demand, and institutional investors, to be lured in, will likely charge higher spreads.

- Last quarter we discussed at some length links between the **US high yield** and emerging debt markets. We had pointed to the **risk of high grade and global fund managers reallocating portfolios towards the high yield sector as it becomes relatively "cheap."** This **risk materialized** in the fourth quarter of 2000. Nevertheless, the US high yield sector **suffered its worst performance since the 1990-91 blowup**.

- The fourth quarter saw **emerging market spreads** pulled wider along with US high yield spreads, then **subsequently saw them trade convincingly below them for the first time**. As both markets rallied following the Fed's interest rate cut in January, average emerging market spreads have remained below those in the US high yield sector. We

Box 4. Structural Increase in US High Yield Spreads?

Well known models[1] of US high yield spreads that have performed well in explaining past spread levels now **show record deviations** of predicted spreads below actual levels, allowing for the pick up in (projected) default rates, **suggesting structural changes**. There appear to be two key sources for this:

- With the acquisition of DLJ, the industry leader, by CSFB, **a decline in** (the combined) **capital devoted to market-making** caused spreads to widen. With the broad trend in the financial industry one of continued consolidation, few see increases in capital devoted to market-making in the near term (see, though, Box 5 below).

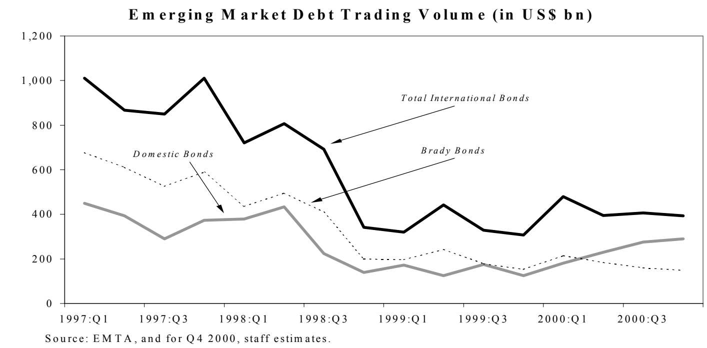
- The **composition of the US high-yield sector changed** during the last "easy money" cycle which peaked in 1997. Substantial numbers of startup and early stage tech and **telecom** companies, who would traditionally have relied on the venture capital market, raised money on the bond market. The increased importance of startup or "business plan" (only) companies in the debt markets means fewer recoverable assets in the event of default. That is to say, **recovery rates** in the event of default **may be much lower than the historical record** suggests. Lower recovery rates imply **higher required spreads** to compensate investors for the lower return.

[1] See M. Christopher Garman and Martin S. Fridson, "Monetary Influences on the High Yield Spread versus Treasuries," *Extra Credit*, July 1996, Merrill Lynch.

argued last quarter that **relative value** between the two asset classes was **highly subjective**. With reasons to believe the **US high yield market may be undergoing structural changes** (see Box 4), we view this **differentiation, with emerging market spreads trading below those in US high yield as appropriate**.

- **Does the recent rally in high yield imply the threat to emerging markets has diminished?** In our view, **on net yes**. We see recovery in US high yield, with fund managers from the sector an important source of crossover flows, as positive for the emerging debt markets. Structural changes that have raised the average level of US high yield spreads, however, are a source of pressure.

- A development of some concern is the **fall-off in secondary market trading volumes** (see chart). We estimate that during the fourth quarter of 2000, trading volume continued to decline. This trend has reflected a number of emerging market-specific factors such as declines in the stock of Brady bonds, and partly a wider trend in international financial markets since the Russian-LTCM crisis which have witnessed a decline in speculative capital (broadly defined to include hedge funds, proprietary trading desks of the major investment and commercial banks) and a **cutback in capital devoted to market-making**. To the extent these positions were, on average, net long positions, this has also meant reduced capital devoted to emerging debt markets, and implied a higher average level of spreads. We noted last quarter the announcement of the Chase-JP Morgan merger raised spreads on the view it would reduce liquidity in the emerging debt markets.

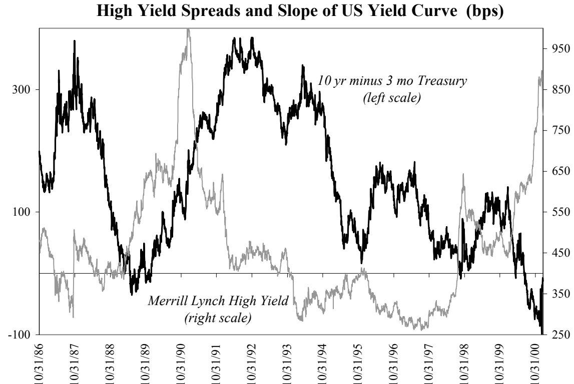


- With consolidation in the financial industry expected to continue, **does this mean further reductions in market-making capital to emerging debt markets, lower liquidity, and higher spreads?** In general, one would expect the extent of market-making capital devoted to emerging debt markets to be a function of the return and the risks. The slope of the yield curve provides an indicator of the cost of market-making and for leveraged (long) position taking. Box 5 shows that average spreads in the US high-yield and—to a lesser extent—emerging markets, bear a negative relationship to the slope of the yield curve. **A disinversion can be expected to lead to an increase in market-making capital devoted to emerging markets, and an increase in leveraged position taking**, and **should be positive for emerging debt markets**.

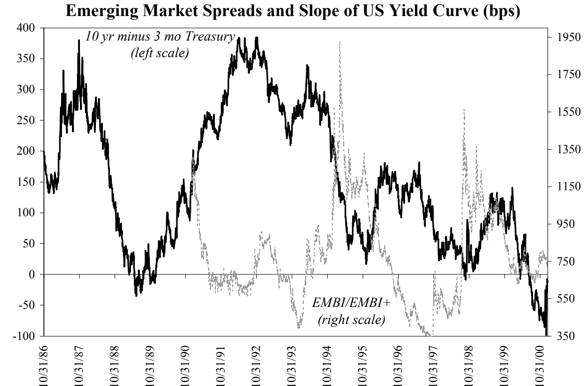
Box 5. The Slope of the Yield Curve and Credit Spreads

Credit spreads in the US high yield market over the last 15 years, and emerging markets in some periods reveal a **strong negative relationship with the slope of the US yield curve**.

High Yield Spreads and Slope of US Yield Curve (bps)



Emerging Market Spreads and Slope of US Yield Curve (bps)



While there are *at least* two key explanations for this negative relationship, the **recent** (almost) **disinversion is unambiguously positive** for emerging debt markets:

- The macro view argues a positively sloped yield curve indicates **expectations of economic recovery** or acceleration, with higher expected short-term nominal interest rates in the future being reflected in current longer rates. The yield curve is in fact often employed as a leading indicator of economic activity.

- The slope of the yield curve determines the **cost-of-carrying an inventory of** (typically longer-dated) **bonds for market-makers** and the **cost of leveraged (long) position taking** in debt markets. A disinversion will change the current "negative" "carry" (i.e. cost) to a "positive" (i.e., profitable) one.

On **emerging equity markets**, we see **secondary markets** continuing to be buffeted by developments in the mature, and especially the US, equity markets. We see, however, some **change in the relative importance of the transmission channels**:

- A global slowing in demand will lower corporate earnings, while lower interest rates act to lower discount rates. The rally in emerging markets since the Fed's rate cut in early January suggests the **impact of lower interest rates is dominating** concerns about a slowing in global demand. Emerging markets have gained also by the fact that emerging market **sovereign spreads have fallen** with declines in US interest rates

Share of TMT in Equity Market Capitalization (end of month, in %)

Date	US	Emerging Markets	Asia	Latin America	EMEA
March, 1999	29	22	18	28	26
March, 2000	40	39	50	36	29
December, 2000	27	33	44	26	28

so that international investors' **discount rates for emerging equities** should have **fallen by more than the declines in US interest rates**.

- As noted above and in past quarterly reports, the **TMT sector represents a larger component of emerging** than the mature equity markets. **Steep declines in the TMT sector globally** since March 10 last year when the Nasdaq peaked, have **significantly reduced the share of TMT** in both the mature and emerging equity markets (see table). The contraction has **reduced the importance of the direct sectoral link** as a channel for transmission from the mature to the emerging equity markets, and this is **borne out by the decline in correlations between returns in emerging equity markets and the Nasdaq** during the fourth quarter noted above. Despite the contraction in importance of TMT, however, the **share remains substantial**. While less so, emerging markets, therefore, **remain vulnerable to developments in the global TMT sector**.

- As anticipated last quarter, **Morgan Stanley Capital International** (MSCI) announced on December 10 its decision **to adjust its widely followed equity indices for the free float** of its constituent shares, i.e., those that could be traded easily, and increase the market coverage of its index series from 60% of market capitalization to 85% of the (free float-adjusted) market capitalization, for each industry group in each country. MSCI plans to publish the new inclusion factors for index constituents on or before June 30, 2001. As also expected, in order **to minimize capital flows generated by portfolio rebalancing** of fund managers benchmarked to MSCI indices (who are estimated to mange some $2-4 tn), the **changes will be implemented in two phases**, on November 30, 2001 and on May 31, 2002. As we argued last quarter, emerging markets are likely to lose as a result of these changes as they **typically have a lower free float** than mature markets, reflecting partial government ownership of former state enterprises, foreign ownership restrictions in many emerging markets, and cross shareholdings due to concentration of corporate ownership within family-owned conglomerates in others. Market estimates suggest a **reduction of the share of emerging markets in world indices** from 5.5% to around 4% in the ACWI free, implying **potential outflows from emerging equity markets of between $30-60 bn**.

- Equity issuance by emerging markets in the first two weeks of January was negligible, amounting to about $26 mn. The **2001 IPO pipeline**, especially in the telecom sector (issuers from emerging Europe and Asia) from emerging markets **is heavy**, with the outlook dependent on secondary market developments. The pipeline of **Chinese issuance**, which market estimates place at $30 bn in 2001, primarily from the petrochemicals and telecom sectors, is likely **to again dominate**. Asian companies as noted above are expected to persist with convertibles issuance.

We expect the **syndicated loan market**, **the largest provider of financing for emerging markets in the fourth quarter and in 2000**, the mainstay for (top-tier) corporates, and a notable source of sovereign funding in the fourth quarter, to continue to be **relatively resilient to fluctuations in global capital markets** of the order of magnitude observed in the second and fourth quarters of last year. The market is expected to remain supportive of emerging markets in early 2001 in the context of easier external liquidity following the recent cut in US interest rates. In the event of increased perceptions of, or an actual hard landing in the US economy, however, deteriorations in loan quality there would have implications for capital devoted to emerging markets. In performing its "lender-of-next-to-last-resort" function we expect the **share of loan financing to emerging markets to fluctuate inversely with international bond issuance**.