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Abstract

This Article analyzes the history from 1994-1999 of the secondary market in emerging markets debt, identifying the lessons learned from that period of market development. It pays particular attention to the increasing integration of the secondary market for emerging markets debt with traditional financial markets, and to the force for globalization that this secondary market therefore exerted in the period.
ARTICLES

A FORCE FOR GLOBALIZATION: EMERGING MARKETS DEBT TRADING FROM 1994 TO 1999

Ross P. Buckley*

INTRODUCTION

The secondary market in emerging markets debt is based in New York and London and grew out of the loan swapping among banks in 1983 in response to the debt crisis. The author has previously chronicled the development of the market from 1983 to 1993,1 and analyzed several of its aspects.2 This Article analyzes the market history from 1994-1999, identifying the lessons learned from that period of market development. It pays particular attention to the increasing integration of the secondary market for emerging markets debt with traditional financial markets, and to the force for globalization that this secondary market therefore exerted in the period.

I. THE MARKET'S DEVELOPMENT: YEAR BY YEAR

The year 1993 witnessed an extraordinary bull run in the

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secondary market for emerging markets debt. The bull market continued through the New Year into 1994 with the Salomon Brady bond index jumping an extraordinary 15.75% in January 1994. In that month there was a revolt in Chiapas, Mexico’s southernmost state, but the market’s upward trend barely hesitated, at the time, on this evidence of political instability. It was the risk of inflation to Mexico’s north, not ill-treated peasants in its south that was to end the bull run.

A. 1994: The Bears Growl

Notwithstanding the strong performance in January, by June 1994 the Salomon Brady bond index had fallen 33% for the year and loan prices had fallen further, with Russian and Peruvian loans down almost 50%. The magnitude of these price falls owed much to their inflated values at the end of 1993. The boom of 1993 had been fuelled in part by low interest rates in the United States that saw fund managers and other investors seeking higher returns in the emerging markets. The turnaround in this interest rate environment was the major factor in the market collapse of 1994. The other important factors were the excesses of 1993, particularly excessive leverage, and the political risks displayed in Mexico and Venezuela. Each will be considered.

1. U.S. Interest Rate Rises

On February 4, 1994, in an effort to curb potential inflationary pressures, the U.S. Federal Reserve increased short-term in-

3. See Buckley, Brady Plan, supra note 1, at 1867.
5. See Weeks, supra note 4, at 26. Other indices deliver slightly different figures: The LDCX, compiled by Finacor, which is an index of Brady bonds and value impaired loans, recorded a 26.6% drop between the peak in mid-January and the trough in mid-April, and JP Morgan’s Emerging Markets Bond Index, which is a total return index (so that it includes the high yields) of Brady bonds, recorded a drop for 1994 as a whole of only 17.3%. See Melvyn Westlake, Annus Horribilis, EMERGING MARKETS INVESTOR, Jan. 1995, at 14 [hereinafter Westlake, Horribilis].
terest rates. The rates continued to climb throughout 1994. As interest rates rose, U.S. Treasury bond prices fell accordingly, and emerging market bonds, which had for some time been priced at margins above U.S. Treasuries, fell precipitately. In 1993, this movement was exaggerated by the narrowing of the spread between emerging market and U.S. Treasury bonds: While the yield on the U.S. long bond declined some 104 basis points in 1993, the spread between it and emerging market bonds, on average, declined a dramatic 413 basis points. As U.S. rates moved upwards in 1994, and U.S. long term rates rose 126 basis points in the first half of the year, investors suddenly found the price differential between emerging market and U.S. instruments grossly inadequate to compensate for the increasing risk on display south of the border.

2. The Excesses of the 1993 Bull Run

The bull run of 1993 was, by any measures, extraordinary. The Salomon Brady bond index rose 44% during 1993, and a further 15% in January 1994. The prices of many loans increased even more dramatically. Peruvian loans, which had sold for twenty cents on the U.S. dollar in early 1993, were trading above seventy U.S. cents in early 1994. Peru was not servicing its loans, so these prices were a gamble on a Brady-style restructuring in which Peru would decide to meet its obligations. Russian loans were at equally unrealistic prices. However, recent restructurings had proven notoriously slow to complete. Brazil's


11. See id.

12. See Emerging-Market Debt—Crash Landing, supra note 6, at 113; see also Weeks, supra note 4, at 26.


restructuring had required over a year longer than anyone anticipated. Paying these prices for non-performing loans purely in anticipation of a restructuring was unalloyed, high-risk speculation.

Many market investors were also highly leveraged in 1993.15 As Bill Nightingale said:

The US stock and bond markets have regulatory limits on how much systematic leverage there can be—the emerging markets have none. It’s purely between the investors and the dealers to determine how much leverage they want to take. There was a hell of a lot in this market, and probably much more than . . . in any well-regulated market.16

Hedge funds and other risk-friendly institutional investors had taken large positions in Brady bonds on margin. A number of banks had leveraged their clients, both institutional and individual investors, by up to 900%.17 These investors tended to look upon Brady bonds as high liquidity instruments that could be sold immediately upon a change in the interest rate environment.18 However, in a falling market, buyers proved to be very scarce indeed. The depth of panic in the market is evidenced by the fact that the prices of floating-rate Brady bonds fell virtually as far as fixed-rate Bradys, even though floating-rate bonds that trade at deep discounts would normally rise in value in a rising interest rate environment.19 Buyers were simply too rare to support the market.

In addition to the investors who were forced to sell to meet margin calls, others who had purchased Brazil’s when-and-if-issued Brady bonds at high prices in late 1993 also had to sell as market prices were substantially lower when completion of the long-awaited restructuring neared.20 Counterparty defaults added further to trader’s losses in 1994. Many participants had

15. See Richard Voorhees, Volatile Mix (Latin American Credit Market), LATINFINANCE, May 1994, at 26 (“[I]n the LDC secondary debt market, a lot more leveraging was being done than hedging, and . . . an across-the-board collapse . . . attests to that.”).
17. See Mullin, Majors Hang Tough, supra note 13.
19. See id.
20. See id.
joined the market in the bull run and had no experience of, and inadequate capital to withstand, an emerging markets collapse. The resulting defaults made trading even more expensive and difficult for the remaining participants.21

In summary, during the bull run of 1993, investors forgot the historical volatility of emerging markets and their history of defaulting on their debts. Brady bonds were liquid instruments, traded in Euroclear and CEDEL, and it was all too easy to believe that there would be buyers when one wanted, or needed, to sell.22 However, many of the institutional investors which had discovered emerging markets debt in the halcyon days of 1993 got out of the market more quickly than they had gotten into it, and the primary source of demand which had buoyed the market throughout 1993 was suddenly mostly gone.23

3. Political Risks

The Chiapas uprising in 1994 underlined the political uncertainty of the region. Political risk in international finance usually refers to the risks associated with the stability of government and governmental decisions. In Mexico, political risk also had a more literal meaning: 1994 was an election year, and in March the ruling party’s presidential candidate, Luis Donaldo Colosio, was assassinated.24

In Brazil, 1994 was also an election year, and early polls showed a populist left-leaning candidate in the lead.25 The specter of a retreat from economic austerity and the threat of a return to hyperinflation shook the market. Furthermore, a radical new economic plan and a new currency, the real, were introduced in July.26

In Venezuela, the banking system went into crisis; and the government responded with a bailout which cost some 10% of

22. See id.
23. See id.
25. See Mullin, Majors Hang Tough, supra note 13.
GDP. Venezuela’s economy was in dire straits and default on its Brady bonds was a real and imminent prospect.\(^27\)

Finally, in September, to cap off a year which thrust political risk before investors without respite, there was a second assassination in Mexico, of the Secretary General of the ruling party, Francisco Ruiz Massieu.\(^28\) By early December, most emerging markets debt traders were consoling themselves with the thought that at least things could not be worse in the market in 1995. They were wrong.

B. 1995: Mexico’s Crisis and the Tequila Effect

As 1994 drew to a close, Mexico was spending its foreign exchange reserves heavily to defend the value of the peso. These reserves, US$30 billion in February, had declined to around US$11 billion by December 1994.\(^29\) The overvalued national currency could no longer be supported, and on December 19, the new Mexican government let the peso float against the U.S. dollar, resulting in a substantial devaluation.\(^30\) In addition, the Mexican stock market fell over 40% in the first quarter of 1995,\(^31\) and Mexican Brady bonds and Eurobonds fell so far that at one stage U.S. dollar-denominated Eurobonds issued by prime Mexican banks were yielding 2500 basis points over U.S. Treasury bonds.\(^32\) The common refrain of traders in January 1995 was that “it was almost a freefall . . . . I’ve never seen anything like


\(^{28}\) See Mark Fineman, Assassination: Ruiz Massieu Accuses Party Officials of Cover-Up In Brother’s Slaying. They Deny Charge, CHI. SUN TIMES, Sept. 28, 1994, at 3.

\(^{29}\) See Westlake, supra note 5, at 14.

\(^{30}\) See Bloomberg Business News, Mexico Floats Peso, Sees It Sink, SUN-SENTINEL (Fort Lauderdale), Dec. 23, 1994, at D1. Mexico’s handling of its devaluation in late 1994 attracted criticism, particularly for its timing only one week before Christmas when many investment houses were short-staffed and winding up positions for the year. See Sean Kennedy, Emerging Markets Growing Stronger, S. CHINA MORNING POST, Apr. 25, 1995, at 14; see also Keith Mullin, Tequila Hangover—A Year to Forget, INT’L FIN. REV., Dec. 16, 1995 [hereinafter Mullin, Tequila Hangover].


This spoke to the general inexperience of the traders, as the market had been through it all before, in October 1991. However, that crash was a memory only of the few “veterans” who had been in the market that long.

There are three major reasons the devaluation became necessary: (i) the previous administration had long left the peso overvalued to curb inflation; (ii) Mexico’s short-term indebtedness had been growing so that it amounted to some 35% of its total debt, and its refinancing was proving increasingly difficult, as the many adverse factors at play in 1994 conspired to direct foreign capital away from Mexico; and (iii) over the preceding three years Mexico had accumulated a balance of payments deficit of over US$90 billion, a deficit approaching that of the rest of Latin America and Asia combined, and was financing it by the sale of securities to U.S. investors, which throughout 1994 became increasingly difficult and expensive.

Ironically, “commentators, economists and finance professionals had been calling out for a Mexican peso devaluation for some time.” A crisis was caused by a development that the experts had been recommending but the inevitability of which the financial markets, replete from a year of profits, did not want to acknowledge. Indeed, even as late as November 1994 journalists were writing, “[f]or Western investors the message is: buy . . . . [T]he potential of most emerging markets [is] beyond doubt.”

The Mexican peso crisis happened one month later.

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34. See Buckley, Brady Plan, supra note 1, at 1856-60.
35. See William C. Melton, The Fall of the Peso; Four Factors Contributed to the Grand Collapse, STAR TRIBUNE (Minneapolis), Mar. 13, 1995, at 3D.
The United States quickly assembled an international financial rescue package. Over US$50 billion of credit support was provided for Mexico: US$20 billion from the United States through its Exchange Stabilization Fund ("ESF"),40 and the balance from the International Monetary Fund ("IMF"), the Bank for International Settlements, the Inter-American Development Bank, the World Bank and Canada.4 This rescue package had a dramatic effect on the secondary market. On the day President Clinton announced the package Mexico's par bonds rose from US44¢ to US55.5¢ and its discount bonds from US56¢ to US72.5¢. The prices of debts of other emerging nations rose likewise.42

Nonetheless, the flow-on effects of Mexico's troubles were so severe that, even with time for reflection, financial journalists were writing that "Mexico had almost single-handedly destroyed the emerging markets as an investment class."43 How could one country almost destroy an entire market by itself? The answer was an effect named by someone who had overindulged in the oily indigenous alcohol of Mexico and paid the price.

1. The Tequila Effect

Mexico's problems in late 1994 and early 1995 were transmitted to other emerging markets with a speed and severity

40. See Melton, supra note 35, at 3D. On January 12, 1995 President Clinton requested approval of the U.S. Congress for US$40 billion of loan guarantees to prevent Mexico from defaulting on its debt. However, this proved to be politically controversial in the United States, and, while Congress tried to decide, the President acted unilaterally by negotiating additional loans for Mexico from the IMF and the Bank for International Settlements and by committing US$20 billion from the Exchange Stabilization Fund of the U.S. Treasury to Mexico. This Fund in the U.S. Treasury was generally used to stabilize the U.S. dollar in the currency markets—its use for such a purpose by a President acting without explicit Congressional approval was legally questionable as well as controversial. See generally Russell D. Covey, Adventures in the Zone of Twilight: Separation of Powers and National Economic Security in the Mexican Bailout, 105 YALE L.J. 1311 (1996). Nonetheless, most of the debt had been repaid by Mexico by January 1997. See generally David E. Sanger, Mexico Repays its Debt, N.Y. TIMES, Jan. 19, 1997.

41. See Mullin, Tequila Hangover, supra note 30. The Bank for International Settlements made some US$10 billion available which Mexico declined to use as it was available only by way of short-term loans. See Emerging Market Debt—IDB Meeting: A Sentiment Booster, INT'L FIN. REV., Apr. 8, 1995.

42. See Tequila Slammers, supra note 33.

which few expected, and which was labelled the "tequila effect." The debt of almost all emerging markets, from Eastern Europe to Asia, was in the first months of 1995 affected by the Mexican devaluation and subsequent problems. Argentina was the hardest hit, but the contagion spread through most of Latin America and Eastern Europe and much of Asia.

Argentina suffered from capital flight "of staggering proportions" as "[m]uch of the flight capital that had returned to the country flew out again." In addition, "[s]hort-term capital, much of it American, stampeded out on fears of a return to hyper-inflation and a breakdown in . . . dollar convertibility." This led to the collapse of a number of banks, and the government was soon seeking an international rescue package which when granted comprised some US$11.4 billion. In Thailand the baht came under sustained pressure and required massive support from the central bank to avoid a devaluation. Polish Brady bonds fell 7.8%, and Bulgaria's over 10%, the Philippines stock market fell over 17%, Hong Kong's some 15%, and the stock markets of nations as diverse as China, Hungary, India, Pakistan, Peru, South Korea, Taiwan, and Turkey all fell over 10% in January as funds withdrew generally from emerging markets. Most East Asian nations, in particular, worked hard

44. See Mullin, Tequila Hangover, supra note 30.
45. See id.; see also Mexican Crisis Triggers Wave of Selling in Asian Currencies, S. CHINA MORNING POST, Jan. 13, 1995, at 1.
47. Mullin, Tequila Hangover, supra note 30.
49. Mullin, Tequila Hangover, supra note 30.
50. See Tequila Slammers, supra note 33.
52. See Platt, supra note 31, at 2A.
to distinguish their economies from Mexico’s as their stock and bond markets took a battering.\textsuperscript{55}

Yet, the economies of these countries shared little in common with Mexico. Argentina and Hungary were identified as having large and growing current-account deficits but far less of their deficits were financed by short-term capital—a crucial part of the Mexican equation.\textsuperscript{56} In part, the tequila effect arose because many fund managers had invested heavily in Mexico and less so in the other emerging markets but, needing cash to meet margin calls and redemptions in Mexico, sold in the other markets.\textsuperscript{57} Mostly, however, in the words of fund manager, Isabel Saltzman, “[i]t was the classic panic market.”\textsuperscript{58} The tequila effect “was a sobering reminder that big institutional investors were looking at all ‘emerging markets’ from Santiago to Seoul through a single lens.”\textsuperscript{59}

Recovery from the tequila effect took time.\textsuperscript{60} Latin sovereigns were issuing debt, admittedly at very high spreads, as early as May 1995,\textsuperscript{61} and bond issuers were active in the markets in the second half of 1995. However, Brady bonds traded at extraordinary yields throughout most of 1995. For instance, the stripped spreads (the spread after deduction of the collateral guarantees over that of comparable U.S. Treasury bonds) for the Bradys of the major Latin nations exceeded 1000 basis points for most of 1995 and, in October, still exceeded 1250 basis points for Argen-

\textsuperscript{55.} See Philip Shenon, A Bad Week in the Asian Markets, Too, N.Y. TIMES, Jan. 16, 1995, at D1; see also Maggie Ford, Showing Everyone That Indonesia Is No Mexico, BUS.

\textsuperscript{56.} See Latin America in the Fallout Zone, ECONOMIST, Jan. 7, 1995, at 59.

\textsuperscript{57.} See id.

\textsuperscript{58.} Hinden, supra note 51, at H3. To put the panic in context, in 1993 Mexico had been admitted to the Organization for Economic Cooperation and Development (“OECD”) and the Mexican economy was considered so stable and prosperous that it was widely expected that Mexican debt would shortly be awarded an investment grade rating. See Mullin, Tequila Hangover supra note 30; see also Murphy, supra note 36.

\textsuperscript{59.} Khanna, supra note 54, at 13.

\textsuperscript{60.} See Melvyn Westlake, Bradys Need a Little Time, EMERGING MARKETS INVESTOR, Oct. 1995, at 10 [hereinafter Westlake, Little Time]; see also Asia Development Bank Report—Equities—Poised to Enter a New Phase, INT’L FIN. REV., Apr. 20, 1996; Mullin, Tequila Hangover, supra note 30; Melvyn Westlake, Happy Days Return, EMERGING MARKETS INVESTOR, Oct. 1995.

tine Brady bonds.\textsuperscript{62}

The peso crisis and tequila effect led to dramatic growth in asset securitization throughout the region. Companies from Argentina, Brazil, Mexico, and elsewhere raised funds through the securitization of cash flows from export contracts for many products.\textsuperscript{63} Asset securitization proved to be an efficient and attractive way for emerging market entities to raise funds upon the credit risk of the contractual counterparty from a developed nation.

C. 1996 and All is Well: Let’s Retire Brady Bonds and Borrow Anew

Prosperity and relative stability returned to the market in 1996 and these factors, coupled to the relatively low interest rates on offer, prompted debtors to seek to retire some of their Brady bonds and liberate the capital tied up in their collateral, and prompted a resurgence in syndicated lending to the emerging markets.

1. Brady Bond Exchanges

In April 1996 Mexico offered to exchange new thirty-year global bonds for U.S. dollar-denominated Brady par and discount bonds. The exchange was structured as a modified Dutch auction and Mexico accepted offers for US$1.75 billion of the new bonds at a spread of 552 basis points over U.S. Treasuries. This gave a yield of 12.4\%.\textsuperscript{64} The par bonds, which paid 6.25\%, were exchanged for US67\$ on the dollar and the discount bonds, which paid LIBOR plus 13/16, at US80.6\$.\textsuperscript{65} This ex-

\textsuperscript{62} See Westlake, Little Time, supra note 60, at 10. Argentina’s Brady bonds rallied some 70\% between their March 9 nadir and the re-election of a fiscally austere government on May 9, but fell back later in the year. See Kevin Muehring, Looking for a Lasting Relationship, \textit{Institutional Investor}, July 1995, at 45.

\textsuperscript{63} See Evans & Mullin, supra note 32.

\textsuperscript{64} The coupon was 11.5\% and an issue price of 92.93\% resulted in a yield of 12.4\%.

\textsuperscript{65} The valuation of the Brady bonds generally ignored the Value Recovery Rights (which provided for a higher coupon if Mexico’s oil revenues rose above certain benchmarks) and Goldman Sachs, somewhat controversially, ascribed very little value to these rights even though, with high oil prices at the time, they were nearly in-the-money. See Melvyn Westlake, Bidding Bradys Bye-bye, \textit{Emerging Markets Investor}, June 1996, at 15 [hereinafter Westlake, Bye-Bye]; see also Emerging Market Debt: Mid-500bp Consensus Emerges—QTC Coming, \textit{Int’l Fin. Rev.}, Apr. 27, 1996; Mexican Debt. Warranted, \textit{Economist} (U.S. ed.) May 4, 1996, at 75.
change resulted in the retirement of some US$2.4 billion of Brady bonds.\textsuperscript{66}

The exchange offer removed one of the enduring anomalies of the Brady bonds—the amalgamation of U.S. and emerging market sovereign risk in the one instrument. This hybrid nature of Brady bonds always made them difficult to value, and, while the zero coupon bonds which provided a partial interest and principal guarantee could be stripped out (usually by shorting them), this was an expensive and inefficient process. In the words of Merrill Lynch:

Brady bond structures were the result of complex negotiations between the restructuring countries and commercial bank advisory committees, with little consideration of their future marketability to traditional bond buyers. In the case of collateralized bonds, the result was a collection of inefficiently bundled attributes whose resulting value to most investors is lower than the all-in servicing cost to the issuer . . . . Given the . . . size of the Brady bond market, these structure choices are probably among the costlier marketing mistakes in bond history.\textsuperscript{67}

The Brady bond exchange appealed to Mexico for four reasons:

1. It allowed Mexico to access some of the collateral tied up in the Brady bonds. In the words of one Mexican finance ministry official: "It is inefficient to have $9 billion of our cash invested in US Treasuries when we can invest that money to cancel more expensive debt."\textsuperscript{68}

2. It reduced the stock of Mexican debt by US$1.25 billion—there was some US$600 million less of the new bonds because the Bradys were exchanged at discounts and the US$650 million of zero coupon bonds used as collateral could now be used to retire short-term, and more expensive, debt.\textsuperscript{69}

3. The new bonds established the long end of an extended, well-distributed, non-Brady yield curve for Mexican debt

\begin{itemize}
\item \textsuperscript{67} Merrill Lynch, \textit{Emerging Markets Debt Monthly}, June 17, 1997, at 37.
\item \textsuperscript{68} See Westlake, \textit{Bye-bye}, supra note 65, at 13.
\item \textsuperscript{69} See Most Innovative Deal—Adios Brady, \textit{EMERGING MARKETS INVESTOR}, Jan. 1997, at 21.
\end{itemize}
and proved there was investor appetite for thirty-year non-collateralized Mexican risk.

4. Mexican officials claimed a further inducement of the exchange was to extend the tenor of their debt from 2019, when the Bradys were due to mature, to 2026.\textsuperscript{70} As repayment of the Bradys was fully secured by zero-coupon bonds, this is a spurious factor, although the exchange did, in facilitating the retirement of some US$650 million of short-term debt, improve Mexico’s debt profile.

The exchange offer appealed principally to sophisticated institutional investors which already held Brady bonds, but sought undiluted Mexican risk with higher yields.\textsuperscript{71} There was very little participation by commercial banks and only around 24% of the issue went to Mexican banks.\textsuperscript{72}

Somewhat extraordinarily, Mexico’s principal bankers for the past century and the architect of its Aztec and Brady bonds, JPMorgan, was not involved in this exchange, which was managed by Goldman Sachs and co-managed by Salomon Brothers, Chase Manhattan, and Deutsche Morgan Grenfell. The deal represented a real coup for Goldman Sachs, never before a noted emerging markets house.

As usual, Mexico’s initiative established a trend. In September 1996 the Philippines gave Brady bond holders the option of exchanging their twenty-five-year collateralized Brady bonds for twenty-year fixed rate uncollateralized bonds. The Philippines accepted US$635 million of the Brady bonds, one-third of those outstanding, and US$137 million in new money as the new bonds were also able to be acquired for cash.\textsuperscript{73}

Brazil launched its Brady exchange in June 1997, issuing

\textsuperscript{70} See Westlake, \textit{Bye-bye}, supra note 65, at 12; see also \textit{Mexico Offers Brady Bond Swap}, J. Com., Apr. 22, 1996, at 9A.

\textsuperscript{71} The appetite for pure sovereign risk had been established because the most liquid Bradys tended to be the non-collateralized ones such as Argentina’s FRBs and Brazil’s C bonds and, in Panama’s Brady-style restructuring earlier in 1996, a majority of creditors chose non-collateralized over collateralized bonds. See Paul Kilby, \textit{Pure Exposure; Latin American Brady Bond Market}, LatinFinance, June 1996, at 28.


\textsuperscript{73} See \textit{Deals of the Year: Sovereign Bond Deal of the Year}, Asiamoney, Feb. 1997, at 38; see also Steven Irvine, \textit{No Expense Spared by JPMorgan on Brady}, Euromoney, Oct. 1996, at 18.
US$3 billion of thirty-year unsecured bonds priced at 395 basis points over U.S. Treasuries.\textsuperscript{74} One-quarter of the new bonds were sold for cash and the balance, US$2.25 billion, were swapped for some US$2.7 billion of Brady bonds.\textsuperscript{75} The exchange, arranged by Goldman Sachs and JPMorgan, liberated collateral worth US$605 million.\textsuperscript{76}

In September 1997, only weeks before the contagion from the Asian crisis spread through the emerging markets, Venezuela effected the largest exchange to date. It swapped US$4.4 billion of Bradys for US$3.68 billion of new thirty-year bonds with a coupon of 9.25%, and sold further new bonds for cash.\textsuperscript{77} The exchange retired over one-half of Venezuela's Brady bonds.\textsuperscript{78} Argentina followed the leader, exchanging US$1.75 billion of new unsecured thirty-year bonds for its Brady bonds and Bocones, domestic U.S. dollar-denominated bonds, and selling a further US$500 million of new bonds for cash.\textsuperscript{79} Finally, Panama rounded out a hectic September, swapping US$700 million of new thirty-year bonds, at a spread only 250 basis points above U.S. Treasuries, for its Brady bonds. This was a quite remarkable transaction given that Panama's Brady-style restructuring had only occurred in July 1996 and its Brady bonds were then issued at a 565 basis point spread over U.S. Treasuries.\textsuperscript{80}

2. The Return of Syndicated Lending

In mid-1991, John Reed, chairman of Citicorp, said that, 

\textsuperscript{74} See The Year in Review: LatinFinance's Deal of the Year, LatinFinance, Jan. 1, 1998, at 35.

\textsuperscript{75} There was an incredible US$16 billion of orders placed for the US$750 million of bonds sold for cash, so buyers received less than 5% of their orders. See Michael Bender, Brazil Sells $3 Billion in Cash/Swap Deal, Inv. Dealers' Dig., June 9, 1997, at 12.

\textsuperscript{76} See id. at 12; see also Many Ways to Swap a Brady, Emerging Markets Investor, June 1997, at 4; Peter Truell, Brazilians Sell $3 Billion of Unsecured 30-year Debt, N.Y. Times, June 5, 1997, at D8.


\textsuperscript{78} Venezuela's was the largest unsecured sovereign global bond offering in history, exceeding Italy's US$3.5 billion issue in 1993.


notwithstanding the need of developing countries for capital, the environment for cross-border lending was "inherently hostile" and would not change for at least a decade. He was wrong. In 1990 there had been US$14.9 billion of commercial bank loans to developing countries. The figure by 1996 was US$36.5 billion, and in 1997 there were US$49.4 billion of commercial bank loans to developing countries. The reasons for this re-emergence of lending to emerging markets are fourfold: (a) The peso crisis and tequila effect in 1995 made bond issuance difficult for many emerging markets debtors and the debtors actively sought loans. Indeed, for the first time since the debt crisis, in 1995 more capital was raised by loans than bonds; (b) Asia accounted for most of the loans—only US$25 billion of the total of US$135 billion went to Latin America—and many of the loans were to private sector corporations, and some were securitized by receivables; (c) the commercial banks had been enjoying strong earnings for some time and were at peak liquidity; and (d) generally there was lots of capital in the system. As always, capital flows to emerging markets are determined by liquidity in the developed nations—the demand is always there, it is the supply side that determines lending volumes.

There were some significant differences between these loans and those of the 1970s. The earlier loans were invariably unsecured. The later loans were usually either secured in some way, or, if to a sovereign, for a specific income producing purpose. Security is most often attained by securitizing receivables

81. Reed: Banks Won't Lend to LDCs for a Decade or Longer, Int'l Fin. Rev., July 6, 1991, at 29.
84. See Tobin, supra note 83.
85. See id.; see also Swafford, supra note 82, at 43.
or structuring the loan as project finance. The days of financing the consolidated revenue of debtors are, thankfully, largely gone. Syndicated lending even survived the Asian crisis—on April 1, 1998 the Export Import Bank of Thailand signed a US$1 billion facility with sixty-four banks priced at eighty basis points over LIBOR, admittedly supported by a guarantee from the Asian Development Bank.  

Citibank was the first to establish a specialist trading desk for emerging markets loans in March 1997. Other active institutions now include Chase Manhattan, JPMorgan, ING Barings, and Merrill Lynch. The difference between these and conventional emerging markets desks, which while principally dealing in bonds still do deal in loans, is that the new desks deal with syndicated loans made in the previous few years which trade at par and are performing—or, at least, which did and were until the Asian crisis. As one would expect, the market was still thin and bid-offer spreads relatively wide at one-quarter to one-half a point.  

A new industry body, the Loan Syndications and Trading Association, was established in New York in late 1995 to promote and regulate secondary market trading in U.S. and European bank loans, and the Loan Market Association was founded in London in 1996 to foster secondary market loan trading in Europe. Each association has devoted considerable attention to trading in emerging markets loans, which is interesting given the considerable overlap with the Emerging Market Traders Association’s (“EMTA”) work. EMTA provided organizational and other technical support to the Loan Syndications and Trading Association in its early years.

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89. See Swafford, supra note 82, at 43.
92. See Eavis, supra note 90, at 12.
Accounts of this “emerging” secondary market in emerging markets loans make amusing reading. Articles written in 1997 with titles like *The Newest Game in Town* present secondary loan trading and the problems in trading loans as opposed to bonds as if they were novel and not the daily fare of this market in the 1980s. The financial markets have a radioactive memory, with a very short half-life.

D. 1997: The Asian Economic Crisis

Few predicted the economic crisis that commenced in Asia in 1997, and almost no one predicted its severity. Western capital had poured into emerging markets in record quantities in the preceding two years. Emerging markets stocks and bonds were being acquired by investors scornful of the low interest rates on offer in their home countries and fearful that the U.S. stock market had reached unsustainable heights. The substantial risks, which history as recent as 1995 taught were inherent in emerging markets instruments, were simply not being factored into their pricing. This meant any generalized market scare was likely to have a major impact. It did.

The Asian problems began in Thailand in June 1997 and soon spread throughout the region. Nonetheless, it was not until October that the currency crisis, as it was then termed, deepened across the sector. Whether it is Wall Street in 1929 or 1987, or this secondary market in every year between 1991 and 1997, October seems a bad month for financial markets. Perhaps this is due to the tendency of many trading accounts to begin to

95. Eavis, supra note 90, at 12. Peter Eavis presents, as new, issues such as banks not selling from their own balance sheets and requiring traders to sell from their own portfolios, the difficulties of trading loans as opposed to bonds, the need for standardized documents, and the need for confidentiality so banks are not seen to be selling a customer’s paper. See id. at 12. All of these issues characterized the secondary market in the 1980s before the loans were securitized into Brady bonds. See Buckley, *Transformative Potential*, supra note 1, at 1156-57.


97. The Asian economic crisis has been described by the IMF as “one of the worst financial crises in the postwar period.” International Monetary Fund (“IMF”), *World Economic Outlook*, May 1998, at 3 (hereinafter IMF, *Economic Outlook 1998*).


book the profits made that year in advance of the year end. Whatever the cause, "beware the ides of October" should perhaps be tattooed on every fund manager's and trader's forearm: The major U.S. banks alone reportedly lost some US$400 million trading in the emerging markets in October 1997.

The precipitating event this October was intense speculation on the Hong Kong dollar which, in turn, triggered a sustained plunge in Hong Kong share prices. Once the contagion spread, it spread widely, to London and Wall Street and throughout the emerging markets. Brazil's Brady bonds fell in value 17% in the last ten days of October and leading Latin American mutual funds lost seventeen to 20% of their value in a week. It was as if Asia was retaliating for the tequila effect of 1995 by sending emerging markets globally into a tailspin, and, just as in 1995, while the economic correlations between regions were weak, the psychological correlations were strong. Argentina, Brazil, Chile, and Mexico were all affected, with Brazil the hardest hit as it shared problems like a large current account deficit with the troubled Asian countries. Quick strong action by Brazilian authorities and prompt action by the authorities in the other countries, principally by tightening monetary and fiscal policies, restored market confidence and staunched the drain on foreign exchange reserves. Accordingly, the contagion did not significantly damage the domestic economies of Latin American countries, or East European ones for that matter. That East Asia's hangover did not spread to other emerging

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101. See Thor Valdmanis, Banks Take $400 M Hit on Emerging Market, USA Today, Nov. 20, 1997, at 1B.
103. The New York Stock Exchange fell 7% on October 27, and this sent the emerging markets sprawling. See Alison Warner, Re-emerging from a Crisis; Asian Currency Effects on Emerging Debt Market, Banker, Apr. 1998, at 40.
106. See IMF, Economic Outlook 1998, supra note 97, at 16; see also 1 World Bank, Development Finance 1998, supra note 82, at 42.
markets on anything like the scale of the tequila effect suggested a pleasing maturation in the secondary market. Nonetheless, the shift in investor perception of the risk inherent in emerging market assets means that corporations and sovereigns from these nations are now paying substantially higher interest premia to raise capital.

The sell-off was so intense that many brokerages were overwhelmed, and EMTA recommended that brokerages close thirty minutes earlier on October 29. An indication of the volatility is given by the composite stripped spread on JPMorgan’s Emerging Market Bond Index, which went from a pre-crisis 334 basis points on October 22 to 695 basis points by November 12. Nonetheless, while a doubling in spreads is extreme, the October sell-off was, in part, merely correcting the anomalous and grossly excessive spread compression which had characterized the market since 1996.

The panic selling that had characterized the market in early 1995 was less prevalent in October 1997. This time the institutional investors showed the maturity and belief in the market that everyone wished they had shown two years earlier. Nonetheless, while many institutional investors did not dump large chunks of their portfolios in late 1997, neither did they return at all quickly to the market to increase their exposure to the sector. While traders were pleased with, and somewhat proud of, this new-found maturity of the market’s principal investors, the market itself decayed quite severely in October 1997. The error rate in matching trades was unacceptably high, which delayed the settlement of many trades, and bid-offer spreads widened dramatically to well over two percentage points.

The crisis turned the clock back in the secondary market.

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107. See IMF, Economic Outlook 1998, supra note 97, at 48 ("An interesting feature of the emerging market crisis of 1997-98 is that the effects of the Asian crisis on Latin America have been relatively limited.").


As many of the most recent new investors left the market and spreads widened, the traditional emerging markets money returned.\textsuperscript{113} Spreads of emerging markets bonds over comparable U.S. Treasuries averaged 5\% in March 1998, compared to 3.3\% before the Asian troubles.\textsuperscript{114} The Asian Crisis also turned back the clock further in other ways, back as far as 1982 in fact. Once again, when trouble broke, the international banks turned off the tap on new lending so decisively that a crisis became inevitable. The five most troubled Asian countries received US$100 billion less in 1997 than in 1996, with South Korea alone receiving US$50 billion less.\textsuperscript{115} Many top U.S. corporations would struggle to survive such diminished access to debt financing; its impact on developing nations was drastic.

While poor prudential regulation in the debtor countries and misjudgements among creditors clearly contributed to the crisis, this was in no conventional sense a debt crisis.\textsuperscript{116} It was initially a currency crisis\textsuperscript{117} and developed into a more generalized economic crisis, at least for Indonesia, Thailand, and Korea, the three most severely affected countries.\textsuperscript{118} However, while this was not a regional debt crisis, indebtedness did play a role in the troubles. The stock of debt in the region increased 12\% in each of 1995 and 1996,\textsuperscript{119} and private commercial debt (debt not backed by a sovereign guarantee) increased a remarka-

\begin{enumerate}
\item \textsuperscript{113} See Robinson, supra note 111, at 240; see also Jerry Edgerton, Rebounding Emerging Markets Bond Funds Offer Lofty Yields—If You Can Handle the Risks, \textit{MONEY}, May 1998, at 42.
\item \textsuperscript{114} See Mary Beth Grover, \textit{Civil Wars and Bedbugs}, \textit{FORBES}, Mar. 9, 1998, at 219.
\item \textsuperscript{115} See Edmund Andrews, Panicky Western Financiers Turned a Problem into a Crisis, \textit{SYDNEY MORNING HERALD}, Jan. 1, 1998, at 21.
\item \textsuperscript{116} Debt crises are generally characterized by total debt to exports ratios of over 200\% and debt service to exports ratios of over 20\%. The respective ratios for East Asia and the Pacific were 99\% and 12\% in 1996. Regional averages can, of course, mislead; within the region, Indonesia's 1996 debt to exports ratio of 220\% and its debt service to export ratio of 34\% suggest a debt crisis for that country. See 1 World Bank, \textit{Development Finance 1997}, supra note 66, at 160-61. However, the debt to exports ratios of Korea, Malaysia, the Philippines, and Thailand were all substantially lower than those of Argentina, Brazil, and Mexico in 1996. Indeed, the debt to exports ratios for East Asia and the Pacific in 1997 was 103\%, compared to Latin America's average ratio of 193\%. See id. at 33, 128.
\item \textsuperscript{117} See Merrill Lynch, supra note 99, at 19.
\item \textsuperscript{118} See generally IMF, \textit{Economic Outlook 1998}, supra note 97. Malaysia and the Philippines were substantially less affected. See id. at 62.
\item \textsuperscript{119} See 1 World Bank, \textit{Development Finance 1997}, supra note 66, at 160.
1. Short-Term Debt

Short-term indebtedness increased significantly in 1995 and 1996 across the region, although the increase was concentrated in China, Indonesia, and Thailand. The rapid increase in short-term debt in East Asia was not matched by Latin America, as seen in Figure One below—perhaps one of the few benefits of Mexico’s peso crisis and the tequila effect. Indeed, it is likely that short-term debt flows to East Asia in 1995, 1996, and early 1997 were buoyed by Mexico’s troubles and the pall they cast over Latin America.

FIGURE ONE —


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120. See id. at 160; see also Rudi Dornbusch, The Sunny Side of Crises, J. COM., Sept. 15, 1997, at 7A.
121. See 1 World Bank, Development Finance 1997, supra note 66, at 160.
The World Bank has concluded that, "[t]he buildup of short-term, unhedged debt left East Asian economies vulnerable to a sudden collapse of confidence . . . The loss of confidence led to capital outflows, and thus to depreciating currencies and falling asset prices, which further strained private balance sheets and so proved self-fulfilling." 123

The build-up of short-term debt was not a region-wide phenomenon. The ratio of short-term debt to total debt in the countries of the region in mid-1997 ranged from 67% in Korea and 46% in Thailand, to 24% in Indonesia, and 19% in the Philippines. 124

The proliferation of investment in local currency local instruments definitely intensified the global contagion. The Asian Crisis began as a currency crisis, and the decimation a substantial devaluation causes to a local currency portfolio naturally prompted a severe sell-off at the first sign of trouble. This was compounded by the tendency of many local currency local instruments to be of short duration for which, as the storm clouds gathered, the prospects of refinancing were slight. 125

E. 1998: The Secondary Market Fails to Impplode

The big events in 1998 were the Russian repayment moratorium on foreign debt and devaluation of the rouble in August and the collapse of the major hedge fund, Long-Term Capital Management, in September. In Frederic Haller's words:

Last year [1998] was just about the worst that the emerging debt market has ever experienced. In particular, the Russian debacle in August . . . was the defining moment of 1998. 126

In stark contrast to Asia the previous year, the contagion from Russia's crisis was severe, far eclipsing the tequila effect of 1995. 127

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124. See id. at 35.
127. See Kiss of Life, Emerging Markets Investor, Jan. 1999, at 10. For instance, in the primary market in November and the first half of December 1998, twenty-three debt deals and three equity deals were completed. In the same period in 1997, the numbers were sixty-five and twenty-eight, respectively. See id. at 10.
1. The Russian Collapse

By 1998 Russia's economic and political problems had been mounting for some years. The radical reforms required to allow markets, not bureaucrats, to allocate resources were proving problematic for this former command economy burdened, as it was, with a deteriorating current account, tax collection problems, debt management problems, low oil prices, and industrial unrest. In addition, there was considerable political instability arising principally from a sizeable bloc in parliament who sought to return the economy to the old system. Coupled to all this were the risk weightings under the Basel Capital Adequacy Accord which made loans to Russia attractive by weighting loans to OECD sovereigns at zero. In the words of one senior banker, "your average loan commitment officer could hit his return on capital targets much easier offering money to Boris Yeltsin than he could lending to GECC."

In May 1998, declining investor confidence forced the Central Bank to raise interest rates to support the ruble. By July the central bank had been forced into extensive sales of its hard currency reserves to defend the ruble. In mid-August 1998, the Russian Central Bank announced a widening of the band in which the ruble would be allowed to float. In effect this was a devaluation. In addition, the government declared a ninety-day moratorium on the servicing of foreign debt by Russian firms. Although most headlines at the time focussed upon the devaluation, the issue of vital concern to investors was the moratorium. Devaluations are a market risk; moratoria are a political one, which in this case was seen as a policy choice to favor local banks over foreign investors.

While Russia's economic problems had been apparent for some considerable time, the market believed Russia would not
be allowed to fail. In the words of Desmond Lachman: “Bulgaria didn’t fail. Thailand didn’t fail. Indonesia didn’t fail. But now Russia fails . . . [T]he IMF and the Group of Seven are no longer there as a backstop.”133 In essence, the Russian crisis was a classic instance of moral hazard. Moral hazard occurs whenever a situation rewards investors for financial misbehavior.134 In the case of Russia, investors expected to be bailed out. In the words, again, of Desmond Lachman:

Anybody who questions that Russia’s fundamentals were worthy of investment . . . wasn’t operating in the markets at the time . . . Most [investors] who did take positions on Russia were doing this on the argument that Russia was too big to fail and that the G-7 nations would . . . bail them out.135

The proper operation of the market, which may have led to a more gradual withdrawal from investing in Russia, was profoundly affected by the moral hazard of an anticipated bailout.136 Russia’s geo-political significance, in particular, meant investors were very confident that it would not be allowed to default on its financial obligations.137 Indeed, even four months later, EMTA’s co-chair, Frederic Haller, was railing that, “[t]he failure of the IMF and G-7 to show timely leadership in Russia in August may prove to be the biggest international policy mistake of the post-Cold War era.”138

The extraordinary aspect of Russia’s crisis was the fallout from it. Russia’s economy is not large, about the size of Spain’s

137. See Jonathon Fuerbringer, After Russian Lesson, Bond Prices Remain Stable in Latest Crisis, N.Y. TIMES, Jan. 14, 1999, at C1 (“Many [investors] refused to believe the United States and the International Monetary Fund would allow Russia to collapse until it actually happened.”).
or Switzerland's. Yet the consequences of Russia's devaluation and moratorium were to stand the international bond markets on their heads. In August, emerging markets debt fell over 28% in value, high-yield bonds fell over 7%, and real estate investment trusts that invested in mortgage securities fell about 27%. Meanwhile, U.S. Treasury bonds increased over 2%. Russia's collapse resulted in a tremendous flight to quality, and this time investors went all the way to the security of U.S. Treasuries. Even the bonds of the blue chip corporate sector offered insufficient security to bondholders in August and September 1998.

How can one explain such profound effects from the events in one small to middling economic power? In part, the answer lies in the approaches to risk of the large investors, and this factor has three elements.

The first was an over-reliance on the then new, sophisticated risk management techniques. Many funds and other investors, believing they could calculate their risk levels precisely, strove for yield and discounted risk as something that was now manageable. However, contemporary risk management models assume a high level of liquidity, which history teaches us may not be there in times of crisis in the emerging markets and which was missing in August and September 1998.

The second element of the risk strategies of large investors was the common strategy of hedging against losses in emerging markets debt by going short on U.S. Treasuries on the assumption that prices of emerging markets and U.S. bonds historically moved in tandem. The flight to quality that followed Russia's collapse sent the yield on thirty-year U.S. Treasuries to the lowest levels since the United States began issuing the bonds.

142. See Clark, supra note 141, at 1.
144. See Crossman, supra note 130, at 20.
145. See Morgenson, supra note 140, at Cl.
146. See O'Brien, supra note 136, § 3, at 4.
on a regular basis in 1977, while the yields on emerging markets bonds soared. As bond yield and price are inversely related, investors adopting this strategy found themselves long on emerging markets bonds which were falling in price rapidly and short on U.S. Treasuries which were increasing in price. As we shall see, this was a pincer sufficient to squeeze the capital out of even the biggest hedge funds.

The third element of the risk strategies of large investors was their appetite for leverage. Investors with highly leveraged positions in Russian assets were forced to sell other assets to cover margin calls or otherwise repay the debt incurred to invest in Russian debt. The other assets sold were most often, though not always, in other emerging markets. Accordingly, the continued appetite for leverage among many investors in the emerging markets means that a severe fall in one emerging market rebounds through the entire market, almost irrespective of the economic health of the other sectors.

Another part of the reason Russia's actions had such far-reaching consequences was that its heavy debt issuance had given it a high profile in the principal index. By spring of 1998, Russian debt accounted for one-seventh of JPMorgan's Emerging Markets Bond Index Plus. A "neutral" investment position for an investor would therefore have seen it with one-seventh of its emerging markets portfolio in Russia. As The Economist pointed out: "This is a result of the perverse logic of bond indices. A country that has issued a lot of debt will be weighted heavily in the index, even though it may be borrowing its way into

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148. See Clark, supra note 141, at 1. Some hedge funds sold U.S. bank debt to cover emerging markets losses. See id.


150. Compare Onelia Collazo, Latin Bond Drop Mires Region in Crisis, LATINFINANCE, Sept. 1998, at 14 (noting the reverberation of the bond drop in Venezuela throughout the market for emerging markets debt), with Barbara Wall, One Investor’s Delight May Be Another’s Nightmare; For Bondholders, Down May Not Be Up After All, INT’L HERALD TRIB., Jan. 30, 1999, at 15 (citing Mohammed El Erian’s argument that Bulgaria, Hungary, Poland, South Korea, and Thailand are only lowly correlated with the other emerging markets).
trouble.”  

The remarkable capital drain that followed Russia’s actions exposed the continuing immaturity of the market, as fund managers once again showed no significant ability to discriminate between emerging economies that had been successfully reformed and those which had not.  

The response to East Asia’s financial troubles and Russia’s devaluation and moratorium also highlights the extent to which the increased globalization of financial markets has exposed the emerging markets to sudden and severe reversals in capital flows.  

2. The Collapse of Long-Term Capital Management  

Coming hard on the heels of Russia’s crisis, this collapse further rocked the market.  The collapse was caused principally by the hedge fund taking a huge position on the assumption that the already very wide spreads on emerging markets debt and high-yield bonds would return to their more customary levels. The fund went short on U.S. Treasuries and long on emerging markets bonds, high-yield bonds, and European government bonds. As we have seen, the turmoil in Russia caused a flood of capital into U.S. Treasuries and out of the emerging markets sector. Similar outflows from high-yield and European government bonds meant that the hedge fund got squeezed so hard its capital ran out.  

The rescue package coordinated by the U.S. Federal Reserve required an effective US$3.5 billion buyout of the fund by a consortium of banks and brokers. For the hedge fund’s principal financiers, this was apparently a cheaper option than allowing it to fail.  

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151. Emerging Markets, Weight Problem, supra note 139, at 80.  
152. See David Wernick, Riders on the Storm, LATINFINANCE, Mar. 1, 1999, at 70.  
F. 1999: Brazil Sambas Its Way Out of Trouble

The most significant event for the market in 1999 was Brazil's allowing its currency, the real, to float in January.

1. Brazil's Devaluation

Much like a fine wine, Brazil's troubles had been a long time fermenting.\textsuperscript{156} In November 1997, in the sell-off that followed East Asia's troubles, Brazilian debt performed the worst of the major debtors, with the spread on its bonds widening by 453 basis points as against 405 basis points for Argentina and 262 for Mexico.\textsuperscript{157} In the first half of September 1998, an extraordinary US$14 billion departed the country's foreign exchange market. The Central Bank lifted the basic lending rate to 49.75\% on September 10, just one week after lifting it to 29.75\%, and spent its foreign exchange reserves heavily to defend the value of the real.\textsuperscript{158} In November, Brazil and the IMF reached agreement on US$41 billion in aid to bolster the nation's finances.\textsuperscript{159} This package was specifically aimed at heading off a devaluation due to the fear such a prospect engendered in the wake of Russia's troubles.

The real had been kept overvalued to combat inflation and to continue compliance with the real plan, which called for a slow depreciation of the real of between 0.58 and 0.68\% per month. The real had been introduced in 1994, and the real plan had succeeded in defeating the ruinous hyperinflation which had previously dogged Brazil.\textsuperscript{160} The considerable commitment of politicians to it was therefore understandable.

However, by January 1999, Brazil could no longer afford to defend its currency: It had used over one-half of its foreign exchange reserves doing so in the previous six months, and two weeks earlier one of its largest states had decided to withhold payments on debt to the Brazilian government. On January 15, the government let the currency float, and it fell in value 17\%.

\textsuperscript{157} See Sullivan, \textit{supra} note 109, at 8.
against the U.S. dollar in a week and about one-third in the first quarter of 1999.161

The fallout from Brazil’s devaluation was not nearly as severe as that from Russia’s devaluation and moratorium only five months earlier.162 Argentine and Mexican assets suffered, but not to the extent that many had feared.163 Given that Brazilian debt has historically been the linchpin of the secondary market, the reasons for this limited fallout are illuminating.

First, in light of the Russian debacle, investors had (a) reduced their exposure to emerging markets in general and to Brazil in particular, as it had been showing signs of trouble since October 1997, and (b) reduced their leverage so that losses in Brazil did not force consequential asset sales to the same extent as in August.164

Second, the central participants in Brazilian debt were the major international banks, which had far deeper and more diversified portfolios than the hedge funds that had dominated investment into Russia.165

Third, the moral hazard of an expected bail-out did not influence the market in Brazil. A US$41.5 billion financial package had been put in place by the IMF in late 1998, and investors were adjusting their portfolios uninfluenced by the prospect of any further rescues. Indeed, Brazil’s abandonment of the real had to some extent been anticipated.166

Finally, floating the currency was welcomed by many in the

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162. See World Economic Outlook 1999, supra note 153, at 1 (“Financial contagion from the Brazilian crisis has been limited.”).
165. See Fuerbringer, supra note 164, at C1. The hedge funds that were active in Brazil had reduced their exposure since the events in Russia. See O’Brien & Kahn, supra note 164, at C8.
166. See IMF, Economic Outlook 1999, supra note 153, at 29; see also O’Brien & Kahn, supra note 164, at C8; Warner, supra note 163, at 22.
financial markets who believed the real to be overvalued. In the words of Arturo Porzecanski: “This is what we’d been hoping for. The government had the courage to let the currency find its own level.”

Encouragingly, after Brazil’s devaluation investors quickly differentiated between Latin American countries with sound economic fundamentals such as Argentina, Mexico, and Chile and those without, such as Brazil itself, Ecuador, and Venezuela. The lack of strong contagion across the region speaks to the increasing sophistication and maturity of the market. Indeed, if one could somehow ignore the sheer panic that Russia’s devaluation engendered, and simply focus upon the secondary market’s reaction to East Asia’s woes in 1997 and Brazil’s in 1999, one might well conclude that the market was approaching maturity. The fallout from Russia in which the market relapsed into its old bad habits of “looking at all ‘emerging markets’ from Santiago to Seoul through a single lens” was merely unfortunate.

II. THE CHARACTERISTICS OF THE MARKET

A. Growth of the Market

This period begins with the market coming out of the most rapid growth spurt in its history. Reported turnover for 1994 was US$2.77 trillion face value of debt, an increase of some 40% over 1993 and nearly four times 1992 turnover. The brakes came on hard in 1995, with turnover stalled at US$2.74 trillion. Rapid growth returned in 1996, with turnover nearly doubling to US$5.3 trillion, and then rising slowly to US$5.9 trillion in 1997. In 1998, the Asian and Russian crises asserted themselves, and turnover fell some 29% to US$4.2 trillion. In 1999, turnover was US$2.185 trillion. This turnover history is repre-

167. Weintraub, supra note 159.
169. Khanna, supra note 54, at 13; see supra note 55 and accompanying text.
As is the custom in the industry, these figures are not adjusted for the significant amount of double-counting involved in their compilation. The figures come from the annual trading volume surveys of the market conducted by the EMTA (which is also the source for the reported custom in the industry). The figures are compiled by surveying regular participants in the market which involves an element of double-counting as a single piece of debt may well be counted in the turnover of its seller and purchaser. This built-in tendency to overestimation is commonplace in the trading volumes of major capital markets, so these figures serve quite well for comparative purposes. If one is interested in the net amount of debt which changed hands in the market, these figures should be discounted by a factor of about one-third. See Buckley, *Brady Plan*, supra note 1, at 1876-77. This adjustment, over time, has tended to bring EMTA's figures into line with the estimates of market participants. A one-third discount suggests an actual turnover in 1994 of some US$1.85 trillion face value of debt—close to the *Emerging Markets Investor* survey which put market turnover at around US$2 trillion. See Melvyn Westlake, *Shaken, Not Stirred, Emerging Markets Investor*, Mar. 1995, at 11 [hereinafter Westlake, *Shaken*]. Firms surveyed by *LatinFinance* in its annual secondary market survey estimated turnover for 1994 at US$2.47 trillion. See Paul Kilby, *Growing Pains: Debt Market Survives Bumps and Bruises on Its Way to Maturity, LatinFinance*, Mar. 1995, at 60. A one-third discount to allow for double counting has
Emerging markets debt represents a small part of the world’s capital markets. In September 1998, the capitalization of JPMorgan’s Emerging Markets Bond Index (“EMBI”), the market standard, was US$71 billion. The EMBI covers only U.S. dollar-denominated Brady bonds, and not the non-Brady bonds, local currency instruments, and loans which comprise the balance of this market. Nonetheless, the total capitalization of the emerging markets debt market would be, on this basis, about US$2.2 trillion.\textsuperscript{176}

B. Types of Debt Traded

The market in this period traded five principal types of assets: Brady bonds, newly issued (non-Brady) bonds, local instruments, derivatives, and loans. Local instruments are bonds denominated in either U.S. dollars or local currency, but issued in the local market, not internationally. The respective turnover of these types of assets in 1997 and 1998 is set forth below.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|}
\hline
Asset Type & 1997 Turnover\textsuperscript{177} & 1998 Turnover\textsuperscript{178} \\
\hline
Brady Bonds & 2,403 & 1,541 \\
Non-Brady Bonds\textsuperscript{179} & 1,335 & 1,021 \\
Local Instruments\textsuperscript{180} & 1,506 & 1,176 \\
Debt Options and Warrants & 365 & 233 \\
Loans & 305 & 213 \\
\hline
\end{tabular}
\caption{Turnover of Various Types of Emerging Markets Debt}
\end{table}

The secondary market began its life as a swap market for loans, as virtually all the debt of the debt crisis of 1982 took the form of syndicated loans. As the market matured, swaps gave way to

\textsuperscript{176} See Emerging Markets Trading and Investment, supra note 175.
\textsuperscript{177} See EMTA, 1997 Survey, supra note 172, at 7.
\textsuperscript{178} See EMTA, 1998 Survey, supra note 173, Supplementary Analysis, at 8.
\textsuperscript{179} The non-Brady bonds turnover comprised US$923 billion of sovereign bonds and US$389 billion of corporate bonds. See EMTA, 1997 Survey, supra note 172, Supplementary Analysis, at 9.
\textsuperscript{180} The turnover of local instruments comprised US$977 billion of local currency denominated instruments and US$202 billion of U.S. dollar-denominated instruments. \textit{Id.} at 9.
sales, but loans remained the dominant form of debt throughout the 1980s.\textsuperscript{181} The succession of Brady-style restructurings in the early 1990s saw many of these loans converted into Brady bonds: Typically thirty-year bonds with their principal and twelve to eighteen months of interest payments collateralized by U.S. Treasury zero-coupon bonds.\textsuperscript{182} Trading in Brady bonds in 1994 was up by 65\% over 1993 and nearly seven times the turnover of loans.\textsuperscript{183} The secondary market was, in essence now, a bond market, with Bradys representing 61\% of market turnover. The transformation of what had begun as a loan market was by 1994 effectively complete, with loans representing only 31\% of turnover in 1999.

In early 1996 an enduring anomaly was removed, as the ratings agencies removed the ratings distinction between a nation's Brady bonds and Eurobonds. Eurobonds were newly issued bonds that did not arise from a restructuring of earlier indebtedness. Formerly, the agencies had rated Brady bonds one half a grade lower than Eurobonds, arguing that debtors may turn to the holders of Brady bonds for relief in times of trouble more readily than to Eurobond holders as Bradys were the by-product of the bank loans of the 1980s. However, this prospect was determined to have diminished with the substantial sales of Brady bonds in the secondary market.\textsuperscript{184} This begs the question why the yields of Bradys and Eurobonds did not also equalize, but they did not.

For a while the gap between the yield on newly issued bonds and the stripped yield on Brady bonds did narrow dramatically, from some 470 basis points in early 1996 to around seventy basis points in January 1998\textsuperscript{185}—partly on the back of a wave of cross-

\textsuperscript{181} See generally Buckley, Transformative Potential, supra note 1.
\textsuperscript{182} See generally Buckley, Turning Loans into Bonds, supra note 4 (analyzing the Brady plan in detail).
\textsuperscript{185} In January 1998, the Mexican global bond due 2026 offered a yield of 9.51\%, while Mexican Brady par bonds due 2019 provided a stripped yield of 10.2\%. Likewise, the Brazilian global bond due 2027, had a yield of 10.97\% and its par bond, due three years earlier, a yield of 11.47\%. See Lucia Reboucas, Investors Prefer Global Foreign Debt Bonds, GAZETA MERCANTIL ONLINE, Jan. 9, 1998, front page.
over investment by investors who had concluded that the risk on the two types of assets was essentially the same.\textsuperscript{186} The gap soon widened again, however, and by early July 1999 was around 420 basis points for the major debtors.\textsuperscript{187}

Some argue these yield differences reflect a real credit distinction, i.e., that in troubled times debtors will honor their newly issued bonds more readily than their Brady bonds. This may have been true when the stock of global and Eurobonds was so small that default on a nation’s Bradys and continued servicing of its global and Eurobonds was a real possibility, just as most debtors did not reschedule their bonds in the 1980s because the stock of bonds was so small relative to loans. However, today the majority of bond debt of most of the major debtors is in the form of newly issued bonds, not Bradys, so defaulting on the latter while servicing the former would make no economic sense.\textsuperscript{188}

There are several potential reasons for this discrepancy in yields.\textsuperscript{189} First, stripping out the collateral, while easy to do on paper, is complex and difficult in practice; and investors therefore are usually earning the blended yield, which is lower than the yield on the global and Eurobonds (because the yield on the collateral in the Bradys—U.S. Treasury zero coupon bonds—is very low). Second, Brady bonds exhibit more secondary market volatility than global and Eurobonds and so need to offer a higher return to investors. Finally, Bradys tend to trade poorly in hard times as no bank is as committed to making two-way markets in them in the way that the arrangers of the global and Eurobonds are committed to these issues.

With hindsight, 1994 represented the pinnacle for Brady

\textsuperscript{186} See Melvyn Westlake, Storming Morgan, 4 Emerging Markets Investor, Mar. 1997, at 21 [hereinafter Westlake, Storming Morgan].

\textsuperscript{187} At close of business on July 9, the stripped yield on Argentine par bonds due 2023 was 17.82%, compared to 13.76% for its bonds due 2027; Brazil’s par bonds due 2024 were yielding 18.65% on a stripped basis relative to 14.18% for its bonds due 2027, and Mexico’s pars due 2019 were yielding 14.51% as against 10.41% for its bonds due 2026. See E-mail from Michael Pettis to Ross P. Buckley (July 12, 1999) (on file with author).

\textsuperscript{188} The presence of the rolling interest guarantee gives debtors a twelve to eighteen month breathing space and may make default a little more likely, as default might be seen as a way of accessing the value tied up in the collateral supporting that guarantee. However, this factor has not been cited as a cause of the yield differentials and it could hardly account for significant differentials.

\textsuperscript{189} See E-mail from Michael Pettis to Ross P. Buckley (July 12, 1999) (on file with author).
bonds in this market. From accounting for 61% of turnover in 1994, the relative share of Brady bonds declined to 58% in 1995, 51% in 1996, 41% in 1997, 37% in 1998, and 31% in 1999, and by 2004 the proportion of turnover Brady bonds represented had fallen further to 6%.190

In each year from 1994 to 1999, Brazil's was the most commonly traded debt, although by 1999 Mexico's debt was also highly traded.191 Brazilian debt accounted for 30% of turnover in 1997. In 1997 Argentine and Mexican assets filled the second and third spots with 21% and 17% of turnover, respectively. Fourth place went to Russian debt in 1997, displacing Venezuelan debt from 1996. The year 1998 saw Russian debt climb even further to second place with nearly 29% of turnover.192 This capped five years of tremendous growth in Russian debt trading as Russian loans had represented only 1.25% of turnover in 1993. In 1999, the wheel turned full circle, and Russian debt fell dramatically to represent only 5% of turnover.193

As can be seen, trading was concentrated in the debt of a small number of debtors throughout this period. Trading in the debt of Argentina, Brazil, Mexico, Russia, and Venezuela represented over 90% of turnover in 1996, 85% in 1997, and 81% in 1998. Asian assets represented only 3% of turnover in 1996, 2% in 1997, and 4% in 1998 (although EMTA notes that, for a variety of reasons, Asian trading is under-represented in its surveys).

Substantial increases in turnover came in local instruments in this period. The external trading of local instruments accounted for 19% of turnover in 1994 and rose steadily to 28% in 1998 and 33% in the first quarter of 1999. Local-currency denominated instruments outnumbered U.S. dollar-denominated instruments by five to one in 1997 and by seven to one in 1998.

192. However, in the fourth quarter of 1998, trading in Russian debt represented only 10% of total turnover, as its economic turmoil struck the market. See EMTA, Bulletin, 2nd Quarter 1999, 1998 Annual Trading Volume Amounted to Nearly US $4.2 Trillion, at 5. The third and fourth spots in 1998 went to Mexican and Argentine debt, respectively. See id. at 6.
The importance of local instruments is exemplified by the fact that, in 1998, trading in one local instrument, Mexican Cetes, at US$164 billion, far surpassed trading in all of Mexico's Brady bonds, at US$96 billion.\textsuperscript{194}

Another area of dramatic increase in this period was non-Brady bond trading, reflecting the dramatic increase in new issues in 1996 and 1997. These bonds, principally Eurobonds and global bonds, accounted for 29% of turnover in 1999, up from 24% of turnover in 1998, 11% in 1996, and 8% in 1995.\textsuperscript{195}

The downturn in 1998 can be attributed to the meltdown in the Russian economy in August of that year and the continued uncertainty as to whether Brazil's economy would be pulled into the maelstrom of the Asian and Russian economic crises.

The best way to appreciate the relative turnover of the various emerging markets instruments is graphically, as illustrated in:

\begin{center}\textit{FIGURE THREE: TURNOVER OF EMERGING MARKETS DEBT, BY INSTRUMENT, 1998}\textsuperscript{196}\end{center}

\begin{center}
\begin{tikzpicture}
  \begin{pie}
    \pie{5.1\%}{Loans}
    \pie{5.3\%}{Options & Warrants}
    \pie{24.4\%}{Non-Brady Bonds}
    \pie{28.2\%}{Local Instruments}
    \pie{37\%}{Brady Bonds}
  \end{pie}
\end{tikzpicture}
\end{center}


\textsuperscript{195} Indeed, in September 1997 when non-Brady bonds represented about one-half of the trading turnover of Brady bonds, the total outstanding of Brady and non-Brady bonds were about equal at US$130-140 billion each. See EMTA, 2000 Annual Report (2000), http://www.emta.org/ar2000/ar00.pdf (last visited Nov. 16, 2006).

\textsuperscript{196} See EMTA, 1998 Survey, supra note 173, Supplementary Analysis, at 8.
1. Derivatives Trading

Before 1993, pricing an option in this market was principally a matter of ascertaining the level at which the seller was prepared to sell the debt and while pricing strategies increased dramatically in sophistication, derivatives continued to be used, in the main, by investors wishing to place a directional bet on the market. Using options for this purpose became expensive in 1994 and 1995, as the cost of derivatives to investors is determined by the volatility of the underlying instrument, and the market shocks of 1994 and 1995 caused sharp rises in volatility. The increases in the cost of options caused investors to begin to use spread plays such as a bull spread, which is the purchase of a call at one strike price and the sale of a call at a higher strike price to achieve some of the purposes of a straight option for less cost.

The range of debt upon which derivatives could be acquired expanded in this period to embrace Venezuela, Poland, Morocco, Nigeria, Russia, Ecuador, and Peru as well as the major debtors. Nonetheless, the derivatives on offer remained simple relative to the sophistication of more mature markets with options and warrants dominating the market.

The market in derivatives on the currencies of these debtors was far more sophisticated and developed. In 1995, the Chicago Mercantile Exchange ("CME") launched trading in Mexican peso futures and options and created a new division, the Growth and Emerging Markets Division, initially to trade futures and options on Emerging Markets’ currencies, equities, interest rates, and stock market indices.
Derivatives specific to this market include those designed to strip out the zero coupon bond component of Brady bonds and sell the pure risk to investors. This was typically achieved by going short on the zero but was difficult to do for most Brady bonds because the zero coupon bonds, issued specifically by the U.S. Treasury for the purpose, contained covenants designed to prevent this. Such derivatives were easy to structure for Brazilian Bradys, the zero coupon bonds which Brazil had bought on the open market, and derivatives specialists, found ways to do it for the Bradys of Nigeria and Bulgaria, among others.

In Chicago, the CME, and the Chicago Board of Trade ("CBoT") actively developed their emerging markets derivatives business. The CME offered futures on, among other things, individual types of Brady bonds and emerging markets currencies, and the CBoT offered futures and options on a Brady Bond index and various local stock market indices. Such derivatives trading is also conducted on exchanges in the emerging market nations, particularly Brazil and Mexico.

Evidence suggests that the availability and use of derivatives may have exacerbated the Asian and Russian crises. In Asia, swaps were popular in which banks paid the return on U.S. instruments and received the return on domestic instruments. These swaps were off-balance-sheet transactions that could be funded on limited margins. The swaps were very profitable for as long as the relevant exchange rate held firm and resulted in huge losses once the local currencies depreciated dramatically.

In Russia, the debt moratorium resulted in massive losses for foreign and local users of over-the-counter derivatives—losses which were as high as US$90 billion on some estimates. The attractiveness of Russian state short-term obligations ("GKOs") to investors was enhanced by the use of forward contracts to hedge the investors' ruble exposures. However, forward currency hedges do not protect against debt moratoria. In the

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203. See generally Buckley, Turning Loans into Bonds, supra note 182.
206. See id. at 39.
World Bank's words: "It is unlikely that investors would have assumed the same level of exposure to GKO's if derivatives had not been available."^{207}

C. Other Characteristics

Other characteristics of the market in this period were: (i) extreme volatility; (ii) equity-like characteristics; and (iii) a high degree of correlation between geographic regions. The volatility came from the long term of the Brady bonds and the political and economic uncertainty in the debtor nations. It was ensured by the short-term investment horizon of the principal types of investors in Brady bonds: Trading houses taking large positions, highly leveraged hedge and Latin capital-flight funds and open-ended mutual funds concerned about redemptions.\(^{208}\) The equity-like nature of these debt instruments and the correlation between regions takes a little more explaining.

1. The Equity-like Nature of Emerging Markets Debt

Two pieces of research highlighted the equity-like nature of emerging markets debt in this period. The first was by Gary Evans and Jose Cerritelli,\(^{209}\) and the second by Michael Pettis and Jared Gross.\(^{210}\) Each argued that Brady bonds and emerging markets loans more often behave like equities than like traditional debt instruments. The preconditions for this behaviour were laid by the institutional structure of the market, the large issue size, long maturity, and high liquidity of Brady bonds, and the political and economic uncertainty of the debtor nations.\(^{211}\) Market behavior certainly supports this thesis: Investors in emerging markets debt in bull runs received equity-like returns well in excess of equities in developed nations and often in excess of emerging markets equities;\(^{212}\) the volatility of emerging markets debt, particularly upon developments in the debtor's economy, resembled that of equity rather than debt; and investors used Brady bonds "as a macroeconomic equity play" on the

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207. See id.
208. See Muehring, supra note 62, at 127.
211. See Gary Evans, Identity Crisis, EMERGING MARKETS INVESTOR, Feb. 1995, at 45.
212. See id.; see Emerging Market Debt—LDC Debt Is Equity, supra note 209.
debtor nations, i.e., investors wishing to express a view on a nation’s prospects did so by buying or selling Brady bonds.

2. Correlation between Regions

The degree of correlation between various emerging equity markets was historically thought to be low. As Kenneth King and Paul Cox wrote in 1995: “[A] familiar argument for investing in the 24 or so emerging markets has been that they are basically uncorrelated with each other, and so have comparatively low volatility as a global portfolio.” In their article, King and Cox challenged this assumption for equities and proved correlation was increasing within regions such as Asia or Latin America, and even between regions.

Whatever may have been the historical position in equity markets, emerging markets debt has always been highly correlated both within and between regions. In 1995, most investors viewed all of Latin America as a single market, and many viewed the entire emerging markets as one, as the tequila effect established conclusively and the contagion which followed the economic crises in Asia in 1997 and Russia in 1998 confirmed. The 1997 contagion was less severe than in 1995, which suggested a maturation in the market that the contagion from Russia’s crisis was to deny.


214. See Muehring, supra note 62, at 45 (“Bradys are the vehicle through which you express a view on the emerging markets. Because they are so large and liquid, they’ve become the best proxy for hedging positions in other markets, such as Latin Eurobonds . . . .”). According to Michael Pettis, Bradys can be an accurate proxy in local equity markets as well. See E-mail from Michael Pettis, supra note 189 (stating “investors see Brady bonds as alternative and equivalent to local stock markets”).


216. See id. at 44.

217. The assertion that equity markets have been lowly correlated strikes this author as strange given the apparent correlation between equity and debt emerging markets and the experience in the debt markets; but as this work has not focused on equity markets, it does not disprove this proposition.


219. When currency problems in Mexico cause a run on the Thai baht and stock exchange prices to fall in India, Indonesia, Hungary, and Poland, one knows that economic fundamentals are playing a minor role in investors’ decisions.
D. Impetus for the Market

Much light can be shed upon the market by considering the factors that have driven it. The principal factors driving the market in this period were: (i) the increasing role of crossover investors, caused principally by the low yields available in developed countries coupled to stronger economic fundamentals in many emerging nations; (ii) the strong growth in new issues; (iii) the buy-backs of Brady bonds; and (iv) the tremendous increase in foreign investment in local instruments. In addition to these factors, the new Brady-style restructurings provided substantial impetus to the market early in the period. Each factor will be considered.

1. The Central Role of Crossover Investors

Crossover is the market’s term for mainstream institutional investors adding emerging market bonds to their portfolios for higher yield. These investors include pension funds, insurance companies, high-yield (“junk”) bond mutual funds, high-grade bond funds, international bond funds, and hedge funds. These funds control such vast amounts of capital that 5% of their aggregate portfolios far exceeds the capitalization of the specialist emerging markets funds, and many allocate that proportion to the emerging markets. The crossover phenomenon is, in essence, the story of a broad array of money managers becoming comfortable with higher risk investments and learning

220. A potential further factor is the increase in creditworthiness of some debtor nations. As the credit rating of a debtor improved, so the range of potential investors in its debt increased. In particular, an investment grade rating was especially significant, as a number of insurance companies and pension funds are proscribed by their constituent documents or State regulations from investing in below investment-grade assets. Poland received an investment grade rating from one of the two major credit rating agencies in 1994, and Colombia’s debt was rated as being of investment grade in September 1995. These improvements in creditworthiness provided some slight impetus to trading in the secondary market. See Emerging Market Debt—Oversupply Worries, INT’L FIN. REV., June 3, 1995; Mullin, Tequila Hangover, supra note 30; David Scanlan, Colombia to Obtain $225 Million Loan from Group of Banks, STAR TRIBUNE (Minneapolis), Oct. 9, 1995, at 8D.


222. For instance, the 182 SEC-registered high yield funds tracked by Lipper Analytical have about US$70 billion in assets, compared to the US$2 billion in assets of the twenty-one SEC-registered emerging markets bond funds. See Eavis, supra note 221, at 17.
to leaven their portfolios with a small proportion of higher risk assets in the quest for a higher overall return. 223

The unprecedented inflows to mutual funds in the early-to-mid-1990s shrivelled fixed income yields in the developed countries. Crossover investors moved further afield in search of higher yields. 224 They began to invest substantially in emerging markets bonds in the bull run of 1993, but fled the market when the bears growled in 1994 and 1995. They returned in far greater numbers in the bull run of 1996 and provided much of the impetus for the dramatic 39% increase in debt prices that year. 225 The returns were certainly there: in the first eight months of 1996, U.S. Treasuries returned negative 2.8%; U.S. corporate bonds, 0.6%; U.S. junk bonds, 6.3%; and emerging markets bonds, 15.7%.

Crossover investors also acquired much of the record $90 billion of new bond issues that year; indeed, as 1996 progressed, more and more underwriters began to sell new emerging markets issues from their high yield or high grade desks rather than from emerging markets desks, in recognition of the destination of the majority of the bonds. 226

The flood of crossover investment caused the yields on the traditional emerging market instruments, Brady and euro bonds, to fall sharply. The emerging market money that had brought these bonds to prominence moved on in search of higher yield, this time to local instruments—bonds denominated in either dollars or local currency that are issued in the local market as opposed to internationally. 227 Local instruments developed into a major secondary market sector over this period.

By 1997, many crossover investors had come to depend on the emerging markets to maintain above-average returns. The initial test of their commitment to the markets came in April 1997 as U.S. short-term interest rates began to climb. The pro-

225. See Eavis, supra note 221, at 16.
pect of a mass withdrawal by crossover investors, as in 1994, led to a decidedly jittery market. Crossover investors are traditionally strong on analysis of the issuers' business and balance sheet and less so on analysis of country risk. However, in 1997, they displayed maturity and understanding of the market by not withdrawing en masse. Indeed, crossover investors underpinned the market until late 1997, as pension funds and insurance companies began to allocate from 3% to 6% of their portfolios to the emerging markets, following the lead of the mutual funds which often were more heavily committed to emerging markets.

With their perceived higher creditworthiness, East Asian and Eastern European issuers appealed in particular to crossover investors. Indeed, the flow of capital allowed yields to decline so dramatically that new issues by these issuers at around 100 basis points over U.S. Treasuries became common, and Slovenia was able to issue a US$325 million five-year Eurobond at only fifty-eight basis points over U.S. Treasuries in an issue sold principally to mainstream institutional investors. Likewise, Indonesia was able to issue US$400 million in ten-year Yankee bonds priced at 100 basis points over Treasuries. As subsequent events confirmed, investors were severely underestimating the country risk.

Crossover investors brought the emerging markets into the investment mainstream. The most remarkable change in this period is that the secondary market moved from a specialist niche market to one that was simply one sector, albeit a risky sector, of the mainstream market. This was borne out by the behavior of the crossover investors in the depths of the October 1997 sell-off. While many left the market, many more stayed. Crossover investors displayed far more commitment to the sector than, for

233. See Tidal wave of Foreign Finance, supra note 227. For instance, the Czech Export Bank was able to obtain a three-year US$150 million revolving credit syndicated loan priced at a mere 12.5 basis points over LIBOR. See id.
instance, hedge funds.\textsuperscript{235}

In 1998, crossover investors were again consistent buyers of the new issues.\textsuperscript{236} However, not even the new-found commitment of the crossover investors could withstand the contagion from the Russian crisis. Having suffered egregious losses, many withdrew from participation in the market. One factor undermining the commitment of crossover investors to the market was that the majority of institutional investors did not benchmark their emerging markets bonds against an index as they would have with investment grade bonds.\textsuperscript{237}

2. The Dramatic Growth in New Issues

While this research does not deal in depth with new issues—neither Eurobonds, yankee, samurai, nor dragon bonds\textsuperscript{238}—the influence of the new issues on the market in this period is too large to ignore entirely. Yen and Deutsche mark denominated bond issues were the saviors of Latin American and Eastern European sovereigns in 1995 when nearly one-half of all emerging markets debt issues were denominated in one of those currencies.\textsuperscript{239} Yields on Deutsche mark and yen bonds were very low, and non-investment grade paper was rare in these markets. This allowed Latin American borrowers to raise massive amounts of funds at relatively fine prices.\textsuperscript{240}


\textsuperscript{237} As do dedicated emerging markets funds.

\textsuperscript{238} While samurai bonds were far less significant than euroyen issues, a remarkable 50\% of all samurai bond issuances in 1995 were by emerging markets issuers. The secondary market in new issue bonds is not as liquid as Brady bonds because many investors buy Eurobonds to hold until maturity. See Paul Kilby, \textit{Growing Pains: Debt Market Survives Bumps and Bruises on Its Way to Maturity}, \textit{LatinFinance}, Mar. 1995, at 60; Secondary Market—Open Season, \textit{Int'l Fin. Rev.}, Sept. 4, 1994; see also Christopher Mai-lander, Financial Innovation, Domestic Regulation and the International Marketplace: Lessons on Meeting Globalization’s Challenge Drawn from the International Bond Market, 31 Geo. Wash. Int’l L. & Econ. 341, 342-43 (1998) (describing these bonds).


\textsuperscript{240} In particular, Argentina, Brazil, and Mexico tapped the yen market, with Uruguay, Colombia, and Venezuela joining them in issuing in Deutsche marks. See Mullin, \textit{Tequila Hangover}, supra note 30. For instance, Mexico was able to issue 100 billion yen in bonds at a spread of nearly 200 basis points. See Investors Step Back into The Arena, \textit{Int'l Fin. Rev.}, Sept. 30, 1995.
With the bull run of 1996, the issuers returned to the U.S. dollar, with 69% of bonds dollar-denominated,\textsuperscript{241} and to issuing record amounts: over US$90 billion of bonds issued compared to US$56 billion in 1995.\textsuperscript{242} The largest issuers were Mexico, with US$17.8 billion of bonds issued; South Korea, US$14.9 billion; Argentina, US$11.7 billion; Brazil, US$9.1 billion; and Indonesia, US$4.8 billion.\textsuperscript{243} Through 1996 and up to October 1997, tenors increased significantly and spreads narrowed dramatically.\textsuperscript{244}

Mexico's return to the voluntary capital markets on this scale signalled an astonishing rehabilitation from the peso crisis and tequila effect. Mexico's officials received effusive and universal praise in the international capital markets for engineering Mexico's return to pre-eminence among emerging markets borrowers.\textsuperscript{245} As Tulio Vera said in mid-1996: "That an issuer, which less than a year and a half ago could conceivably default, can now go out and raise a 30-year bond is incredible."\textsuperscript{246}

There were a number of notable issues in 1996. Foremost among them was Mexico's massive US$6 billion debt issue in July, which was used to repay the relatively expensive loans advanced by the U.S. Treasury as part of the U.S.-led bailout of Mexico in 1995.\textsuperscript{247} JPMorgan managed the issue and creatively supported its credit with future Mexican oil revenues and by structuring it as a hybrid transaction in which purchasers could acquire either floating rate notes or certificated bank notes. The issue thus appealed to both bond investors and commercial banks.\textsuperscript{248} Mexico had laid the groundwork for this issue with an

\textsuperscript{241} See International Bond Issuance: A Banner Year, Emerging Markets Investor, Jan. 1997, at 3 (whereas only 58% of bonds were dollar-denominated in 1995).
\textsuperscript{242} See Prospect '97, Emerging Markets Investor, Jan. 1997, at 14; see also International Bond Issuance: A Banner Year, supra note 241, at 3; cf. 1 World Bank, Development Finance 1997, supra note 66, at 105 (showing slightly lower figures).
\textsuperscript{243} See International Bond Issuance: A Banner Year, supra note 241, at 3.
\textsuperscript{244} See Danielle Robinson, Crunch Time for Emerging Markets, Euroweek, Jan. 1997, at 240 (showing average weighted maturities of emerging markets bonds lengthening to 11.5 years (from 4.5 years in 1995)).
\textsuperscript{246} Brian Caplan, Best Emerging Markets Borrowers: Mexico, Euromoney, June 1996, at 64.
\textsuperscript{247} See David E. Sanger, Mexico Says It Will Repay $7 Billion to the U.S., N.Y. Times, July 26, 1996, at D1, C5.
innovative US$1.5 billion issue in November 1995 which yielded the higher of twelve month dollar LIBOR or twenty-eight day Cetes yields minus 6% (Cetes are local market peso-denominated paper). This allowed investors to take a punt on receiving high returns while minimizing risk for those funding in LIBOR.249

In 1997 notable issues included Argentina’s issue of ten-year Eurobonds denominated in pesos. Priced at only 160 basis points over Argentina’s dollar-denominated Eurobonds and issued in an amount of 500 million pesos, the issue confirmed the market’s faith in Argentina’s fixed peg of the peso to the U.S. dollar,250 a faith that was to prove utterly misplaced.251 The fluidity of these markets was well demonstrated by Mexico—it made a number of bond issues in the first half of the year in yen, lira, pounds sterling, and dollars. In August 1997, Mexico used the proceeds to prepay the US$6 billion 1996 issue, thereby lengthening its debt maturity profile, securing lower interest rates, and freeing up the oil revenue collateral attached to the earlier bond.252

The year 1997 was also notable for the regular issuances by Latin American issuers in a broad range of European currencies and for regular global bond issuances of US$1 billion and upwards, designed to ensure the liquidity that had often been lacking in the new issue market.253

The dramatic growth in new issues of 1996 was sustained through the setbacks of 1997, such as the U.S. Federal Reserve’s increase in interest rates in the first quarter and the onset of East Asia’s troubles in June.254 The primary market displayed a depth and stability not seen before. The debtor nations, with Brady bond exchanges, global bonds, local debt programs, and in-

250. See Vote of Confidence, EMERGING MARKETS INVESTOR, Mar. 1997, at 13; see also Danielle Robinson, New World for Latin Sovereign Debt, EUROWEEK, Aug. 29, 1997, at 48 (commenting that by June 1997, when Argentina issued five-year europeso bond, spread had halved to around 80 basis points).
253. See Robinson, supra note 250, at 48.
creased European currency issuance, likewise displayed a more sophisticated and flexible approach to liability management than in earlier years. The growth in new issues in this period was supported by the improving economic outlook and liability management of debtor nations, and driven by the low rates of return on investments in industrial countries, the increased liquidity in international capital markets, and the increasing tolerance of risk displayed by traditionally conservative institutional investors.

October 1997 changed all this: The demand for emerging markets debt largely evaporated; fortunately, most emerging markets borrowers had already raised all the capital they needed for the year. The demand for dollar-denominated debt was the slowest in returning. For instance, in the first two months of 1998, Argentina raised the equivalent of US$1.35 billion in the Deutsche Mark, Euro/ECU, French franc, guilder, and lira markets, and only US$500 million. In early 1998, the Latin sovereigns principally raised capital in a host of European currencies, and Latin blue-chip corporates and major banks issued short-term dollar denominated paper.

Notwithstanding its very real economic problems, Korea’s US$4 billion global bond issue in early April 1998 was three-times oversubscribed. The IMF’s record US$57 billion bailout was in place, but such strong appetite for bonds yielding only around 350 basis points over comparable U.S. Treasuries was difficult to fathom.

Russia’s crisis in August closed the market to new issues for a while, and recovery, when it came, was slow. Indeed, twenty-three debt deals were completed in the primary market in November and the first half of December 1998, compared to sixty-nine.

255. See Robinson, supra note 250, at 48.
five in the same period in 1997. In the aftermath of Russia, most investors required extra inducements to buy bonds. For example, Argentina was able to raise US$1 billion in November 1998 by issuing bonds with warrants that permitted holders to buy Argentina’s global bond due 2027 in one year’s time, at a fixed price. In addition to warrants, the other popular inducement was, predictably, the securitization of assets such as oil and telecom revenues. The trend to sweeteners continued well into 1999. In February 1999, Mexico’s US$1 billion bond issue included warrants entitling the exchange of Brady bonds into new global bonds in one year. Similarly, Argentina’s 1999 issue included warrants entitling the purchase of more of the same bonds in one year’s time. Inducements were also necessary in 1999 for debt of maturities of five years and longer.

The development with the most potential future impact during this period was the trend towards issuance in emerging market currencies by corporations, sovereigns, and supranational institutions. The supranationals followed this route for two reasons: (1) very fine pricing was achievable in these currencies in this period; and (2) to develop Euromarkets for currencies such as the Czech and Slovak korunas, the Korean won, the Mexican peso, the New Taiwan dollar, the Philippine peso, the Polish zloty, and the South African rand. The supranationals issued the equivalent of US$4 billion in emerging markets cur-

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262. The price of the bond was US$93.3. See Jonathon Fuerbringer, Argentina Sells $1 Billion of 20-Year Bonds, N.Y. Times, Feb. 18, 1999, at C11. The bond was trading at US$85.5 when the warrants were issued and at around eighty-four U.S. dollars in February 1999. Id. at C11.
267. While the range of new currencies was impressive, the depth of issuance was not yet there—three-fourths of the volume of new bonds issued in 1997 were denominated in U.S. dollars. See I World Bank, Development Finance 1998, supra note 82.
rencies in the first nine months of 1997, four times the figure for the whole of 1996 and nearly eight times the amount issued in 1995.  

The trend towards local currency issuance in the Euro-market was significant, because it offered the best way to shift the exchange rate liability from debtors onto foreign investors, and thus minimize the prospects of, and the pain suffered by the debtors and creditors, any future sovereign debt crisis.  

When emerging markets debtors borrow in their own currency and their economy is healthy, the real cost of such borrowing tends to be high, as interest rates are generally higher on local currency debt. When their economy is weak, the real cost of borrowing tends to be low due to a deteriorating exchange rate. Raising capital in the relevant local currency tends to ensure that debtors pay handsomely when they can afford to do so, and less when they cannot. This liability profile displaces or minimizes the damage to all parties from a debt crisis. If the day arrives when a majority of sovereign borrowing by emerging markets countries is denominated in the currency of the debtor, the international financial system will be inherently more stable, as the risks of raising international debt will be apportioned far more equitably between creditors and debtors than was the case in 1982, 1995, 1997, or 1998.  

The premise underlying the massive loans of the 1970s was that sovereigns never go bankrupt because they can always raise taxes: The loans arranged by the economic elite of a nation can always be repaid by its poor. The poor of Latin America endured seven years of suffering before the developed world began to embrace the notion of debt relief. Borrowing in local currency would lead to increased reward for creditors when times are good, and conversely provide debt relief when times are bad.  

3. Debt Buy-backs  

Brady Bond exchanges are, of course, a type of buy-back.
and have been considered above.\textsuperscript{271} They provided some impetus to the market in this period. Far greater impetus was provided by informal debt buy-backs, an altogether quieter affair than exchanges. In an informal buy-back, a sovereign repurchases its Brady bonds on the secondary market, typically using the proceeds of newly issued bonds. These repurchases are often conducted anonymously through agents, resulting in scarce information regarding these transactions. The rationale for the buy-backs is the same as for the exchanges: The total stock of debt is reduced because the Bradys are repurchased at a discount and the liberated collateral is used to retire further debt. The trade-off is that the newly issued bonds are usually issued at higher interest rates and for shorter terms than the debt being retired. Of course, the principal has to be repaid upon maturity and is not covered by zero coupon bonds as with Bradys.

Depending upon secondary market prices, and prevailing interest rates, buy-backs can be an extremely attractive proposition for debtor governments.\textsuperscript{272} Brady bonds typically did not prohibit buy-backs and, as bonds, had none of the sharing, \textit{pari passu}, and other clauses typical of sovereign loan agreements, which also require waivers for buy-backs to proceed.\textsuperscript{273} Argentina, Brazil, and Venezuela reportedly conducted substantial buy-back programs in 1995.\textsuperscript{274} Indeed, most debtors bought back a portion of their debt when prices fell far enough, partly to profit from the large discount and partly to provide stability for their paper. When Brady bond prices fell, their yields increased, which meant higher yields had to be paid to issue new Eurobonds.\textsuperscript{275} Consequently, emerging markets sovereigns retained a healthy appetite for Eurobonds.

Peru, rather cheekily, bought back substantial amounts of its debt while engaged in negotiations with its bankers for a

\textsuperscript{271} See supra note 211 and accompanying text.
\textsuperscript{274} See Kilby, supra note 272, at 34.
\textsuperscript{275} See Weeks, supra note 4, at 26 ("Countries are also learning that they must do what is necessary to support prices of their [Brady bonds] if they are to remain in a position to issue other securities on the international markets."); see also Kilby, supra note 272, at 34.
Brady-style restructuring. Perú reportedly bought some of its debt in late 1994 and early 1995 through Swiss Bank Corporation at prices between forty-two and fifty-two U.S. cents and a further US$1.2 billion of its debt in July and August, 1995 for US$600 million. This was highly beneficial for Perú, as past due interest was not usually forgiven in Brady deals. Perú was so far in arrears that past due interest and principal were roughly equal to around US$4 billion each. However, past due interest ceased to matter upon the repurchase and retirement of debt, so Perú was twice as well off by repurchasing its debt in the market than by restructuring it in a Brady-style restructure, even one with a principal discount as high as 50%.

Later deals included Argentina’s repurchase of some of its Brady bonds with part of the US$1.7 billion from two yen and Deutsche Mark Eurobond issues in late 1995, Mexico’s repurchase of US$1.2 billion of Brady bonds at eighty-one cents on the dollar with the proceeds of a US$1 billion twenty-year bond in September 1996 and its redemption of US$1 billion of Aztec bonds in March 1997 and Poland’s repurchase of some US$1.7 billion of Bradys in May 1997. Numerous other nations, particularly Brazil, took advantage of the low interest rates in the primary markets to issue new bonds and use the proceeds to repurchase Brady bonds quietly in the secondary market. These buy-backs were an important motivator in the market during this period, even though they diminished the stock of the most liquid instrument in the market. By late 1997, Brady bonds represented only 12% of the total stock of emerging market debt.

276. See Marray, supra note 272, at 24.
278. See Kilby, supra note 272, at 34.
279. See Marray, supra note 272, at 24.
280. See id. at 13.
281. The new issue was issued at 445 basis points over U.S. Treasuries. See 1 World Bank, Development Finance 1997, supra note 66.
282. This was a great deal for Mexico as the coupon on the Aztecs was substantially higher than on the debt with which they were replaced and, in addition, some $400 million of collateral was liberated. The bonds were redeemed at par. See Robinson, supra, note 245, at LA26.
and yet remained the most actively traded portion of the market.285

Informal Brady bond buy-backs continued throughout 1997, until the October market crash stopped the source of funds—the new issue pipeline.286 However, while moving one group of debt repurchasers temporarily aside, the Asian troubles ushered another group onto center stage. In Asia itself, the troubled corporations, or their principal shareholders, became major repurchasers of the corporation’s debt. At steep discounts, the repurchase of debt allowed the debtor corporations to obtain debt forgiveness and continue in business,287 usually by virtue of capital injections from their controlling shareholders or through debt buy-backs by shareholders.

As the effects of the Asian crisis contagion wore off in early 1998, the major Latin American nations apparently resumed repurchasing their debt.288 Certainly by August and September of 1998 Argentina, Brazil, and Venezuela were active in repurchasing their debt, with Argentina repurchasing some US$700 million of its Brady par bonds in September alone.289

4. Local Instruments

The emerging markets are driven by investors’ appetites for high yields.290 In 1993 this appetite led investors to debt instruments issued in the debtor country. The most accessible instruments were cetes (peso-denominated Mexican treasury bills), tesobonos (dollar-denominated Mexican treasury bills), and bonex (dollar-denominated Argentine treasury bills).291 By mid-1994, nearly one-half of all cetes were held by foreigners.292 By January 1995, foreign ownership had risen to 70% of cetes and

292. See Goodhart, supra note 290, at 53.
82% of tesobonos. Indeed, it was the pending maturity of some US$6 billion of cetes and US$5.2 billion of tesobonos in late January and early February 1995 that helped trigger the peso crisis of December 1994, as it became increasingly unlikely that Mexico would be able to roll most of them over.

It has been suggested that the movement into local currency bonds was supported by investors seeking debt instruments not linked to the dollar when U.S. interest rates were in decline. Whatever the cause, the braver institutional investors were soon investing up to 10% of their portfolios into local instruments. The local instruments of the major debtors such as Mexico and Argentina attracted the most attention; however, others, such as the Polish zloty and Czech koruna instruments, and a growing range of Asian bonds, also attracted investors. The high yields, particularly of the Latin American instruments, proved attractive to many investors as 1995 progressed. These instruments were traded through the secondary market and added significantly to market volume. As Table Two establishes, the secondary market was serving as the intermediary facilitating the flow of developed world capital to developing nations.

293. See Latin America in the Fallout Zone, ECONOMIST (UK), Jan. 7, 1995, at 59.
295. See Goodhart, supra note 290, at 52.
298. Asian bonds were the least actively traded in the secondary market, whereas Latin American bonds were the most actively traded. See World Bank Backs Asian Bond Market—Second Best, INT'L FIN. REV., July 1, 1995.
299. Nicolas Rohatyn of JPMorgan is "personally . . . extremely driven by the notion that . . . to intermediate capital between the developing and developed markets . . . is a fundamental good for the world." Saul Hansell, At Morgan, New Markets and a Rohatyn Emerge, N.Y. TIMES, Feb. 28, 1994 at D1. For the effect on an emerging market such as Malaysia, see Jennifer Jacobs, Prospects for Public Listings Bright: Official, BUS. TIMES (Malay.), Apr. 19, 1995, at 5. Whether these flows are a good is a separate question beyond the scope of this work—on one view they support development in emerging nations, and on the other they permit excessive indebtedness and lead directly to currency crises such as Mexico's in December 1994 and the East Asian economic troubles of late.
Local instruments were a substantial market sector with a total capitalization of some US$850 billion at year-end 1996 and US$599 billion at year-end 1999.

As the crossover investors moved into the emerging markets, particularly the market in new issue bonds, and yields declined, the traditional emerging markets capital sought out higher returns in local markets. Stripped spreads on Brady bonds fell from 1900 basis points in early 1995 to 800 basis points in early 1996 and 400 basis points in early 1997. Indeed, in one month alone in early 1997, spreads compressed by well over 100 basis points. This spread compression was driven by the influx of crossover investors into this market and the primary market. The compression squeezed many traditional investors out of the emerging markets and, in turn, these traditional emerging markets investors supported a major expansion in local instruments.

As would be expected, the highest returns were earned in the most risky local markets such as Russia, Bulgaria, Romania,

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**TABLE TWO: TURNOVER OF LOCAL INSTRUMENTS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Turnover (In billions of US$ face value of instruments)</th>
<th>Share of Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>519</td>
<td>19%</td>
</tr>
<tr>
<td>1994</td>
<td>571</td>
<td>21%</td>
</tr>
<tr>
<td>1996</td>
<td>—</td>
<td>24%</td>
</tr>
<tr>
<td>1997</td>
<td>—</td>
<td>26%</td>
</tr>
<tr>
<td>1998</td>
<td>1,176</td>
<td>28%</td>
</tr>
<tr>
<td>1999</td>
<td>599</td>
<td>34%</td>
</tr>
</tbody>
</table>

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301. EMTA’s surveys almost certainly grossly underestimate the turnover of local instruments as the surveys do not capture the turnover of many of the local traders in the emerging market nations. For instance, trading in Brazil in Brazilian local instruments is massive, and it is unlikely that these figures capture very much of this trading at all. See *Emerging Market Debt—A US$5tr. Market*, INT’L FIN. REV., Mar. 22, 1997.


304. See, e.g., Kandler, supra note 302.

Russia, in particular, grew to rely upon short-term debt, much to its detriment.\textsuperscript{307} GKO, Russian sovereign short-term paper, represented 9.2\% of public debt in 1994 and a remarkable 45.4\% by 1996. By October 1997, outstanding GKO\textsuperscript{s} totalled US$55 billion with 30\% held by foreigners. By December, the proportion in foreign hands had declined to 18\% due to the general market sell-off and, more specifically, the withdrawal of Brazilian and Korean investors.\textsuperscript{308}

The major local currency index in this period was JP Morgan’s Emerging Local Markets Index, which tracked local-currency money market instruments in twenty-four countries.\textsuperscript{309} In addition, in 1997, Deutsche Morgan Grenfell commenced its Emerging Eastern Europe Index, which tracked performance of local currency instruments in Eastern Europe.

An interesting variation in local markets was Mexico’s creation in 1997 of a local market in its internationally issued debt, both Brady bonds and eurobonds. Previously, a Mexican entity wishing to invest in these instruments had to convert its savings into U.S. dollars, deposit the money outside Mexico, and deal with a secondary market trader. Since 1997, an entity can acquire U.S. dollar-denominated Mexican sovereign bonds in Mexico for pesos, earn the interest in U.S. dollars, be paid interest in pesos, and liquidate the position in pesos.\textsuperscript{310} This new alternative provided much needed access for Mexican pension funds to diversified and long-term investments.\textsuperscript{311}

5. New Brady Restructurings

The newly completed Brady-style restructurings in 1994 to 1995, namely Brazil and, to a lesser extent, Bulgaria, the Domini-

\textsuperscript{306} See Rob Spence, *Softly, Softly Catchee Yield*, EMERGING MARKETS INVESTOR, June 1997, at 32.
\textsuperscript{310} See Baron Levin, *Bolsa Boasts Brady Bonds*, BUS. MEX., July 1, 1997; see, e.g., *Mexico to Trade Bradys on Local Markets*, EMERGING MARKETS DEBT REP., Apr. 21, 1997.
\textsuperscript{311} While technically such bonds are local instruments as they trade on a local market, they are treated for our purposes as external debt.
can Republic, Ecuador, Jordan, and Poland, each provided new bonds which traded far more frequently than did the loans they replaced and thus increased market activity.\footnote{312} These restructurings, notably Brazil's, brought significant amounts of highly liquid Brady bonds onto the secondary market and assisted in the market's relatively quick recovery from the peso crisis and tequila effect.

F. Market Practices

This period saw a dramatic increase in sophistication of the practices of the market, starting, it must be said, from a relatively low base. The principal changes in market practices were the increasing use of live screens and brokers to trade the debt, the increasing importance of research, and four initiatives of the Emerging Markets Traders Association ("EMTA"): (a) limits on credit extended by traders to customers, (b) the multilateral netting facility, (c) Match-EM, and (d) the Emerging Markets Clearing Corporation. Each will be considered.

1. Screen Trading and the Role of Brokers

Live screens, quoting firm prices, expanded in this period to include a wider range of debt and became the norm for major assets in late 1993. They proved highly efficient at disseminating Brady bond and Eurobond prices and "revolutionized Brady broking."\footnote{313} In doing so, they also changed the nature of trading. In 1994 and 1995, there was a distinct move towards screen-
based trading through a broker and away from traders dealing directly with each other. As Jorge Jasson, of Chase Manhattan, said at the end of 1995:

There's not as much dealer-to-dealer trading now . . . direct dealing is done mostly with clients . . . .

. . .
Our commitment to market-making and liquidity . . . is to our clients and not to the Street. With more activity through brokers, professionals now are not required to make markets to each other.\textsuperscript{314}

This was a major change in the market's operation. The market of the late 1980s and early 1990s functioned as an over-the-counter market, in which liquidity was provided by market makers buying and selling for their own accounts.\textsuperscript{315} While the market remained, in essence, an over-the-counter market, the trend was towards its functioning more like an exchange, in which liquidity arose from brokers matching buyers and sellers, and less like an over-the-counter market.\textsuperscript{316}

In early 1995, most traders were transacting about 50% to 60% of non-client business through brokers.\textsuperscript{317} The increased use of brokers screens improved liquidity and price transparency. For the first time, live screens permitted traders to see the prices at which the market was clearing.\textsuperscript{318} This increased use of brokers was promoted by the ease and efficiency of screen-based trading, as well as the broking commission war that had broken out.\textsuperscript{319}

In early 1994, the standard commission was two basis points charged to the party placing the buy or sell order (the so-called "aggressor") and, shortly afterwards, one basis point to the aggressor.\textsuperscript{320} It appears this move towards fine commissions was an attempt by the major brokers to squeeze out some of the newer entrants in a market that was distinctly over-brokered. The increased use of brokers was the only positive outcome of a com-

\begin{thebibliography}{99}
\bibitem{315} See Kilby, \textit{supra} note 272, at 34.
\bibitem{317} See Hogg, \textit{Pips Squeak}, \textit{supra} note 313, at 35.
\bibitem{318} See Kilby, \textit{supra} note 272, at 34.
\bibitem{319} See id.
\bibitem{320} See id.
\end{thebibliography}
mission war that meant massive turnover was needed to earn profits broking Brady bonds.\textsuperscript{321} Meanwhile, institutional investors with raised expectations also came to prominence during this period, which increased the level of sophistication in the market.

2. Increasing Importance of Research

As institutional investors came to dominate this market, they demanded high quality research upon which to base their investment decisions.\textsuperscript{322} JPMorgan grew its research efforts in 1991; by 1995, it had thirty-five economists and analysts dedicated to emerging markets research.\textsuperscript{323} In addition to the usual economic and political analysis, market strategy, and forecasts, JPMorgan produced two indices: an Emerging Markets Bond Index and a Brady Bond Index. These indices appeared on most trading screens. The former, the Emerging Markets Bond Index, became a key tool for benchmark-focused investors.\textsuperscript{324} To put JPMorgan’s research commitment into context, Chase Manhattan’s research team, itself highly regarded, at the time comprised sixteen people.\textsuperscript{325} Further evidence of the importance of quality research is demonstrated by the poaching in 1995 by Merrill Lynch of virtually the entire research team from Salomon Brothers.\textsuperscript{326} Headed by Joyce Chang, the compact, but highly regarded, team of approximately fourteen people gave Merrill an immediate profile in research.

The production of emerging markets research and indices served the market well.\textsuperscript{327} The importance of a transparent market operating on high quality information is reflected in the decision of the International Finance Corporation to produce two

\textsuperscript{321} See Hogg, \textit{Pips Speak}, supra note 315, at 35. In early 1995, there were seven brokers in New York and five in London, in a market in which most brokers thought four in New York and two in London would be a happy number. \textit{Id.} New York accounted for about 80\% of emerging markets debt broking because of the predominance of Brady bonds and eurobonds. \textit{Id.}


\textsuperscript{323} See \textit{id.}

\textsuperscript{324} See \textit{id.}

\textsuperscript{325} See \textit{id.}


\textsuperscript{327} See \textit{id.}
indices of emerging markets equities. Nonetheless, relative to older markets, the market still operated on relatively poor information. This was reflected in the large number of traders who came from Latin American countries: in the absence of plentiful formal information, access to informal informational sources and a deep knowledge of a country was relatively more important.

3. Limits on Extension of Credit

In 1994, EMTA acknowledged that excessive leverage had contributed to the size and speed of the collapse of early 1994. EMTA recommended that the initial extension of credit by market participants to their customers be limited to between 50% and 75% for loans, 60% and 80% for Brady and other bonds, and 65% and 85% for short-term debt instruments. EMTA’s guidelines and recommendations, which are still in force today, are not law and not directly enforceable. The experience of the market, though, suggests that the rate of compliance with the guidelines is high, as sophisticated participants recognize their own interests in a well-organized market.

4. Multilateral Netting Facility

In September 1994, EMTA implemented its Multilateral Netting Facility so that only netted trades would need to be reported to agent banks. The netting facility reduced the administrative burden on back offices of both traders and agent banks. Specifically, the facility proved its worth on the restructuring of Russia’s debt in which it settled over US$7.3 billion of when-issued, when-restructured and participation trades by 161 market participants in three weeks. Previously, these settlements

331. See Chamberlin, supra note 330, at 41.
332. See id. The netting facility was developed in response to the large backlog of unsettled trades that developed from the continued high volume of loan trading. See EMTA, supra note 329, at 2. By early November 1995, the facility had settled 1,837 trades of Russian loans with a face value of about $4.6 billion, some $125 million face value of Panamanian loans and $55 million of Peruvian loans. See EMTA, 1994 Annual Report 9 (1994), http://www.emta.org/about/emta94ar.pdf (last visited Nov. 16, 2006).
would have required many months to effect.\footnote{333}

5. Match-EM

Match-EM is an automated trade confirmation and matching system for Brady bonds and loans, which allows traders to confirm trades almost instantaneously, thereby greatly reducing the risk of errors and other problems. It was launched on May 1, 1995; within four months of commencement, approximately one-half of the market and the majority of brokers were wired into it.\footnote{334} After one year of operation, there was a daily average of 1,200 trade inputs being entered into the system with an average matching rate of 92\%\footnote{335}. Match-EM allowed EMTA to begin to collect and disseminate more accurate volume and price information on a daily basis\footnote{336}, effecting a substantial reduction in settlement risk. It also enabled participants to manage their inventories more effectively and enhanced the efficiency and transparency of the market.\footnote{337}

6. Emerging Markets Clearing Corporation

In early 1995, the EMTA began developing proposals for a clearing corporation that would “accept matched trades of emerging markets debt . . . net aggregate trade positions and issue net delivery and payment instructions to Euroclear and Cedel.”\footnote{338} The Emerging Markets Clearing Corporation (“EMCC”) was established in conjunction with, and is operated by, the International Securities Clearing Corporation.\footnote{339}

The EMCC was primarily established to promote the efficiency and the orderly development of the market and to end the over-concentration of counterparty risk in two sets of institutions: the commercial clearers of emerging debt (a field domi-
nated by Daiwa Securities America), and the brokers. Rapid rises in market turnover led to increases in the number of Daiwa’s counterparties, exposing the firm to ever higher levels of counterparty risk. Likewise, higher turnover exposes brokers to a greater risk of having, unintentionally, to maintain positions overnight or longer, which is problematic as brokers are typically thinly capitalized. As all trades between members are guarantee and the EMCC is fully collateralized by all members, counterparty risk is massively reduced.\(^{340}\) In the hopes of creating a more efficient market, JPMorgan was the impetus and guiding hand behind the formation of the Euro-area Economy Modelling Centre ("EMCC"), motivated by its interest as a major emerging markets trading house in addition to being the owner of Euroclear.\(^{341}\)

The dramatic increase in Brady bond turnover that accompanied the October 1997 market turmoil demonstrated in stark terms the need for such a clearing corporation. The ordinary turnover of about 750 Brady trades per day increased to 4,500 per day; concurrently, the number and rate of mismatches grew dramatically. The EMCC could have provided real-time matching of trades and settlement instructions for both parties to Euroclear or CEDEL—thus avoiding the bottlenecks that developed in late October when mismatched settlement instructions became unacceptably common.\(^{342}\) Unfortunately, as the market turmoil unfolded, the final proposal for the EMCC was at the Securities and Exchange Commission awaiting approval (which was not granted until February 1998). The EMCC commenced commercial operation in April 1998.\(^{343}\)

There are costs to EMCC membership, as high-quality collateral has to be posted with the clearing corporation. Accordingly, many of the smaller banks and brokers did not join.

G. Participants

1. Traders

JP Morgan was the leading trader throughout this period.


\(^{341}\) For an excellent analysis of JPMorgan as the driving force behind the EMCC, see Jack Willoughby, Emerging Risk, INSTITUTIONAL INVESTOR, Dec. 1997, at 39.

\(^{342}\) See id.

\(^{343}\) The EMCC cost about $3.5 million to establish.
Its turnover was US$1,052 million face value of debt in 1997, our sample year. Other prominent traders and their turnover in millions of U.S. dollars in 1997 are: Chase Manhattan ($810), Deutsche Morgan Grenfell ("DMG") ($790), Lehman Brothers ($600), ING Barings ($373), Bear Stearns ($335), Salomon Smith Barney ($257), and Bank of Boston ($259). The figures appear somewhat inflated relative to other sources, as one would expect—they are self-reported. Nonetheless, the relative rankings of trading houses are probably sufficiently accurate.

DMG's strong performance in 1997 is doubtless attributable to its bold hiring of over seventy of ING Barings sales, trading and research staff in mid-1996. The dramatic move was at least in step with historical precedent: DMG acquired its entire original Emerging Markets division of fifty staff in one swoop in 1990 when Libra Bank closed its doors. Major moves are not uncommon in this market. In March 1995, Bankers Trust's twenty-five person emerging markets trading team moved to Donaldson Lufkin Jenrette, a complete newcomer to the business. In February 1998, ING Barings stopped all dedicated equities research, sales, and trading for Latin America and laid off about 200 employees—somewhat remarkable given that the bank had been voted the best overall emerging markets bank, ahead of JPMorgan and Merrill Lynch, in surveys of some 1,500 money managers in 1997 and 1996, and their research team had been voted the best in the emerging markets only three months previously. While it had a good debt trading operation, ING Barings had apparently been unable to establish a significant presence in the more lucrative corporate finance and equity underwriting sectors.

344. These figures are from surveys by the Emerging Markets Investor. See Melvyn Westlake, Scrambling for the Top, Emerging Markets Investor, Mar. 1998, at 17; Westlake, Storming Morgan, supra note 186, at 21.
349. See Weever & Newton, supra note 347, at 4.
By 1995, emerging markets divisions had become important parts of their respective banks. Citicorp’s experiences make this particularly clear. Between 1990 and 1994, Citicorp laid off or lost as a result of business sales some 19,000 staff, but in the same period added 6,000 new jobs in emerging markets.\textsuperscript{350} By the end of 1994, 45% of Citicorp’s total profits came from its emerging markets operations, and the share was growing. This figure comprised the bank’s entire emerging markets operation, including corporate loans, bond and equity underwriting, equity trading, etc., in addition to the secondary market in debt. However, 45% of profits coming from emerging markets is nonetheless remarkable when one considers that, at the time, Citicorp was the largest bank in the U.S. and the largest issuer of credit cards in the world.\textsuperscript{351}

Some indication of the number of traders in this market is given by membership in the Emerging Markets Traders Association. As of May 1, 1998 EMTA had 125 members that traded debt: Sixty-five Full Members, defined as “institutions which actively trade Emerging Markets instruments,” a further fifty-four Associate Members, defined as “institutions that trade Emerging Markets instruments but are smaller and less active than Full Members,” and six Local Market Members, that trade in local instruments.\textsuperscript{352}

The wave of crossover investors began to alter the way the trading houses structured themselves. In mid-1997, Citibank merged its capital markets efforts in high-yield and emerging markets, while retaining separate sales desks, while Morgan Stanley merged its high-yield and emerging markets groups.\textsuperscript{353}

The market turmoil in late 1997 and 1998 saw major staff reductions among the major banks and other trading houses in the final quarter of 1998. It was as if the major players were waiting to see if business would rebound after the Asian crisis. Once the Russian debacle occurred, they were convinced the business would not rebound any time soon. The result was a slew of layoffs from banks’ emerging markets operations.\textsuperscript{354}

\begin{footnotes}
\footnote{350. See Simon Hylson-Smith, Bank of the Year—Citicorp, Int’l Fin. Rev., Dec 17, 1994.}
\footnote{351. See id.}
\footnote{352. EMTA, 1997 Annual Report, supra note 333, at 16.}
\footnote{354. See Richard Miles, Merrill Lynch to Shed 3,400 Staff, Times (UK), Oct. 14, 1998.}
\end{footnotes}
2. Sellers

Early in this period, the major net sellers of debt were the money-center banks, particularly the Japanese and, to a lesser extent, the U.S. banks. Their sales were facilitated, at least in the U.S., by loan-loss provisions that, by then, were generous. The major banks had deep pockets which remained filled with Brady bonds—in late 1994 Canadian and Italian banks had apparently not even begun to sell their Brady bonds. Overall, the banks remained the largest holders of Brady bonds. Indeed, these deep pockets posed problems for the market, as more debt would come on to the market each time prices moved up, making a recovery difficult to sustain.

Later in the period, debt was supplied to the market by the full range of its holders. Banks and investors from across the globe were now participating as sellers. The Asian and Russian crises, as one would expect, caused a wave of selling. Many open-ended mutual funds were forced to liquidate assets at virtually any price to meet investor redemptions. In addition, as the regional economies went into a tailspin, many local investors were forced to sell assets to stay solvent.

3. Buyers

In this period, the investment vehicle of choice for retail investors were funds, of which a full range was available: emerging markets mutual funds (both open-ended and closed-ended funds), emerging markets infrastructure funds, emerging markets bond funds, emerging markets equity funds (some of which also purchased Brady bonds because of their equity-like characteristics); and the whole range of non-dedicated mutual funds that often invested a small portion of their capital into the

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355. See Kilby, supra note 272, at 34; see also Norman Peagram, How Safe Are Those Bradys, Euromoney, Sept 1994, at 50.
356. See Kilby, supra note 272, at 34.
357. See Peagram, supra note 355, at 50.
358. See Westlake, Little Time, supra note 60, at 14.
emerging markets in search of a higher average yield. Brady bonds were available from some brokers, but generally in minimum denominations of US$250,000; mutual funds were the preferred method of spreading the risk. In addition, high-yield ("junk") bond funds often invested sizeable proportions of their portfolios, at times up to 25%, into emerging markets debt.

There was a boom in funds in the first half of 1994 with over US$8 billion raised by 211 funds. Given the problems in the market, this was somewhat surprising, but it seems investors were hoping to recapture the 70% return most funds showed in 1993. However, the peso devaluation and tequila effect in early 1995, reined in this growth dramatically and only US$1.33 billion was raised by seventy-four funds in the first half of 1995. Bond funds enjoyed a good year in 1995, gaining on average 20.1% on the back of the high interest rates emerging markets issuers were forced to offer. On the other hand, equity funds, which far outnumbered bond funds, lost on average 4.6% for the year, while Latin American equity funds were down on average 20.6%. Nonetheless, mutual funds, in general, became so influential in this period that commentators were writing of "a new phenomenon in Latin America where mutual fund managers, not bankers, can bring an economy to its knees." Indeed, by the end of this period, Charles Dallara, the managing

359. See Westlake, Shaken, supra note 175, at 13; Melvyn Westlake, Turning up the heat, EMERGING MARKETS INVESTOR, Mar. 1996, at 10. For examples of new funds being launched, see Adam Courtenay, Opportunity Knocks as Peru Rings Changes, SUNDAY TIMES (LONDON), June 18, 1995, § 6, at 6; Discret Charm of Debt, EMERGING MARKETS INVESTOR, Dec. 1995, at 6; Clifford German, Gambling on Third World Debt, INDEP., Nov. 18, 1995, at 26; Duncan Hughes, Bond Fund Targets Emerging Markets, S. CHINA MORNING POST, Oct. 29, 1995, at 12.


363. See John Waggoner, Peso Pummels Emerging Markets Funds, USA TODAY, Jan. 3, 1995, at 3B.

364. See Hogg, Running Uphill, supra note 362, at 37.

365. See Hinden, supra note 297, at 7.

366. Kevin G. Hall, Latin America Economies Vulnerable to Uninformed Investing Decisions, J. COMM., Apr. 28, 1995, at 3A. As an example of the size and diversity of these funds, consider the two Société Générale managed funds launched in late 1993 and early 1994 with initial asset values of 1 billion and 2.2 billion French francs, respectively. See French Bank Leverages Emerging Market Fund—Fed Stance May Jeopardize Rolling Spot, INT'L FIN. REV., Feb. 19, 1994.
director of the Institute of International Finance was quoted as saying: "[T]he debt flows to the emerging markets are going to come from ... pension funds and mutual funds, ... not from bank balance sheets." Funds had assumed a central role in international capital flows.

An open-ended fund (known as a unit trust in England) is obliged to redeem shares (or units) if requested by shareholders at the net asset value per share. This posed enormous problems for fund managers in early 1995. The peso crisis led to a rush of redemption requests to funds that were invested in essentially illiquid underlying assets. The resultant shakeout among open-ended funds suggested that closed-ended funds (known as investment trusts in England, in which investors can sell their shares on the market but not demand their redemption by the fund) were a more suitable vehicle for investing in the highly volatile emerging markets. Nonetheless, because capital for the emerging markets was scarce in the first half of 1995, open-ended funds accounted for two-thirds of funds launched, as they allowed the fund manager to start with a smaller fund and create new shares over time if demand improved.

The other big buyers were the other institutional investors: hedge funds, insurance companies, and pension funds. The term, "hedge fund" is, simply, "a broad catch-all for an incentive-based partnership." Indeed, the term "hedge" in the title is an historical misnomer. Today hedge funds are more likely to be using leverage, short positions, and derivatives in search of greater profits, than to be cautiously hedging their risks. The


369. See id.; see also Mike Goodman, Investment Trusts Survey: Emerging Again as a Favorite, DAILY TELEGRAPH, Jan. 6, 1996, at 16.

370. This was a neat reversal of the trend in 1994 when closed-end funds accounted for 64% of the total. See Hogg, Running Uphill, supra note 362, at 37.


374. See Fraser, supra note 372, at 11.
quest for high yields drew hedge funds almost inevitably to the emerging markets.\textsuperscript{375}

The sea change in the approach of institutional investors towards risk continued in this period, especially for mutual funds. In the words of a contemporaneous report:

Strategies once deemed to be on the wilder, forbidden shores of the business are being eagerly embraced by mainline institutional investors. The justification? Investing across markets that are out of step with one another enhances returns while reducing risk.\textsuperscript{376}

Mutual and hedge funds were major investors in Brady bonds in this period. As we have seen, the supposed low correlation between countries in a region and between regions, if true for equities, had never been true for Brady bonds. Nonetheless, funds had to hand a neat justification to invest in a range of Brady bonds—and returns from Bradys were high enough to make a fund manager’s performance sparkle. The other attraction of Bradys was their denomination in U.S. dollars, which, as fund managers repeatedly said, meant no currency risk.\textsuperscript{377} However, denominating the bulk of a nation’s borrowings in U.S. dollars merely transferred the currency risk to the borrower, making repayment difficult and restructuring more likely. Essentially, the risk remained with the investor.\textsuperscript{378}

One of the principal changes to the market in this period was that the universe of investors broadened tremendously, at least until the Asian economic crisis of mid-to-late 1997. Throughout 1996 and the first half of 1997, the market enjoyed the support of the investors with long-term investment horizons—such as multi-national corporations, pension funds, insurance companies and mutual funds (collectively, the so-called “crossover investors”)—that it had craved for so long.\textsuperscript{379} These were principally U.S. investors, as European institutions had not

\textsuperscript{375} See id.

\textsuperscript{376} Makin, supra note 373, at 41.


\textsuperscript{378} See Peter Drou & Ross Buckley, Strengthening the International Financial System (forthcoming).

yet developed the appetite for risk of their U.S. counterparts. These funds had access to tremendous amounts of capital. As the World Bank noted in late 1997, "[t]he last few years have witnessed an increasing concentration of national savings in the hands of institutional investors . . . ." Returns on emerging markets debt ensured that, although small, the proportion of this money finding its way into emerging markets debt was increasing. JPMorgan’s Index, a total return index, put total returns for 1996 at 39% across the sector, with Argentina returning 35%, Brazil 55%, Mexico 35%, Panama a staggering 85% and Venezuela 62%. The average return for 1996 was 42% compared to 13.5% for high-yield “junk” bond funds and 4.7% for high-grade U.S. bonds. Emerging market equity funds were another story, with many leading funds returning substantial losses for the year. Such stellar returns on debt, merely one year after the tequila effect, establish that a year is a long time in the emerging markets.

The other major category of buyer in this period was hedge funds. As private entities, hedge funds are not subject to reporting requirements, leading to potentially imperfect statistics: while the World Bank states there were fifty-seven dedicated emerging markets funds in 1997 with some US$7.1 billion of assets, the London-based fund monitor, Tass Management, believes there were eighty-five funds with some US$12 billion in assets, and other estimates are of 130 funds controlling some US$15 billion. Likewise, general funds were estimated to control anywhere from US$145 to US$300 billion of assets.

After October 1997, the wider spreads brought back the

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386. See id.; see also 1 World Bank, *Development Finance 1998*, supra note 82, at 17 (citing Tass Management as source of estimates). Hedge funds attracted considerable criticism for precipitating the Asian Economic Crisis, but this is an oversimplification. Hedge funds are an easy target to blame for a crisis caused more by excessive capital
traditional emerging markets investors to the mainstream Latin American and East Asian assets. The very fine pre-October spreads had seen much traditional emerging markets capital move on, often into local currency denominated instruments, in search of higher yields—yields that were, again, to be found in their traditional hunting ground. The principal buyers after the Asian crisis were the traditional emerging markets investors, who understood the risks (which includes buyers from the emerging markets nations themselves) as well as U.S. high-yield funds investing in specific industry sectors.

4. Brokers

Screens have offered the market a number of advantages including facilitating swifter and more accurate trading and the anonymous conduct of large-scale business. Before screens, major trades often moved the market as it speculated on why that bank would make that trade. For instance, if a bank known to act regularly for a certain country made a large acquisition, other traders might take positions on the assumption that the bank was repurchasing some of the country's debt on its behalf.

Screens have significantly improved liquidity and transparency in the market and, of course, entrenched the role of brokers. In 1993, perhaps one-fourth of non-client business was put through brokers; by 1996, the proportion had risen to three-fourths.

Screens were pioneered by Reuters, which posted prices and names of participants on information from Martin Quintin-Archard's Intercapital. In 1993, Chapdelaine Securities introduced its own no-name-give-up screens to strong resistance from many traders who wanted name-disclosed broking to continue so they could know who was doing what. The major brokerages

flows from developed countries, inadequate local prudential supervision, and overvalued exchange rates than by the actions of these speculators.

387. See Mullin, Entree, supra note 380.
389. See Westlake, Junkyard, supra note 287, at 15, 17.
391. See id.
392. See id. at 17.
such as Cantor Fitzgerald, EuroBrokers, Tradition and Tullett & Tokyo soon followed suit. Initially, these proprietary screens were only made available to market-makers who would stand by their prices, and many boutique investment houses and second-and third-tier banks, which had used Reuters public screens, were denied access. However, by 1996, access had broadened to the point that many criticized the service was too widely available. There were allegations that screens were being supplied to both institutional investors and local players in emerging markets nations.393

Brokers and their screens came to dominate the trading of Brady bonds. By 1998, estimates showed that up to 90% of Brady trading in the interdealer market was conducted through brokers' screens.394 Nonetheless, the market remained overbrokered, with perhaps twice the necessary number of brokerages scrambling for the business.395 The reason for the overbroking was simple: Even at one basis point, the potential commissions were huge.

5. Clearing Systems

The final significant participant in the market was the international securities clearing systems. The two principal international clearing systems were, and continue to be, Euroclear and CEDEL. Formed in 1968 and 1970, these two clearing systems and securities depositories serve as the traditional means by which to distribute, hold, clear, and settle Eurobonds. Mexico's Aztec bonds, issued in 1988, were the first Latin American securities to be held in quantity in the clearing systems. Mexico's Brady bonds were distributed, held and settled through the clearing systems but not without difficulty. The two principal difficulties were: (i) the entire issue was printed in US$1,000 denominations, and (ii) there were value-recovery rights attached to the bonds which were designed so that repayments increased when oil prices reached certain specified levels. These rights had to be detached from the bonds according to a predetermined program. Once detached, settlement involved deliv-

393. See id. at 18.
395. See Spence, supra note 390, at 19.
ery of both the bond and the rights. The lessons were duly 
learned from these clearing and settlement difficulties: the en-
tire bond issue in the subsequent Brady-style restructurings was 
represented by one global certificate and the concept of value-
recovery-rights was dropped.396

The clearing systems have proceeded to handle the distribu-
tion, settlement and subsequent trading of each of the Brady 
bond and new bond issuances together with an ever-increasing 
array of local instruments.397

Presently, settlement in the clearing systems is by book-en-
tries. If there is a physical certificate for the underlying security, 
it is held, immobile, at a clearing system depositary. Settlement 
can be in any of over thirty currencies, irrespective of the de-
nominated currency of the security, and “delivery” and payment 
are simultaneous. These two features reduce the risks inherent 
in the physical movement of security instruments and in delays 
between delivery and payment. By 1995, the standard settlement 
period for bonds had been reduced from seven days after trade 
(T+7) to three days after trade (T+3). The efficiency of these 
standard procedures increased market liquidity and attracted 
some foreign investors, particularly to local instruments, which 
would otherwise have been chary of domestic settlement risk.398

H. Impact of the Market

The market had three principal effects in this period. It fa-
cilitated: (i) the growth in local currency denominated instru-
ments; (ii) the growth in formal Brady bond exchanges and 
other debt buy-backs; and (iii) it exerted considerable pressure 
on emerging markets' governments to implement the “Washing-
ton consensus” on economic policy.399 Each will be considered.

1. Growth in Local Currency Instruments

The issuance and secondary market turnover of local currency 
denominated instruments expanded dramatically in this 
period. Traditional emerging markets investors were driven out

396. See id.
397. See id.
398. See id.
399. See At the Crossroads, INT’L FIN. REV., Mar. 6, 1999 (defining term “Washington consensus”).
of Brady and new issue bonds by the willingness of crossover investors to accept low returns on Brady and new issue bonds. By introducing many investors to the asset class, the secondary market facilitated the growth in new issues as well as secondary trading. Of course, with hindsight, whether the typically short tenor of most local currency instruments served the debtors is highly questionable.

2. Growth in Brady Bond Exchanges and Other Debt Buy-Backs

Debtors repurchased substantial amounts of their Brady bonds during this period because the secondary market price represented a particularly good deal for them. During this period, formal Brady bond exchanges resulted in the replacement of over US$13 billion of Brady bonds with some US$10.6 billion of newly issued bonds. The substantial amount of collateral liberated in this process was used principally to retire relatively expensive short-term debt. These Brady exchanges allowed the debtor countries to establish yield curves out to thirty years generally considered to have been in the debtor's interests. Most of the participants in these exchanges were institutional investors that sought the higher yields available on pure emerging markets risk—few banks exchanged their bonds. As the market had facilitated the transfer of ownership of Brady bonds from the original bank holders to the institutional investors, the market indirectly facilitated these Brady exchanges.

If formal Brady bond exchanges served the debtor nations, informal buy-backs certainly did. Informal exchanges, being private and confidential, did not drive up the secondary market prices of a nation's bonds as did the announcement of a formal Brady bond exchange. Accordingly, the debtor nation was able to recapture the entire secondary market discount for its benefit. Informal buy-backs were the principal source of debt relief for Latin American sovereigns and East Asian corporations during this period.

3. Increase in Economic "Discipline"

The international movement of private capital has exerted considerable economic "discipline" on emerging market na-
Institutional investors almost invariably subscribe to the "Washington consensus" on economic policy, which prescribes budget surpluses or small deficits, relatively high interest rates to maintain the value of the local currency, minimal government price regulation, reform and liberalization of local financial systems, and privatization of state-owned assets. If one believes that this is a recipe for economic health in emerging market countries, then the market serves a salutary purpose: Emerging market governments can only depart from the formula at the cost of severe penalties as the institutional investors withdraw their funds. In turn, the cost of raising capital increases as accessibility to capital decreases. Similarly, if one believes that this is a recipe for economic dislocation and impoverishment of the already poor, the market's impact has hardly been positive.

**CONCLUSION**

In January 1994, the bulls of 1993 looked like they would run all the way from Mexico to Pamplona. In February, they stopped at Wall Street, causing frightened institutional investors to return their capital to developed countries. By September and October of 1994, mutual funds and others were returning to the emerging markets and the optimists were again getting most of the media coverage. In December, the Mexican peso was allowed to float, and sank. The effect on the other emerging markets was like a quart of tequila—the hangover was horrendous. According to some, the hangover never fully lifted—in early 1997 average spreads on Brady bonds (the margin between their yield and that of U.S. Treasury bonds) were around 480 basis points compared to 300 basis points in 1993. This re-

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401. See At the Crossroads, supra note 399.


reflected a change in the investor base. The typical investors in 1991 and 1993 were short-term speculators motivated by capital gains, so called "momentum" investors, of whom many were driven from the market by the collapses that began and ended 1994. Yields then had to rise to attract investors who wanted to lend to these countries in the longer term. In the words of EMTA's 1996 Volume Survey: "To many, 1996 marked a year when the emerging markets took large strides toward becoming a mature marketplace; and Emerging Markets debt instruments became a legitimate, distinct asset class and an important part of the investment mainstream."

However, the flaw in 1996 was that investors were happy with returns that did not reflect the real risks inherent in emerging markets debt. As U.S. Treasury Secretary Robert Rubin identified in 1999, "excessive capital flows . . . can be indicative of broader failures in transparency and risk management . . . there is . . . a need to address the weaknesses in risk assessment that contributed to the recent crisis." Certainly, in 1996 investors in this market were making major errors in risk assessment—errors that increased the flow of funds to Asia and thus compounded the eventual problems there.

One clear lesson from this research is that while contemporary risk management models may work well when their assumptions apply, a liquid market is one critical assumption for these models. The secondary market did not provide the required levels of liquidity in times of crisis in the second half of the 1990s. Models developed for the major capital markets of the world cannot simply be applied to the secondary market for emerging markets debt as if it is a smaller version of the New York Stock Exchange, no matter how much traders might crave the spurious certainty and security such models offer.

Nonetheless, the emerging markets in this period grew to become an inextricable element of the global financial markets, as the Russian crisis of 1998 firmly established. The global shift

404. See Muehring, supra note 62, at 127.
405. See Evans, supra note 211, at 45-46.
of investment capital into institutional investors has put a premium on high yields. The competition between fund managers to attract the most capital to their fund, retain their jobs, and improve their annual remuneration ensures that the search for yield will continue to characterize much capital markets behavior. Insofar as yield is pre-eminent, the emerging markets will remain a significant and integral part of the global financial markets.