

# Debt financing rollercoaster

Latin American and Caribbean access to international bond markets since the debt crisis, 1982-2012

Inés Bustillo Helvia Velloso



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Economic Commission for Latin America and the Caribbean (ECLAC), Santiago, Chile, September 2013

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# List of abbreviations

BIS Bank for International Settlements

BNDES Brazilian Development Bank

CAF Development Bank of Latin America

CEMBI JP Morgan Corporate Emerging Markets Bond Index

CBOE Chicago Board Options Exchange

CRAs Credit Rating Agencies

EMBI+ JP Morgan Emerging Markets Bond Index Plus
EMBIG JP Morgan Emerging Markets Bond Index Global

FDI Foreign Direct Investment

FLAR Latin American Reserves Fund

GBI-EM JP Morgan Government Bond Index—Emerging Markets

GDP Gross Domestic Product

IMF International Monetary Fund

S&P's Standard & Poor's

VIX Chicago Board Options Exchange Volatility Index

#### **Foreword**

In 2012, Latin America and the Caribbean reached an important milestone: 30 years since the beginning of the debt crisis that led to the region's "lost decade". This occasion offers an opportunity to reflect on how access to financing has evolved, the lessons learned over the period, and the challenges —old and new— that it faces.

ECLAC has drawn attention to the importance of attaining sustainable growth with equality, as well as the need for devising strategies to achieve that goal. Obtaining financing for these is of paramount importance. Critical in this process is to strengthen the international financial system's ability to prevent and manage crises and improve countries' access to international financial markets.

This publication, which it is my pleasure to introduce, examines how external debt financing has evolved in the past three decades. It looks back 30 years and analyses the Latin American and Caribbean region's trajectory from the unique perspective of access to international financial markets. As the title implies, this trajectory has been a rollercoaster ride, with many ups and downs, and moments of anticipation and panic. Bond financing today is very different from what it was in the 1980s and 1990s. Access to external bond financing has become more widespread and less costly, increasing countries' options when considering ways to finance investment and development strategies. Through its analysis of the forces behind the evolution of spreads, issuance and credit ratings, this book tracks major changes during the period. By end-2012, debt spreads had declined considerably from the high levels prevalent in the late 1990s and early 2000s; the composition of debt issuance had shifted from sovereigns to the

corporate sector and to local markets; debt was being issued on a broader range of currencies; credit quality had improved substantially; and Latin American and Caribbean external debt was attracting a larger and more diversified investor base.

In contrast to the 1980s, in the 1990s Latin America and the Caribbean regained access to international capital markets, which, in combination with a commitment to robust macroeconomic principles, led to smaller fiscal deficits and lower inflation. Sources of external finance other than foreign direct investment and official credit were extremely volatile throughout the decade, however, reflecting the inherent instability in global financial markets.

Latin American and Caribbean countries exhibited tremendous vulnerability to financial cycles, which were often accompanied by procyclical macroeconomic policies. There were shortcomings in the region's financial development process, as well, and the failings of mechanisms for regulating and supervising national financial systems paved the way for unusually frequent financial crises. As a result, the region did not grow fast enough to strengthen labour markets or to reduce poverty significantly and recovered only part of the ground it had lost in the 1980s.

In the 2000s, however, the rate of growth picked up. Economic performance became associated less with the magnitude of private capital flows and more with export performance. Along with a more cautious fiscal stance in most countries of the region, current account surpluses helped to bring down foreign debt ratios and reduce external vulnerability. The region's financial development process advanced, access to international debt markets increased and financing costs fell. Supported by improved economic fundamentals, a commitment to robust macroeconomic principles and, most significantly, a greater emphasis on social spending, Latin American and Caribbean countries not only grew faster between 2002 and 2012, but also experienced a sharp decline in unemployment and a rise in real wages. Whereas the 1990s were typified by rising inequality, from 2003 on, a turnaround in the region led to falling poverty and inequality.

The developments of the past three decades as described in this book suggest that more widespread and cheaper access to international capital markets can play a role in the long process of achieving sustainable growth with equality, by broadening the options for financing investment and social initiatives. Several countries in the region which had faced a shortage of funds in 1982 had moved, by 2012, to a position of learning how best to manage available financing options.

Despite the lessons learned and the progress over this 30-year period, many challenges remain. Access to external debt financing is not universal and, despite increased resilience, vulnerability to external financial shocks

can still be a threat. Moreover, the financial and economic advances of the past 30 years, and particularly of the past decade, have not brought about changes in the region's production structure. Structural change should be at the heart of a long-term growth process to make equality a reality.

Alicia Bárcena

Executive Secretary
Economic Commission for
Latin America and the Caribbean (ECLAC)

#### **Abstract**

This report examines how the access of Latin American and Caribbean countries to external debt financing has evolved in the three decades since the debt crisis of 1982. In these thirty years, as the global financial environment evolved and structural shifts took place in the region, the market for Latin American and Caribbean tradable debt opened, deepened and broadened, developing from an unsecuritized loan market in the 1980s to a robust and improved securitized bond market by the end of the period.

The study highlights how bond financing today is very different from what it was in the 1980s and 1990s and how access to external bond financing has become more widespread and less costly. Through the analysis of the forces behind the evolution of spreads, issuance and credit ratings, the report shows that by the end of 2012, debt spreads had declined considerably from the high levels prevalent in the late 1990s and early 2000s; the composition of debt issuance had shifted from sovereigns to the corporate sector and to local markets; debt was issued on a broader range of currencies; credit quality had improved substantially; and Latin American and Caribbean external debt attracted a larger and more diversified investor base.

From 1982 to 2012, several countries in the region moved from facing a shortage of funds to learning how best to manage available financing options. Access to external debt financing is not universal, however, and despite increased resilience, vulnerability to external financial shocks can still be a threat.

#### Introduction

Since the 1982 debt crisis in Latin America and the Caribbean, access to international debt markets has developed considerably. In the past three decades, the market for Latin American and Caribbean tradable debt has opened, deepened and broadened, as the region underwent important structural shifts, including long-term changes in economic policies across countries and rising global economic weight. Bond financing for the region today is thus very different from what it was in the 1980s and 1990s. Important recent trends include a shift in public sector funding from sovereign debt to local markets and in external funding from sovereign to corporate and bank debt.

The region has also been gradually rising above some of the financial markets' asymmetries that were so prevalent in the 1990s.¹ Countries are overcoming the so-called original sin,² and liabilities have lengthened as countries are increasingly able to issue longer-term financial assets. Mexico, for example, was able to place a 100-year bond in foreign markets in 2010, selling the longest-maturity debt ever issued by a Latin American country.

The deepening of financial globalization over the past few decades was a decisive factor in the volatility and the boom-bust cycles experienced by the region in the period. It accentuated the effects of fluctuations stemming from changes in the global financial environment and the influence of international financial markets on local markets (ECLAC, 2012).

For a discussion of these asymmetries, see Ocampo (2001).

Original sin is the expression coined by economists Barry Eichengreen, Ricardo Hausmann and Ugo Panizza in a series of papers to describe emerging economies' inability to issue long-term debt at reasonable interest rates in their domestic currency in international capital markets.

Given the many ups and downs of the past thirty years, Latin American and Caribbean debt markets have had quite a rollercoaster ride. The ride began shortly after the regional debt crisis in 1982, when an incipient secondary market for sovereign debt started to develop among commercial banks. The market for Latin American debt has evolved in the past threee decades, growing in volume, types of instrument traded and number of investors and trade houses involved.

Emerging market debt materialized as an asset class in the 1980s, when a small group of traders began to intermediate the transactions between sellers and buyers of developing countries' debt in the aftermath of the debt crisis in 1982. Debt trading activity increased throughout the decade. In 1989, the Brady Plan was unveiled, further accelerating the growth of the region's debt trading markets. By pushing securitization forward, the plan helped countries enhance their access to international financial markets and redefine their integration in the global economy. The unsecuritized loan market of the 1980s was gradually replaced by a securitized bond market.

In the 1990s, external financing in Latin America and the Caribbean was characterized by increasing access to international bond markets. Investors were drawn by the high growth potential and high yields in most countries of the region, as well as by a general trend towards the implementation of economic and political reforms. As a result, the relative size of the Latin American and Caribbean market worldwide grew, and bond financing became the second major source of external funding in the region after foreign direct investment.

The region's growth became closely associated with the magnitude of net private capital flows, however, and a series of external events underscored the region's vulnerability to financial shocks and interruptions to those flows. Bond flows to Latin America were highly volatile throughout the decade, and they were strongly concentrated in middle-income countries, particularly Argentina, Brazil and Mexico. In addition, bond spreads responded not only to economic fundamentals, but also to market sentiment. Issues of financial volatility and contagion became particularly relevant to the region, leading to much debate about how to cope with the sudden stops<sup>3</sup> of international credit flows and the financial crashes that follow.

The wave of financial shocks that started with Mexico's peso devaluation in December 1994 and ended with Argentina's 2001 default led to real exchange rate depreciation in 2001-2002, which boosted export growth. Export growth also benefitted from the benign global environment in subsequent years, leading to significant current account surpluses in the region.<sup>4</sup> Along with a

A sudden stop, or a capital account crisis, can be defined as a large —and largely unexpected—fall in capital inflows occurring in conjunction with a sharp rise in credit spreads (see Calvo, Izquierdo and Talvi, 2006; Chamon, Manasse and Prati, 2007; Mendoza, 2008).

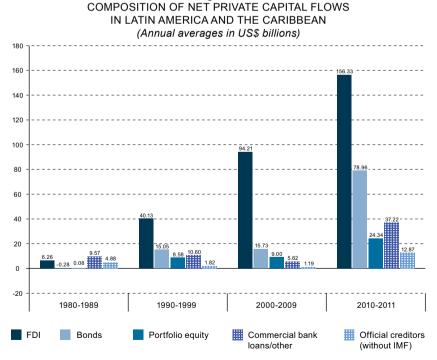
Latin America's good export performance in those boom years reflects gains in export prices, pushed by increases in oil and non-oil commodity prices.

more prudent fiscal stance in most countries of the region, the current account surpluses contributed to a decline in foreign debt ratios, an improvement in the region's creditworthiness and a drop in its external vulnerability. Economic performance in the 2000s therefore becomes less associated with the magnitude of private capital flows —decoupling, to a certain extent, from fluctuations in these flows— and more driven by export performance.

The strong performance of Latin America's capital markets in the 2000s, along with plentiful liquidity in global markets, allowed for record low debt spreads, currency diversification (with a particular increase in local currency debt issuance), a heightening of the attractiveness of local markets to investors, a strong rise in corporate issuance, and a substantial improvement in credit quality.

Bond financing remained the second major source of external funding in the region, on average, throughout the 2000s. Its importance actually increased in the aftermath of the 2008 global financial crisis, with bond flows being particularly strong after 2009 (see figure 1).

Figure 1



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the World Bank's World Development Indicators (WDI) and Global Development Finance (GDF) databases.

The objective of this document is to examine the evolution of the Latin American and Caribbean region's access to international bond markets in the past three decades. To assess the role, performance and evolution of bond financing as a source of external funding for Latin America and the Caribbean, it is important to understand the behaviour and evolution of bond spreads and the changes in debt composition over the past thirty years.

This study looks first at the early stages of the secondary market for sovereign debt following the debt crisis of 1982 (chapter I). It then examines the role of the Brady Plan in redefining Latin America's integration in the global economy in the 1990s, as well as the role of debt buybacks and swaps that helped bring the Brady bonds full circle in the 2000s (chapter II). The following chapters examine the trends in debt trading over the period, including changes in debt composition (chapter III), developments in new debt issuance, issuer type and currency breakdown (chapter IV), changes in the behaviour of spreads, the effects of United States interest rates and the correlation between local spreads and United States high-yield corporate bond spreads (chapter V), and the evolution of credit ratings (chapter VI). Chapter VII takes a closer look at how countries in Central America and the Caribbean have fared relative to the rest of the region, particularly following the global financial crisis. We conclude with a discussion on how far the region's access to international bond markets has evolved and what is next for bond financing in the region (chapter VIII).

#### Chapter I

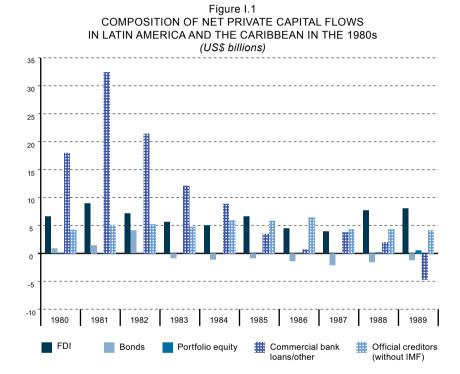
# The origins of the asset class: the debt crisis of the 1980s

In the early 1980s, following three decades of marked economic growth, Latin American countries faced a serious crisis associated with the rapid increase in their debt with creditor banks in the 1970s and the deterioration of the global economic backdrop. Massive and largely unforeseen swings in commodity markets, exchange rates, capital flows and interest rates were key causes of the 1982 debt crisis. The global recession narrowed export markets and squeezed commodity prices, while tight monetary policies in industrial countries forced global interest rates up and increased the real burden of Latin America's bloated debt. The crisis hit the region when many countries had become used to receiving a high annual inflow of loans and had accumulated a very large debt stock relative to previous decades.<sup>1</sup>

The resulting decline in capital flows to Latin America throughout the 1980s led to a significant shift in the composition of these flows. Most notably, official credit from bilateral and multilateral sources increased significantly, while the share of commercial bank loans declined quite sharply (see figure I.1). Alarmed at the deteriorated quality of their assets in Latin America, commercial banks adopted a strategy of reducing their exposure in relation to their overall assets as well as their capital, while the increase in official flows was partially the result of increased disbursements by the

For a deeper analysis of the 1982 debt crisis in Latin America, see ECLAC (1996), Devlin (1989) and Ffrench-Davis (1988).

World Bank and the Inter-American Development Bank (IDB), both of which adopted special programmes to speed credit to recipient countries. However, the boost in official flows —augmented by lending from the International Monetary Fund (IMF)— was insufficient to offset movements in private markets. The net outflow of capital from Latin America was so great during the decade that it seriously impeded new investment and growth.



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the World Bank's World Development Indicators (WDI) and Global Development Finance (GDF) databases.

The spark igniting the developing countries' debt crisis was the announcement by Mexico on 12 August 1982, that it would be unable to meet its 16 August obligation to service its debt of US\$ 80 billion. The situation quickly grew worse, and by October 1983, 27 countries owing US\$ 239 billion had rescheduled their debt to banks or were in the process of doing so.<sup>2</sup> Sixteen

The syndicated bank loans of the 1970s were mostly short- or medium-term loans denominated in United States dollars and issued at variable interest rates. The costs of any changes in interest rates were to be borne by the borrowing countries, which began to face serious debt sustainability problems when real interest rates shot up and the world economy slowed down at the end of the decade.

of these countries were from Latin America and the Caribbean, and the four largest (Argentina, the Bolivarian Republic of Venezuela, Brazil and Mexico) owed various commercial banks US\$ 176 billion, or approximately 74% of the total debt outstanding. Of that amount, roughly US\$ 37 billion was owed to the eight largest United States banks and constituted approximately 147% of their capital and reserves at the time. As a consequence, several of the world's largest banks faced the prospect of major loan defaults and failure, putting the stability of the financial system at risk.

The origin of emerging market debt as an asset class goes back to the early 1980s and the international background just described. Not long after the beginning of the Latin American debt crisis in 1982, a small secondary trading market for sovereign loans gradually began to develop among commercial banks. The first loan trades took place shortly after the first debt restructurings were agreed in December 1982. The trades were initially for the limited purpose of allowing lenders to reallocate their portfolio of sovereign credits. Trades were structured as exchanges of assets. While major banks continued to hold loan assets and to participate in debt restructurings, some smaller commercial banks preferred to sell their non-performing portfolios by exchanging their relatively small exposure to developing countries. Other banks wished to rearrange their credit portfolios by trading loans they had made to one country for another bank's loans to a second country. In 1983 and 1984, a small group of traders began to work as intermediaries between sellers and buyers of sovereign loans.

### A. The early years: 1983-1985

The beginning of a secondary market for developing countries' discounted debt was facilitated by four major factors: the willingness of a small but growing group of banks to sell their debt at a substantial discount from face value; the desire of some banks to adjust their developing countries' loan portfolios through loan swaps; the reduction of the number of loan instruments as a result of the debt restructuring and rescheduling process, which made the documentation of the swaps simpler, cheaper and quicker; and the gradual simplification of debt transfer procedures, which was facilitated by the standardization of the transfer provisions in the rescheduled loan agreements.<sup>5</sup>

Only banks with small exposures to the region or large loan loss reserves could afford the losses associated with the outright sale of their debt. In 1983 and 1984, most banks would not sell their Latin American and Caribbean loans outright, but used the incipient secondary market to rearrange their portfolios of loans to the region. According to Buckley

<sup>&</sup>lt;sup>3</sup> See FDIC (1997).

<sup>&</sup>lt;sup>4</sup> See EMTA (2010) and Wolfson (2010).

<sup>5</sup> See Buckley (1997a).

(1997a), an estimated three out of four debt swaps in this period were purely for portfolio adjustment purposes.

There were four main reasons for a bank to adjust its portfolio. First, different banks had different views on the relative creditworthiness of different countries and proceeded to readjust their portfolio accordingly. Second, many Latin American banks opted to focus their exposure on the market they knew best —their own— and proceeded to exchange their loans to other countries of the region for loans to their own country. Third, a large number of small exposures to borrowers in numerous countries was too expensive to manage and administer, and the solution was to focus lending to one or two countries. Finally, in the opposite direction, banks also sought to diversify risk exposure across a number of countries in the region rather than focus their exposure on only one or two countries.

From 1983 to early 1985, one of the major features of the secondary market was that the transactions were customized and individually documented, as there were few willing buyers and sellers. Transaction sizes typically were not large, and there were no publicly quoted secondary market prices and no central location for trading. Another important feature of the secondary market in this period was the need for confidentiality, given the politically sensitive nature of banks selling their Latin American loans and the capacity for these transactions to move the market.

While the secondary market in this early period played a role in affording an exit route for banks with small exposures to developing countries' debt and in allowing portfolio adjustment for the larger banks, it offered no relief for the debtor countries and had little impact on the amount of debt they owed.

## B. Debt-equity conversion schemes: 1986-1987

When provisions allowing creditors to exchange sovereign debt for equity or other assets were introduced into new restructuring agreements, the incipient trading market gained further impetus. Trading activity increased substantially in 1986 and 1987, especially after Chile and Mexico adopted debt-for-equity exchange programmes as part of their debt restructuring packages.<sup>6</sup>

These programmes allowed debt holders to exchange their debt claims for equity in state-owned or other companies or for other local

The most heavily traded debt was that of Brazil (before February 1987), Chile and Mexico. Towards the end of this period when Chile's and Mexico's debt-equity schemes were in full swing, these countries' loans accounted for about two thirds of the total volume of the market (Buckley, 1997a).

assets. Each debt-equity conversion would generate many secondary market transactions, resulting in long chains of swaps as traders positioned the required amounts of eligible debt with investors. The need to assemble debt eligible for conversion into equity thus fuelled a great deal of activity in 1986 and 1987. By providing the debt for use in debt-equity swaps and debt buy-backs, the secondary market during these years contributed, for the first time, to somewhat lessening both the creditors' and the debtors' burdens.

Portfolio adjustment by banks (1983-1985) and debt-equity swaps and debt buy-backs (1986-1987) were facilitated by the early secondary trading market in its first five years. The incipient secondary market thus played an important role in the history and improvement of the debt crisis.

#### C. Aztec bonds: 1987-1988

In the final days of 1987, a plan for securitizing up to US\$ 20 billion of Mexico's loans was announced. The plan consisted of converting loans into bonds, known as Aztec bonds, on which the payment of principal was secured. The loans eligible for conversion were those held by original creditors, not those acquired in the market, so this plan had little impact on the secondary market. Nonetheless, this plan is significant as the precursor to the Brady Plan, which would transform the market in subsequent years.

The Aztec bonds were issued to commercial bank creditors in exchange for debts owed by the Mexican public sector. Commercial bank creditors forgave 30% of the debt in question in exchange for a collateralized, floating-rate Aztec bond. The Aztec had a tenor of 20 years. Principal would be repaid upon maturity and its repayment collateralized by Mexico's purchase of a 20-year zero-coupon United States Treasury bond to be deposited with the United States Federal Reserve until maturity. Even though the interest rate on these new bonds was higher than on the loans they replaced, the reduced principal meant that Mexico would save in net interest payments over the life of the bonds.

In assisting the Aztec scheme by making a special-purpose issue of zero-coupon United States Treasury bonds, the United States government publicly allowed some degree of debt forgiveness for the first time. This departure from the previous "repayment in full" stance was a pivotal step in the journey towards the Brady Plan.

#### Chapter II

# **Brady bonds**

The type of voluntary restructuring of non-performing debt, including debt relief, that was introduced with the issuance of the Aztec bonds was incorporated into a United States government initiative announced by Secretary of the Treasury Nicholas Brady in March 1989. The initiative, now known as the Brady Plan, called for the United States and multilateral lending agencies (including the IMF and the World Bank) to cooperate with commercial bank creditors in restructuring and reducing the debt of developing countries that were pursuing structural adjustments and economic programmes supported by these agencies. Mexico was the first country to reach a Brady agreement in September 1989, setting the standard for subsequent Brady operations.

Many countries that had defaulted on bank loans in the 1980s began the 1990s by converting defaulted commercial bank loans to restructured sovereign bonds, known as Brady bonds. Brady bonds were the securities that ignited the emerging market bond boom in the 1990s and helped redefine Latin American and Caribbean bond markets' integration in the global economy.

In the second half of the 1990s, some countries came full circle, voluntarily entering the market to retire collateralized Brady bonds through buybacks and swaps for uncollateralized Eurobonds. The attractiveness of debt swaps for debtor countries was twofold. First, collateral associated with the Brady bonds (low-yield United States Treasuries) was released and could be used by the country to meet other obligations. Second, the level of debt outstanding was reduced, since the exchange took place at a discount based on secondary market prices. For the original holder of the bond, the advantage lay in higher yields on the uncollateralized bonds.

#### A. The Baker Plan

The Brady Plan was preceded by the Baker Plan. In October 1985, at the annual meetings of the IMF and the World Bank in Seoul, South Korea, United States Treasury Secretary James Baker announced the "Programme for Sustained Growth" for the most highly indebted countries, which became the core of the United States government's debt policy for the following three years. The plan proposed that the commercial banks would provide new loans of US\$ 20 billion over the next three years, with US\$ 7 billion coming from United States banks and US\$ 13 billion from banks in other countries, while the official agencies, particularly the World Bank and the Inter-American Development Bank, would provide a further US\$ 9 billion. The official loans were to be tied to policy reforms in the debtor nations, including trade and investment liberalization, tax reform, budget cuts, the elimination of government subsidies, large-scale privatization, cuts in minimum wages and liberalization of domestic financial markets. However, neither the commercial banks nor the official agencies came close to lending the targeted amounts of fresh funds.1

By early 1987, the Baker Plan was beginning to unravel as the commercial banks increasingly resisted lending new money to debtor countries. The resistant institutions were regional banks in the United States and continental Europe that had sold their exposures on the secondary markets. The market had given them an alternative to new money calls: the liquidation of their developing countries' portfolios. The secondary market thus provided these regional banks with a way out of the debt crisis, which the major banks, with high exposures, did not have.

By early 1989, the Baker Plan and its strategy of rescheduling with new money had become ineffective. Banks were weary of advancing new funds and countries were weary of their ever-rising level of indebtedness and of the IMF's austerity programmes. A new approach was needed, and it came in the form of the Brady proposal. The Brady Plan, as it became known, would in time transform the secondary market.

# B. The Brady Plan

The Brady Plan, named after former United States Treasury Secretary Nicholas Brady, was introduced in 1989. It represented a sharp departure from the Baker Plan. In a speech on 10 March 1989, Secretary Brady proposed a series of individual market-based transactions, in which creditors would be invited to participate voluntarily. Debt relief would be tied into the conversion of loans into collateralized bonds; debtor countries would be

See Buckley (1997a).

allowed to repurchase their own discounted debt on the secondary market; and debt-equity schemes would be promoted. The proposal was seen as an expression of increased urgency from the United States government regarding the resolution of the debt crisis, a strong call for the development of capital-market-based solutions and an official acceptance that some debt forgiveness was essential.<sup>2</sup>

The Brady Plan combined United States government and official multilateral support to obtain debt and debt-service relief from foreign commercial bank creditors for those countries that successfully implemented comprehensive structural reforms supported by the International Monetary Fund and the World Bank. By restructuring its debt, a country could obtain partial debt forgiveness while simultaneously deferring a portion of the principal and interest payments for a few years, allowing time for reforms to ripple through the economy and improve its cash flow and balance of payments. Banks were largely given the choice to accept a reduction in debt (face value) or debt service (interest rates).

The Mexican Brady agreement, the first to be reached, was the prototype for other ensuing Brady-type accords.<sup>3</sup> It covered close to US\$ 48 billion of the face value of Mexico's eligible foreign debt to commercial banks and took nearly a year to develop. In exchange for their illiquid defaulted loans, the banks were given three choices of instruments, with two of them including an exchange for collateralized bonds.

The first option was an exchange for discount bonds, or principal reduction bonds. These bonds required a 35% reduction in the face value of defaulted loans, thereby providing Mexico with debt relief in terms of lower principal payments. Discount bonds, however, had a market coupon rate of the London Interbank Offer Rate (LIBOR) plus 13/16. The second option, par bonds, or interest rate reduction bonds, had no face value debt reduction, but included a below-market coupon rate of 6.25%, at a time when the LIBOR was over 10%. Both types of bonds included full principal collateral in the form of a special purpose United States Treasury zero-coupon bond, similar to the Aztec exchange. They also included a rolling interest guarantee (RIG) covering 18 months worth of interest payments.<sup>4</sup> The third option, new money, involved no reduction in the face value of the defaulted loans (allowing the banks to carry the full principal amount of

<sup>&</sup>lt;sup>2</sup> See Buckley (1997b).

Mexico's Brady agreement represented a departure from Secretary Brady's proposals, however, as it was a one-off scheme in which creditor participation was effectively compulsory.

<sup>&</sup>lt;sup>4</sup> The acquisition of the collateral for these bonds —the zero-coupon bonds and the rolling interest guarantee— was funded as follows: US\$ 1.3 billion from Mexico, US\$ 2.0 billion from Japan and US\$ 3.7 billion from the IMF and the World Bank. See Buckley (1997b, p. 1,810). For a description of what a rolling interest guarantee entailed, see box II.1.

their Mexican loans on their books), but required that commercial banks provided additional new lending of at least 25% of their exposure over a three-year period.<sup>5</sup>

An essential element of the Mexican Brady agreement was the emphasis on debt reduction and interest relief. The secondary market played a major role to make them more acceptable. The debt of developing countries was already being routinely traded at large discounts to par value on the secondary market, giving Mexico a fundamental basis for arguing that banks were already assuming an eventual write-down on the debt and that Mexico should thus be allowed to capture part of the discount.<sup>6</sup>

Other agreements soon followed the Mexican Brady exchange. By 1996, ten Latin American and Caribbean countries had implemented Brady-style exchanges (see table II.1). Over time Brady exchanges became more complex, offering a broader array of possibilities for debt and debt-service reduction (see box II.1). In exchange for their loans, lenders received bonds with terms prescribed by a variety of options, carefully developed on a case-by-case basis.

Each completed Brady restructuring resulted in the issuance of new debt securities (bonds), which were designed to be more easily tradable than defaulted loans. The transformation from an unsecuritized loan market to a bond market was finalized in 1998, when all major Brady restructurings had been completed. Securitization helped Latin American countries enhance their access to international financial markets.

The majority of Brady debt was issued by Latin America, with Argentina, the Bolivarian Republic of Venezuela, Brazil and Mexico accounting for three-fourths of the original outstanding amounts in the market (see table II.2). Almost all countries with defaulted commercial bank debt from the 1980s exchanged that debt for Brady bonds or restructured loans. Most countries improved their financing budgets throughout the 1990s and subsequently raised funds in the Eurobond market.

<sup>&</sup>lt;sup>5</sup> See Brauer and Chen (2000).

<sup>&</sup>lt;sup>6</sup> See Buckley (1997b).

Table II.1 BRADY AGREEMENTS WITH COMMERCIAL BANKS IN LATIN AMERICA AND THE CARIBBEAN

Country	Date of agreement	Debt forgiveness (percentages)
Mexico	March-1990	35
Costa Rica	May-1990	n.a.
Venezuela (Bolivarian Republic of)	December-1990	30
Uruguay	February-1991	n.a.
Argentina	April-1993	35
Brazil	April-1994	35
Dominican Republic	August-1994	35
Ecuador	February-1995	45
Panama	May-1996	45
Peru	November-1996	45

Source: Jane Sachar Brauer and Douglas Chen, "Brady Bonds", The Handbook of Fixed Income Securities, Frank J. Fabozzi (ed.), New York, McGraw Hill, 2000.

Table II.2
ORIGINAL BRADY EXCHANGE ISSUE AMOUNTS
(US\$ billions)

Country	Pars	Discount	Other Brady debt	Total Brady debt issued	Percentages of all Brady bonds
Latin America and					
the Caribbean	55.77	27.03	65.17	147.96	87.10
Argentina	12.67	4.32	8.47	25.45	14.98
Brazil	10.49	7.29	32.88	50.66	29.82
Costa Rica	n.a.	n.a.	0.59	0.59	0.35
Dominican Republic	n.a.	0.33	0.19	0.52	0.31
Ecuador	1.91	1.44	2.78	6.13	3.61
Mexico	22.40	11.77	2.73	36.90	21.72
Panama	0.26	0.04	2.92	3.22	1.90
Peru	0.18	0.57	4.12	4.87	2.87
Uruguay	0.53	n.a.	0.54	1.07	0.63
Venezuela (Bolivarian					
Republic of)	7.33	1.27	9.95	18.55	10.92
Other regions	5.57	5.09	11.26	21.91	12.90
Total	61.34	32.12	76.43	169.97	100.00
Percentages	36.11	18.91	44.99	100.00	

Source: Jane Sachar Brauer and Douglas Chen, "Brady Bonds", The Handbook of Fixed Income Securities, Frank J. Fabozzi (ed.), New York, McGraw Hill, 2000.

#### Box II.1 STRUCTURE AND TYPES OF BRADY BONDS

Brady bonds were government obligations issued by a debtor country after it negotiated with its creditor banks to restructure loans that were no longer performing. The creditor banks exchanged the non-performing syndicated bank loans for various Brady bonds offered by the debtor government. At the conclusion of these negotiations, the creditor banks were given various Brady bond structures from which to choose. Once issued, the Brady bonds began trading in the secondary market.

Brady bonds were structured in a variety of ways. Early Brady agreements included a fixed- and floating-rate bond, with principal collateralized by United States Treasury zero-coupon bonds and cash collateral representing a set number of future interest payments (rolling interest guarantee). Later Brady agreements included a wider array of bond options and structures, including fixed-rate, floating-rate, and step-up coupons, bullet or amortizing principal, and collateralized and non-collateralized principal and interest payments. Not all types of Brady bonds were collateralized, and no Brady bond was guaranteed by the United States government.

Collateralized principal bonds: Two principal bonds, pars and discounts, were 25– to 30-year registered bullet bonds (meaning that payment of the entire principal was due at the end of the term) and represented the largest, most common assets in the Brady bond market. Par bonds were issued at par value in exchange for the original face value of the rescheduled loans, but they carried a fixed, below-market interest rate. Discount bonds carried a floating interest rate, typically the LIBOR plus 13/16, but they were exchanged for fewer bonds than the original loan amount or at a discounted face value of the previously rescheduled loan, often ranging between 50% and 65% of the original face value.

Pars and discounts generally had principal secured by United States Treasury zero-coupon bonds, which were originally funded by a combination of IMF and World Bank loans and the country's own reserves. In addition, the interest portion of the pars and discounts was partially collateralized by securities rated at least AA in amounts sufficient to cover a specified number of months (usually 12 months) of interest on the outstanding principal at a notional rate. The interest guarantee was characterized as a rolling interest guarantee (RIG) because the guarantee rolled forward to the subsequent interest period if not utilized. Both the interest and principal collateral were maintained by an assigned collateral agent and held in escrow at the United States Federal Reserve Bank of New York. Bondholders did not have recourse to the principal collateral until maturity, at which time the proceeds would be available to pay the full principal amount due. Although the earlier exchanges involved a special-purpose issue of a zero-coupon bond by the United States Treasury, subsequent issues allowed the sovereign to buy United States Treasury strips from the growing open market.

Non-collateralized Brady bonds: The types of bonds included in a given plan were determined during the debt restructuring negotiations between a consortium of creditors and the debtor country. The bonds often had varying coupon schedules and amortization scheme, and they sometimes included the capitalization of interest. Each plan might also include principal types other than par and discount bonds, such as debt conversion bonds (DCB), front-loaded interest reduction bonds (FLIRB), and the related new money bonds (NMBs). The DCBs, FLIRBs and NMBs were typically non-collateralized

#### Box II.1 (concluded)

amortizing bearer instruments with a significantly shorter final maturity and average life than the pars and discounts.

A creditor selecting the DCB option would receive an even par amount of bonds, but would also lend the debtor new cash. The debtor country then issued an NMB to represent this additional obligation. Interest and principal were not collateralized. The FLIRB option provided the issuer with belowmarket interest relief in its early years, followed by market interest rates in later years. Creditors choosing this option received even par amounts for exchanged debt. Interest was collateralized only for a certain period of time, and the coupon would first step up and then float.

Capitalization or C-bonds first appeared in the 1994 Brazil Brady plan. The C-bond was issued at par value for exchanged debt. The coupon was fixed, partly paid in cash and partly added to the principal (capitalized). Bondholders accepted more bonds in place of cash for part of the coupon through the end of 1999. In the C-bond exchange agreement, Brazil agreed to an 8% interest accrual rate that initially only paid 4%. The remaining 4% capitalized, increasing the par amount outstanding at the end of the first year to 104% of the original amount.

Past-due interest on several Brady plans was consolidated into past-due interest (PDI), interest due and unpaid bonds (IDUs), eligible interest bonds (Els), interest arrears bonds (IAB) and floating-rate past-due interest bonds (FRB). These instruments were issued in exchange for interest arrearages. They showed floating coupons (or step-up coupons in the case of the IABs and PDIs). Principal and interest were not collateralized, and principal payment could be amortized after a grace period. They generally consisted of a non-collateralized, 10- or 20-year amortizing floating-rate bond. Past-due interest on defaulted loans exchanged for these instruments typically capitalized during several of the earlier interest payment periods and then amortized, as was the case in the PDIs issued under Brady exchanges for Ecuador, Panama and Peru.

Many Brady deals also included value recovery rights (VRRs). Payments on VRRs were contingent on favourable conditions for the debtor countries. For example, in the Bolivarian Republic of Venezuela and Mexico, VRRs were contingent on the international price of oil (in the case of Mexico, on a combination of price and export volumes). Other VRRs were contingent on either the growth rate or the level of GDP reaching a certain value. The general principle was that if the debtor country's economic conditions improved, creditors could also benefit from these improvements by receiving additional payments. Although VRRs became a marginal part of the emerging market debt, they provided valuable lessons on how to create and trade contingent debt instruments. One lesson was a preference for simplicity, as market interest would decline when the formula to determine the payoff was unnecessarily complicated. Another lesson was the need for convenience: market interest would rise when the VRRs were made detachable from the main bond with which they were associated, so they could be traded as separate financial instruments. This was the case with Mexico's VRRs.

Source: Jane Sachar Brauer and Douglas Chen, "Brady Bonds", The Handbook of Fixed Income Securities, Frank J. Fabozzi (ed.), New York, McGraw Hill, 2000; Sharon Y. Lee and Michael E. Venezia, "A primer on Brady Bonds", United States Fixed-Income Research, Emerging Markets Fixed Income, Salomon Smith Barney, 9 March 2000 and Inter-American Development Bank (IDB), "Living with debt. How to limit the risks of sovereign finance", Economic and Social Progress in Latin America, 2007 Report, Eduardo Borensztein, Eduardo Levy Yeyati and Ugo Panizza (cords.), 2007.

### C. Buybacks and swaps

In the second half of the 1990s, some countries came full circle, voluntarily entering the market to retire collateralized Brady bonds through buybacks and swaps for uncollateralized instruments (see box II.2). These buybacks and swaps enabled the debtor country to release the collateral associated with the Brady bonds (low-yield United States Treasuries) in order to use it to meet other obligations, as well as to reduce the level of debt outstanding, since the exchange would take place at a discount based on secondary market prices. For the original holder of the bond, the advantage was on the uncollateralized bonds' higher yields.

#### Box II.2 RETIRING BRADY BONDS

Within 10 years of the creation of the last Brady bond, sovereign issuers had retired virtually all Brady bonds through several main approaches:

- Quietly buying back Brady bonds in the secondary market;
- Initiating a formal Brady to Eurobond exchange programme, in which the exchange price was preset and bids were solicited (for example, Mexico in 1996, followed by subsequent formal exchanges by Argentina, the Bolivarian Republic of Venezuela. Brazil. Panama and Uruquav):
- Initiating a formal exchange into local debt, with a commitment to pay
  the debt service from tax revenues;
- · Engaging in private exchange agreements;
- Using Brady bonds as payment in privatizations (for example, Brazil);
- · Bonds maturing: and
- Exercising the call option on the bond, since all but one Brady bond were callable at par.

Source: Bank of America/Merrill Lynch, "Sovereign debt restructurings: lessons from Brady bonds", GEMs Strategy Viewpoint, 3 February, 2011.

The cycle of debt buybacks and swaps started with Mexico in 1996, which undertook two operations to retire US\$ 3.6 billion of Brady bonds. In 1997, Argentina, the Bolivarian Republic of Venezuela, Brazil, Ecuador and Panama followed suit, retiring US\$ 10.4 billion of collateralized Brady bonds through debt buybacks and discounted swaps for unsecured bonds. In 1998, Argentina undertook two straight buyback operations, retiring US\$ 1.5 billion of Brady bonds. In 1999, Argentina, Brazil, Mexico and Uruguay retired US\$ 6 billion. Argentina, the Bolivarian Republic of Venezuela and Mexico were the largest buyers of their own Brady bonds in Latin America in the second half of the 1990s, retiring over 30% of their original issue of Brady debt.

The buybacks and swaps continued in the 2000s. Mexico retired all its outstanding Brady debt in 2003, the first country to do so. Argentina and Ecuador retired most of their outstanding Brady debt through the restructuring

process that took place after their default, as did Uruguay through its debt restructuring (see box II.3). In July 2005, Brazil announced the retirement of US\$ 4.4 billion of its C-bonds (capitalization bonds).<sup>7</sup> The C-bonds were exchanged for new A-bonds (amortization bonds), and with this exchange Brazil further reduced its amount of outstanding Brady debt. Then, in March 2006, the Bolivarian Republic of Venezuela and Brazil announced the retirement of all their outstanding Brady debt, while Panama retired the last of its outstanding Brady debt in July, bringing the asset class that was created from the 1980s-era defaulted bank loans to a virtual extinction.

#### Box II.3 ECUADOR, ARGENTINA AND URUGUAY: RESTRUCTURINGS OF BRADY DEBT

Ecuador (1999): Ecuador was the first country to default on Brady bonds. Ecuador's debt was more diverse than some at the time of default in 1999, with six Brady and Eurobond issues totaling US\$ 7.7 billion in face value. There were two global bonds: the 2002 global, an extremely illiquid global bond issued in 1997 and primarily held by banks, and another global bond that never traded. Ecuador defaulted in 1999 and restructured in 2000. In the 2000 restructuring, the two global bonds received preferential treatment.<sup>a</sup>

Argentina (2001): The government conducted two large voluntary exchanges of debt in an effort to reduce near-term debt service by extending maturities and lowering cash coupon rates, but these were not sufficient to avert default. First, the government carried out a "mega swap" in June 2001, exchanging close to US\$ 30 billion of local, external global and external Brady debt, much of it coming due in the near future. Credit rating agencies viewed the exchange as taking place at fair market levels. Second, in November of the same year, the government offered another exchange of Brady and Eurobond debt for local loans. The November exchange was viewed as coercive by S&P, however, who downgraded all eligible bonds to a default rating of D. Within a month, the sovereign declared a moratorium on the payment of US\$ 95 billion of external debt, the largest sovereign default in history.

Uruguay (2003): When Argentina defaulted at the end of 2001, Uruguay's cost of funds was T+300 basis points. Four months later, it was T+500 basis points and rising. By August 2002, there was a run on the banks, the government froze some deposits, and bonds had plummeted. Uruguay's banking system was heavily dollarized, and neither the banks nor the government held enough liquid dollar assets to back these deposits. Banks were not able to open until the United States pledged US\$ 1.5 billion to bolster Uruguay's financial system. The International Monetary Fund had pledged US\$ 2.8 billion in assistance the year prior and had asked Uruguay to propose an exchange before failing to make a payment on its debt (pre-default), to try to avoid the type of crisis that took place in Argentina. To succeed in this preemptive strategy, Uruguay aimed for a voluntary exchange that would treat bondholders equally, pursuing a market-friendly approach that included informal consultations with bondholders.

 $<sup>^7</sup>$   $\,$  The C-bond had been a benchmark for many years, accounting for around 10% of all emerging market debt trading in the 10 years up to 2003. However, it lost its liquidity after that date, as the 2040 bond (a global bond) grew in importance.

#### Box II.3 (concluded)

The exchange was successful. It gave Uruguay a fiscal surplus and enabled it to draw on IMF loans and to regain investor confidence in its ability to pay debts and revive the economy. Collective action clauses (CAC) were included in the new bonds issued in the Uruguayan exchange. °

Source: Bank of America/Merrill Lynch, "Sovereign debt restructurings: lessons from Brady bonds", GEMs Strategy Viewpoint, 3 February, 2011, and "Sovereign debt restructurings, Part 2: post-Brady experience", GEMs Strategy Viewpoint, 18 March 2011.

- <sup>a</sup> At the end of 2008, Ecuador defaulted on its foreign debt again, which this time involved global bonds only. It conducted another restructuring post-default, buying back the defaulted 2012 and 2030 bonds at 35 cents on the dollar in 2009.
- b Three years later, Argentina launched another debt exchange offer to swap its defaulted debt for new bonds with a total value of US\$ 41.8 billion: on 3 March 2005 the government announced that 76% of its creditors (97% in Argentina and 65% abroad) had accepted this offer. This was the biggest discount ever proposed by a defaulted country to its creditors. Under the offer, Argentina would pay 30 cents -34 cents on each dollar in net present value terms. In 2010, Argentina opened another bond exchange, which added a further US\$ 20 billion in participation, for a total participation rate of 92% of total defaulted debt.
- Other countries subsequently adopted a similar preemptive approach, proposing debt exchanges before missing payments on their debts: Grenada in 2004, the Dominican Republic in 2005 and Belize in 2006.

The Eurobonds and global bonds issued in the 1990s started to displace the original Brady bonds and eventually became dominant in the markets. In fact, sovereigns preferred to replace their Brady bonds with other instruments because the origins of the Brady bonds in the restructuring of defaulted bank loans were a reminder of a troubled past. In addition, the structure of the Brady bonds was more complicated.

Eurobonds are typically plain vanilla bullet structures, <sup>9</sup> and investors tended to see them as less subject to default risk than the Brady bonds. Investors did not require as wide of a spread on Eurobonds as on Brady bonds. With tighter Eurobond spreads, sovereigns were able to reduce their external funding cost by occasionally using the proceeds from Eurobond issues to retire outstanding Brady debt. <sup>10</sup> The Brady bonds that were retired typically had higher spreads and lower absolute prices than the Eurobonds that replaced them, thereby offering the sovereign net present value (NPV) savings and a reduction in the stock of debt (face value). <sup>11</sup>

According to IDB (2007), a total global volume of US\$ 175 billion in Brady bonds was issued. 12 Of that total, just over US\$ 10 billion remained

A Eurobond is a bond that is issued and sold to international investors and is not subject to registration. A global bond is a bond that is registered in the jurisdiction of the major financial centres (see Bank of America Merrill Lynch (2011)). Despite the distinction, global bonds are also referred to as Eurobonds, and are frequently included in the same category.

<sup>&</sup>lt;sup>9</sup> Bullet structures mean that the principal is paid in full in a single payment at the end of the bond's maturity term (rather than being amortized, or gradually paid back, over the specified term of the bond).

<sup>&</sup>lt;sup>10</sup> See Brauer and Chen (2000).

See Bank of America Merrill Lynch (2011).

This total differs from that found in Brauer and Chen (2000), according to whom the total amount of Brady bonds issued was slightly lower —US\$ 170 billion— as shown in table II.2.

in circulation by 2006 and more than 97% of the region's Brady debt had already been retired (see table II.3).

The buyback operations or exchanges of Brady debt led to a sharp fall in its share of outstanding external sovereign debt in the 2000s. Now the once-dominant debt instrument is a dying asset class. After reaching a peak in March 1997, the stock of dollar-denominated Brady bonds embarked on a downward trend (see figure II.1). This trend was largely a result of two factors: plentiful liquidity in world financial markets, which encouraged investors to seek higher yields available on riskier assets such as emerging market bonds, and a sharp improvement in the creditworthiness of many emerging market countries.

Most of the retirements were possible because the countries with Brady agreements had regained the confidence of investors and of international markets after restructuring their debts. The retirement of Brady bonds is a sign of the strength of the sovereign bond market, which grew to significant proportions in global capital markets. The recovery of these countries was so remarkable that just a few years after the last Brady was retired, countries that had accounted for over 50% of the Brady debt had already become investment grade.

Table II.3
ORIGINAL AMOUNTS AND OUTSTANDING BALANCES
OF BRADY BONDS AS OF MARCH 2006
(US\$ billions)

			ssued	Oı	utstanding (Ma	rch 2006)
Country	Year of issue	Face value	Percentages of Total	Face value	Percentages of Total	Retired (percentages)
Latin America and						
the Caribbean		143.1	81.8	3.9	36.4	97.3
Argentina	1993	24.8	14.2	0.0	0.0	100.0
Brazil	1994	51.3	29.3	0.0	0.0	100.0
Costa Rica	1990	0.6	0.3	0.0	0.0	100.0
Dominican Republic	1994	0.5	0.3	0.4	3.7	20.0
Ecuador	1995	6.3	3.6	0.0	0.0	100.0
Mexico	1990	35.6	20.4	0.0	0.0	100.0
Panama	1996	2.9	1.7	0.9	8.4	69.0a
Peru	1996	4.2	2.4	2.0	18.7	52.4 <sup>b</sup>
Uruguay	1991	1.1	0.6	0.0	0.0	100.0
Venezuela (Bolivarian						
Republic of)	1990	15.8	9.0	0.6	5.6	96.2
Other countries		31.8	18.2	6.8	63.6	78.7
Total		174.9	100.0	10.7	100.0	93.9

Source: Inter-American Development Bank (IDB), "Living with debt. How to limit the risks of sovereign finance", *Economic and Social Progress in Latin America*, 2007 Report, Eduardo Borensztein, Eduardo Levy Yeyati and Ugo Panizza (cords.), 2007.

<sup>&</sup>lt;sup>a</sup> Panama retired the last of its outstanding Brady debt in July 2006.

<sup>&</sup>lt;sup>b</sup> Peru retired the bulk of its outstanding Brady debt in March 2007 and by March 2008 had retired nearly all of its Brady debt.

Source: Emerging Markets Trade Association (EMTA).

#### Chapter III

# Emerging market tradable debt: the maturing of the asset class

In the past three decades, emerging market debt as an asset class has evolved and matured. The asset class is broader today, credit quality has improved, and the investor base has expanded. Following the implementation of the Brady agreements, emerging market trading experienced a profound transformation, from a market for trading commercial loans to a broadening market for securities and related derivatives.

As emerging market debt transitioned from mostly loans to bonds (first to Brady bonds and then to Eurobonds and global bonds), the creditor base broadened from commercial banks to other institutional investors. Nevertheless, investment and trading opportunities throughout the emerging markets continued to share certain characteristics that presented common risks. According to Chamberlin (2010), "in addition to the customary risks stemming from the issuer's economic or financial performance and its capacity to service its payment obligations, these common risks included a variety of cross-border risks such as legal and regulatory uncertainties, enforcement difficulties, foreign exchange fluctuations and restrictions and changes in government or government policies, including the risk that a country's willingness might fall short of its capacity to honour its debt." These risks and the volatility associated with them, together with weaknesses in trading infrastructure, kept the asset class separated from mainstream trading and investment. For much of the 1990s, emerging market economies experienced boom-bust cycles as a result, facing a series of financial crises that underscored the vulnerability of the asset class to external shocks.

Emerging market debt as an asset class has improved since the crises of the 1990s. During the 2000s, supported by economic policies that brought about macroeconomic stability and a higher participation in the global economy, emerging markets in general and Latin America's capital markets in particular performed strongly, allowing the asset class to evolve and mature.

Emerging markets were the main contributors to global growth in 2012. In addition, many emerging market countries have moved to net external creditor status. In Latin America, the Bolivarian Republic of Venezuela, Brazil, Chile, Mexico and Peru have become net creditors. This contrasts sharply with the surge in public indebtedness in advanced economies. As a result, local emerging markets became increasingly attractive to investors in the last decade, and corporate issuance grew strongly. The most recent trends point to a shift in public-sector funding from sovereign external debt to local markets and in external funding from sovereigns to corporates and banks.

In this section, we examine the evolution of emerging market debt as an asset class, with a particular focus on Latin America and the Caribbean.

#### A. Evolution of the asset class: 1990s to 2000s

Since the crises of the 1990s, emerging market debt as an asset class has improved. Unlike previous shocks, Argentina's 2001 default, which occurred towards the end of the cycle of financial shocks in the 1990s, produced virtually no contagion to the broader emerging market debt asset class. The lack of contagion demonstrated fundamental improvements, with respect to both assets and investors. The improvements continued throughout the 2000s and can be summarized as follows:

- The asset class is broader today. For example, when the tequila crisis hit Mexico in December 1994, the JP Morgan EMBI Global index contained just 15 countries (seven of which were in Latin America and the Caribbean), but by the end of 2012 it contained 55 countries (including seventeen from the region). This means that investors have more options if one or more of the countries face problems.
- Credit quality in emerging markets has improved, which is reflected in improved credit ratings. There has also been an improvement in instrument quality. In the 1990s, many of the instruments in the JP Morgan EMBI indices were loans or collateralized Brady bonds. Since the completion of Brady restructurings in the 1990s, most borrowers have bought back

collateralized bonds and paid down restructured bonds. Many of the buybacks took the form of a debt exchange, in which the issuer saved money by buying cheap collateralized debt and issuing more expensive global bonds. The substitution of Brady bonds with global bonds has improved the quality of the instruments that make up the asset class.

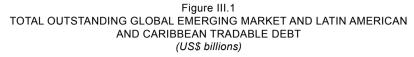
• The emerging market investor base has also improved since the crises of the 1990s. Prior to Russia's 1998 default, emerging market debt was dominated by highly leveraged investors, such as banks and hedge funds, which were short-term traders. Today the investor base has more investors willing to buy and hold the assets for the long term. The fundamental trend since 2002 has been for emerging market debt to flow out of the hands of short-term investors and into the hands of long-term investors. Moreover, the investor base is broader, including investment grade managers (as many emerging market countries have been upgraded to investment grade) and local pension funds.

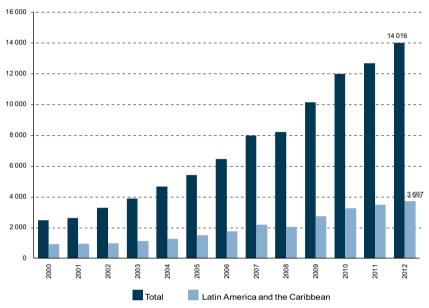
On average, the total global emerging market (GEM) debt stock has grown approximately 16% per year since 2002 and 14% per year since 1994, according to Bank of America/Merrill Lynch, on the basis of data from the Bank for International Settlements (BIS). The total outstanding stock of emerging market tradable debt reached a new high of US\$ 14 trillion in 2012.¹ Global emerging market external debt was 8.3% of world external debt, and outstanding GEM domestic debt was 13.2% of world domestic debt in 2012 as reported by the BIS, making GEM tradable debt an important part of the global bond universe.

### B. Emerging market debt universe

According to Bank of America/Merrill Lynch, total outstanding emerging market tradable debt reached a new high of US\$ 14 trillion in 2012 from only US\$ 2.5 trillion in 2000, a total that includes domestic and external tradable debt. For Latin America and the Caribbean, total outstanding tradable debt stood at US\$ 3.7 trillion in 2012, accounting for 26% of the overall total for global emerging market debt.

See Bank of America/Merrill Lynch (2013). Total outstanding global emerging market tradable debt also includes tradable loans, local/regional government tradable debt, treasury bills, central bank bills and other short-term debt.



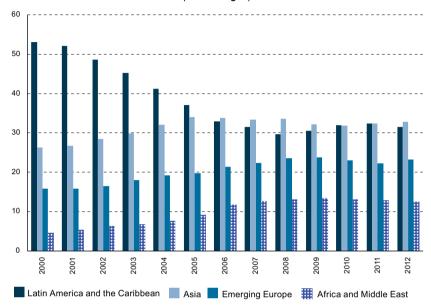


Source: Bank of America/Merrill Lynch Global Research, Bank for International Settlements (BIS).

Latin America and the Caribbean accounted for the largest share of total global emerging market external tradable debt throughout the 1990s. Although the region also maintained the largest share in the first half of the 2000s, the trend turned downwards in the second half, as funding needs declined with the accumulation of foreign reserves and as domestic bond markets became an increasingly significant source of financing for the region's economies, capturing a larger share of global investors' portfolio allocation. The region's share of global emerging market external debt thus reached a low of 30% in 2008, remaining close to this level up to 2012 (see figures III.2 and III.3).

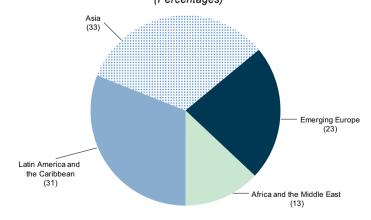
Regarding Latin American and Caribbean external tradable debt by type of issuer, the share of corporate debt has now surpassed sovereign debt. In the 1990s, sovereign debt predominated, but corporate debt rose in the 2000s, and in 2012 there was more corporate debt outstanding than sovereign (figure III.4).

Figure III.2
TOTAL GLOBAL EMERGING MARKET EXTERNAL TRADABLE
DEBT: REGIONAL BREAKDOWN, 2000-2012
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Bank of America/Merrill Lynch Global Research, Bank for International Settlements (BIS).

Figure III.3
TOTAL GLOBAL EMERGING MARKET EXTERNAL TRADABLE DEBT:
REGIONAL BREAKDOWN, 2012
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Bank of America/Merrill Lynch Global Research, Bank for International Settlements (BIS).

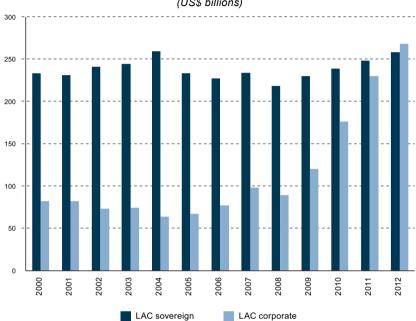


Figure III.4

LATIN AMERICA AND THE CARIBBEAN: OUTSTANDING
EXTERNAL TRADABLE DEBT BY ISSUER TYPE, 2000-2012

(US\$ billions)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Bank of America/Merrill Lynch Global Research, Bank for International Settlements (BIS).

The biggest share of the total outstanding global emerging market debt is domestic, however, not external. Domestic debt is now approximately 88% of total outstanding GEM debt, according to Bank of America/Merrill Lynch, and most of that is government debt. Domestic government debt accounts for about 47% of total GEM debt outstanding, followed by domestic corporate debt at 41%. Asia accounts for 61% of the overall GEM domestic tradable debt total, while Latin America and the Caribbean represents 26%. In the case of Latin America and the Caribbean, domestic debt was about 86% of total outstanding debt in 2012, with domestic government debt accounting for 55%. The other 45% included domestic corporate debt (31%), and sovereign and corporate external debt (14%).<sup>2</sup>

The region's domestic markets vary widely in size —with Brazil having the largest by far—and are generally dominated by the public sector. Despite their recent expansion, they continue to have two key vulnerabilities. First, the shift from external to domestic debt has contributed to reducing the risk from currency mismatches, but it may also have amplified the risk from maturity mismatches, as investors are still reluctant to commit their funds at fixed rates for long periods of time (Jeanneau and Tovar, 2008). This could expose Latin American and Caribbean borrowers to a significant degree of risk refinancing. Second, the narrow investor base at the domestic level hampers the development of secondary market liquidity.

According to data from the Emerging Markets Trade Association (EMTA), the share of local market instruments in emerging markets' total tradable debt peaked at 71% by 2011 before falling to 67% in 2012, up from only 26% in 1997. At the same time, the share of corporate bonds increased from 7% of the total amount of tradable Eurobonds in 2004 to 13.5% in 2012, while sovereign bonds decreased from 39% to only 18% in the same period (figure III.5). Emerging market sovereigns have become less reliant on external markets and the resilience shown by emerging market corporations throughout the credit crisis has led to an expansion in the emerging corporate bond universe.

(Percentages) Options and warrants/other 90 Local markets 80 70 60 50 40 30 20 Brady 10 Sovereign 0 Loans Sovereign Eurobonds Local Markets Brady Corporate Eurobonds Options and warrants/Other

Figure III.5
EMERGING MARKET DEBT: TRADING SHARE BY INSTRUMENT
(Percentages)

Source: Emerging Markets Trade Association (EMTA).

Finally, the credit quality of the asset class has improved. By 2010, all three JP Morgan emerging market debt indices had an investment-grade rating: the Emerging Markets Bond Index Global, or EMBIG (Baa3/BB+), the Corporate Emerging Market Bond Index, or CEMBI (Baa2/BBB) and the Government Bond Index —Emerging Markets, or GBI-EM (Baa2/A–). The investor base for emerging market debt continued to grow after that and became increasingly diversified as a result. JP Morgan estimates that nearly 40% of total inflows between 2008 and 2012 came from a pool of investors who had typically invested in more traditional developed market debt and equities.

#### Chapter IV

### Developments in new debt issuance

The trends described in the last section took place against the background of a globalization process that generated substantial growth in the capital markets of developed economies. Retail and institutional investors increased their participation in capital markets, and companies raised more capital in bond and equity markets.

In the 1990s, financial markets in advanced economies experienced such growth that by 2000 the combined bank credit, stock market capitalization and private bonds outstanding reached an average of about 250% of gross domestic product (GDP) for the G7 countries, compared to only 75% in 1970. This wave of capital market development and financial globalization was fostered by government policies that promoted financial liberalization; by technological and financial innovations that allowed lower-cost trading, more efficient clearing and settlement processes and the development of new financial instruments; and the emergence of mutual and pension funds that enabled investors to purchase securities at low cost and to diversify their investments across assets and countries.

These global trends affected developing countries, as well. As new capital became available in international capital markets, developing countries tried to attract part of it to their domestic markets through a series of reforms, which included liberalization and privatization efforts and the emergence of pension funds. <sup>1</sup>

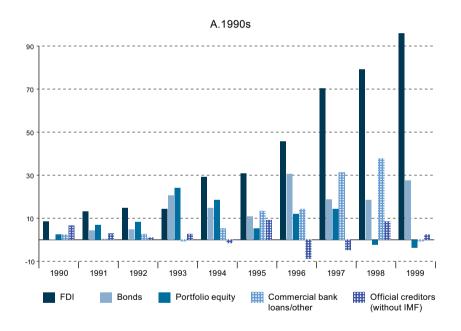
<sup>&</sup>lt;sup>1</sup> For a more extensive discussion of these policies, see De la Torre and Schmukler (2004).

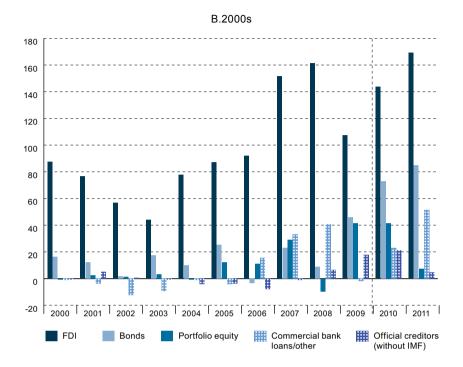
The composition of capital flows to developing countries changed significantly in the 1990s and the 2000s relative to the 1970s and the 1980s. The share of official flows more than halved, with private capital flows becoming the major source of capital for a large number of countries. The nature of private capital flows also changed markedly. Foreign direct investment (FDI) grew throughout the 1990s and continued to be strong in the 2000s, while portfolio flows also became very important, particularly bond flows. Figure IV.1 shows the composition of capital flows in Latin America and the Caribbean.

Figure IV.1

LATIN AMERICA AND THE CARIBBEAN: COMPOSITION OF NET PRIVATE CAPITAL FLOWS, 1990s AND 2000s

(US\$ billions)





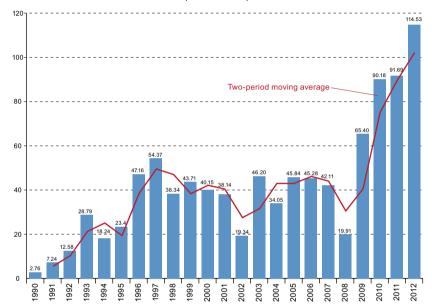
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the World Bank, World Development Indicators (WDI) and Global Development Finance (GDF) Database.

Before 1989, Latin America and the Caribbean had only limited access to the international bond market. The region's access increased in the 1990s, however, and the importance of bonds as a source of external financing rose significantly, second only to FDI. The volume of international bond issuances rose sharply from US\$ 2.8 billion in 1990 to a peak of US\$ 54.4 billion in 1997, before falling in 1998 and 1999 (see figure IV.2). Corporate issuance represented a small share of the total amount issued in the 1990s, accounting for only one quarter of the regional total in 1999. In addition, most of the new debt issues were dollar denominated. The concept of original sin, or the inability of emerging markets to borrow in their own currency, was discussed extensively in the 1990s.

In the 2000s, on the other hand, the major trends in the region included an increase in the issuance of local-currency-denominated debt and a rise in corporate issuance. In 2007, the share of local-currency-denominated bond issues in total Latin American external debt issuance, including sovereign and corporate debt, was an impressive 19%, compared with 5% in 2004 and no issues in local currency in 2002 and 2003. In 2012, corporate and bank issuance in Latin America accounted for 85% of the total, while sovereign

bonds accounted for 14%. The volume of international bond issues rose from US\$ 40 billion in 2000 to a record of US\$ 114.5 billion in 2012 (see figure IV.2). Brazil and Mexico, following the pattern of previous years, were the top issuers in the region (see table IV.1).

Figure IV.2
ANNUAL NEW DEBT ISSUANCE IN LATIN AMERICA AND THE CARIBBEAN
(US\$ billions)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

Table IV.1 LATIN AMERICA AND THE CARIBBEAN: INTERNATIONAL BOND ISSUES (US\$ millions)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Latin America and the Caribbean	37 806	36 383	45 188	45 064	41 515	18 913	64 750	90 183	91 687	114 529
Argentina	100	200	540	1 896	3 256	65	200	3 146	2 193	663
Bahamas						100	300			
Barbados	•	1	325	215	1	•	450	390	1	1
Bolivia (Plurinational State of)	•	108	•	,	1	٠	ı	•	1	200
	19 364	11 603	15 334	19 079	10 608	6 400	25 745	39 305	38 624	50 255
Chile	3 200	2 350	1 000	1062	250	1	2 773	6 750	6 049	9 731
Colombia	1 545	1 545	2 435	3 177	3 065	1 000	5 450	1 912	6 411	7 459
Costa Rica	490	310	•	•	•	'	1	•	250	1.250
El Salvador	349	286	375	925	•	•	800	450	654	800
Guatemala	300	380	'	1	•	30	1	'	150	1 400
Honduras	•	•	•	1	•	•	1	20	•	1
Jamaica	•	814	1 050	930	1 900	350	750	1 075	694	1 750
Mexico	7 979	13 312	11 703	9 200	10 296	5 835	15 359	26 882	21 026	28 147
Panama	275	770	1 530	2 076	670	989	1 323	•	897	1 100
Paraguay	•	•	•	•	•	•	•	•	100	200
Peru	1 250	1 305	2 675	733	1827	•	2 150	4 693	2 155	7 240
Dominican Republic	009	•	160	675	902	•	•	1 034	750	750
Trinidad and Tobago	•	1	100	200	•	1	820	1	175	•
-			1 062	3 679	999	' 6	500	' (	1693	200
Venezuela (Bolivarian Republic of)	2 354	3 050	6 115	100	006 /	4 000	2 000	3 000	7.200	
Supranational issues	İ	•	784	817	539	447	2 800	1 526	2 665	2 484
Central American Bank tor Economic Integration	1	1	200	292	1	'	200	151	'	250
Caribbean Development Bank	ı	•	1	•	•	•	•	•	175	•
Foreign Trade Bank of Latin America	1	1	1	'	1	•	1	1	1	400
Andean Development Corporation	•	1	584	250	539	447	1 000	1 375	1 240	1834
Spinion IIV	•						006 1		067	

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Latin Finance, JP Morgan and Bank of America/Merrill Lynch. Note: Includes sovereign, bank and corporate bonds.

#### A. Rising above original sin

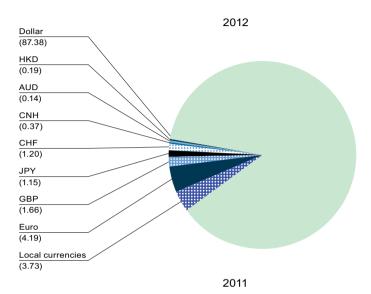
In their 1999 paper on exchange rates and financial fragility, Barry Eichengreen and Ricardo Hausmann advance the idea that developing countries are more vulnerable to international financial crises than developed countries because of the currency composition of their debts. According to the authors, for less developed countries "the domestic currency cannot be used to borrow abroad or to borrow long term, even domestically" (Eichengreen and Hausmann, 1999, p. 3). Many emerging market countries borrow in foreign currency instead, a situation the authors described as the original sin of international finance.

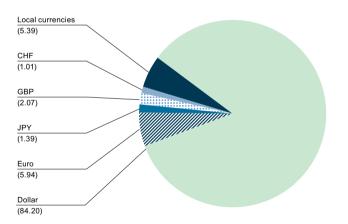
More specifically, Eichengreen, Hausmann and Panizza (2003) show that "the composition of external debt —and specifically the extent to which that debt is denominated in foreign currency— is a key determinant of the stability of output, the volatility of capital flows, the management of exchange rates and the level of country credit ratings" (p. 3). The authors find greater output and capital volatility, lower credit ratings and a limited ability to manage an independent monetary policy for countries with a high degree of original sin. To highlight the relevance of the issue, the authors show that only a select number of countries are able to issue in their own currencies. While the major financial centres (namely, the United States, the United Kingdom, Japan and Switzerland) issued only 34% of the total debt outstanding in 1993-1998, debt denominated in their currencies amounted to 68% of the total. On the other hand, developing countries accounted for 10% of the debt, but less than 1% of the currency denomination in the same period.

Several possible determinants of original sin have been identified in the literature, such as the level of development, monetary credibility, fiscal solvency, the level of debt burden, credit market imperfections, the exchange rate regime, the slope of the yield curve (with an upward-sloping yield curve being associated with higher long-term borrowing to meet investor demand and, hence, lower original sin), the size of investor base, trade links and the strength of institutions. Testing the robustness of any determinant in particular is not the object of this book. Nonetheless, external debt issuance in local currency became more common in Latin America and the Caribbean following the economic adjustment and improvements in macroeconomic fundamentals and policies in the late 1990s and early 2000s, which included a more flexible exchange rate regime, an improved fiscal situation, inflation control, a more credible monetary policy based on inflation targets, a broader investor base and improved institutions such as better banking supervision. Despite the increase, however, local-currency debt still represents a small percentage of total issues, especially relative to major currencies such as the United States dollar (see figure IV.3).

Figure IV.3

NEW DEBT ISSUANCE IN LATIN AMERICA AND THE CARIBBEAN:
2011 AND 2012 CURRENCY BREAKDOWN
(Percentage of total regional issuance)



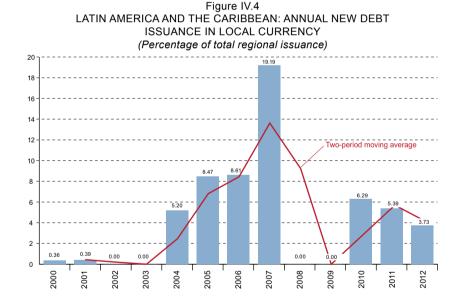


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance.

In Latin America and the Caribbean, new external debt issuance in local currency jumped from nothing at all in 2002 and 2003 to 5.2% in 2004. It peaked at 19.2% of the total regional issues in 2007, but then declined

during the global financial crisis in 2008 and 2009. Total new external debt issuance reached record amounts in 2010 and 2011, with local-currency debt accounting for about 5.4% of the total in 2011. In 2012, debt issuance in local currency declined again to 3.7%, but currency diversification increased. For the first time in the region, there was debt issuance in Chinese offshore renmimbi and Australian dollars (see figure IV.4).

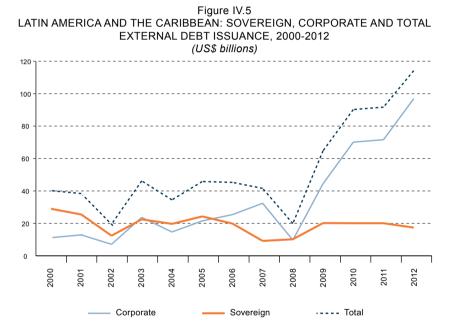
The local currency share of 5.4% in 2011 was notable, and its decline to 3.7% in 2012 was not surprising. The advanced economies' easy monetary stance brought global interest rates to historic low levels, and the record capital flows to emerging markets kept local currencies under pressure. In this scenario, companies and sovereigns found it advantageous to issue in hard currency (especially in United States dollars) rather than in local currencies, which in many cases were appreciating and strengthening against the United States dollar and other foreign currencies.



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

#### B. The rise in corporate issuance<sup>2</sup>

Another recent trend in the region's debt market in the past decade has been a shift in external funding from sovereigns to corporations and banks. The external Eurobond component of the Latin American and Caribbean corporate asset class has grown remarkably in the period and has emerged as a mainstream product in the global credit space. While the size of gross Latin American and Caribbean external debt issuance has continued to rise, corporate issues have become the main driver of new supply (see figure IV.5).



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

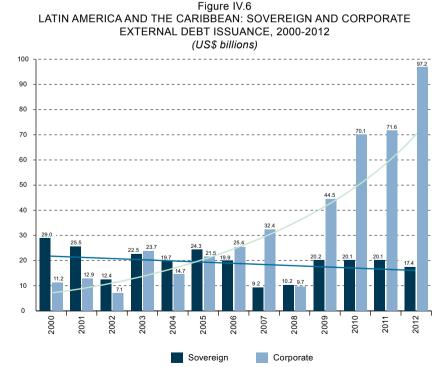
Latin American and Caribbean corporate debt issuance increased more than eightfold from 2000 to 2012. In 2011, external debt issuance from the corporate sector outstripped sovereign issuance by more than 3:1, whereas in 2000, sovereign debt issuance exceeded external corporate debt issuance by more than 2:1. More significantly, in 2012, external debt issuance from the corporate sector outstripped sovereign issuance by more than 5:1. Sovereigns are now less inclined to tap international bond markets not only because they have developed their local markets, but because they have

<sup>&</sup>lt;sup>2</sup> This section draws heavily on Lara (2011).

fewer funding needs after previous financial crises forced them to improve their debt dynamics.

The upward trend in the region's issuance of external corporate debt steepened after the 2008 credit crisis. The average external corporate debt issuance in 2009-2012 represents an increase of 381% from the average volumes in the 2000-2007 period. Corporations dominated new issuance out of Latin America and the Caribbean in the 2009-2012 period as investors sought higher yields through both dollar and local-currency plays.

As emerging markets have matured, investment activity has picked up, especially corporate capital expenditure. Access to term funding in external markets has been key to financing this growth. External debt issuance from the Latin American corporate sector grew steadily as a share of total issuance throughout the 2000s, reaching 77.8% in 2007. Corporate issuance dried up in the wake of the 2008 crisis, however, while sovereign issuance remained relatively steady. As credit availability rebounded, corporate issuance activity regained momentum, reaching a record US\$ 97 billion in 2012 (see figure IV.6) and accounting for 85% of the total external debt issuance (see figure IV.7), its biggest share ever.



**Source**: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

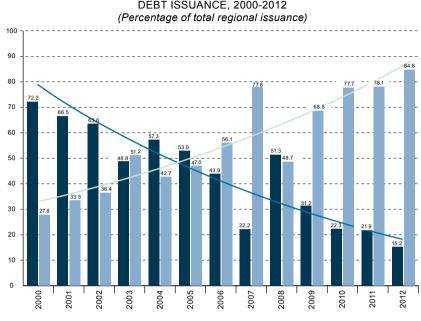


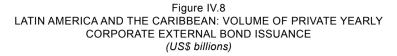
Figure IV.7
LATIN AMERICA AND THE CARIBBEAN: SOVEREIGN AND CORPORATE EXTERNAL DEBT ISSUANCE, 2000-2012

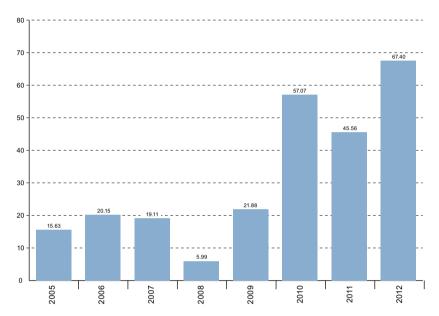
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

Corporate

Sovereign

Yearly private corporate debt issuances in the international debt capital markets, including banks and financial issuers and excluding public sector and quasi-sovereign issuers, totalled US\$ 54.9 billion from 2005 to 2007 (see figure IV.8). The annual breakdown was US\$ 15.6 billion in 2005, US\$ 20.2 billion in 2006 and US\$ 19.1 billion in 2007. The private sector was crowded out by the public sector in the immediate aftermath of the 2008 global credit crisis, causing private issuances to drop dramatically to US\$ 6 billion. Nevertheless, the volume of private issuance returned to pre-crisis levels by the end of 2009, with a total volume of US\$ 22.2 billion, and it reached a historical peak of US\$ 67.4 billion in 2012.





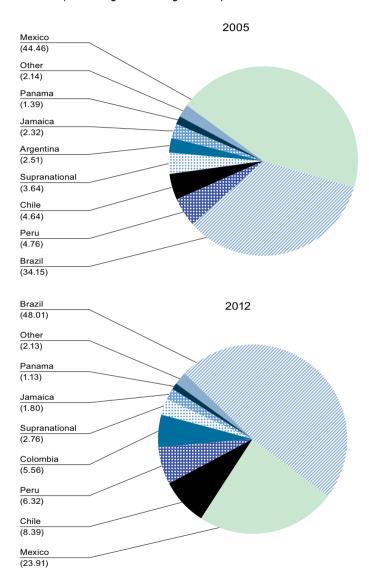
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

Note: Volumes do not include public sector or quasi-sovereign issuers.

Brazilian corporate issuers have been the main driver of the increase in corporate bond issuance. Over a period of seven years, they increased their average weight in the region's growing aggregate volume from 34% to 48% (see figure IV.9). Brazilian companies (both private and state owned) sold a record of US\$ 46.64 billion in bonds in 2012, an increase of 534% from the US\$ 7.36 billion in bonds sold in 2005. The share of Brazilian corporate bonds in the region's total corporate issuance reached a historic peak in 2008, when Brazilian corporate issuers represented 62% of the region's volume (see table IV.2). The increase in Brazilian corporations' share in total regional corporate issuance in the past few years can be attributed to a number of factors, such as economic stabilization, an improvement in the regulatory environment governing securities markets, a growing demand for fixed-income securities by investors and the scarcity of bank credit as a source of major long-term financing. It can also be explained by the 2008 and 2009 upgrades of Brazil's sovereign debt to investment grade by the main credit rating agencies.

Figure IV.9

LATIN AMERICA AND THE CARIBBEAN: BREAKDOWN OF INTERNATIONAL CORPORATE BOND ISSUANCE BY COUNTRY (Percentage of total regional corporate debt issuance in 2005 and 2012)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

Note: Volumes include private and public sector or quasi-sovereign issuers.

Table IV.2

LATIN AMERICA AND THE CARIBBEAN: BREAKDOWN OF INTERNATIONAL CORPORATE BOND ISSUANCE BY COUNTRY, 2005-2012

(Percentages)

	2005	2006	2007	2008	2009	2010	2011	2012
Argentina	2.51	5.11	8.44	0.67	1.01	2.60	1.73	0.06
Barbados	0.93	0.59	0.00	0.00	1.01	0.27	0.00	0.00
Brazil	34.15	48.25	23.87	61.89	48.84	52.37	51.47	48.01
Chile	4.64	4.18	0.77	0.00	6.23	7.49	6.56	8.39
Colombia	0.00	1.66	5.44	0.00	5.50	0.88	6.16	5.56
Costa Rica	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.26
Dominican Republic	0.74	1.48	1.87	0.00	0.00	0.41	0.00	0.77
El Salvador	0.00	1.18	0.00	0.00	0.00	0.64	0.00	0.00
Guatemala	0.00	0.00	0.00	0.31	0.00	0.00	0.21	0.51
Honduras	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Jamaica	2.32	2.68	4.33	0.00	1.68	1.53	0.41	1.80
Mexico	44.46	24.43	28.74	25.81	27.19	28.47	25.17	23.91
Panama	1.39	1.58	0.68	0.00	0.00	0.00	0.55	1.13
Paraguay	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.52
Peru	4.76	2.89	1.00	0.00	0.34	3.13	3.01	6.32
Trinidad and Tobago	0.46	1.97	0.00	0.00	1.91	0.00	0.24	0.00
Uruguay	0.00	0.39	0.00	0.00	0.00	0.00	0.28	0.00
Venezuela (Bolivarian Republic of)	0.00	0.39	23.19	6.71	0.00	0.00	0.00	0.00
Supranational	3.64	3.22	1.67	4.61	6.29	2.18	3.72	2.76

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

Note: Volumes include private, public sector or quasi-sovereign and supranational issuers. Supranational issuers include the Development Bank of Latin America (CAF), the Central American Bank for Economic Integration (CABEI), the Caribbean Development Bank and NII Holdings, Inc.

Mexico's share, which represented almost 45% of the region's volume in 2005, fell to 24% in 2012. Mexican companies (both private and state owned) sold US\$ 23 billion of bonds in 2012, an increase of 143% from the US\$ 9.6 billion of bonds sold in 2005. A number of factors contributed to the decline of Mexican corporations' share in total regional corporate issuance in the 2005-2012 period. Mexico's real interest rate was less attractive to foreign investors than the Brazilian rate, which was higher. In addition, given its closeness to the United States economy, the Mexican economy was hit hard by the 2008-2009 financial crisis. The decline in Mexican corporate issuances as a share of the total in 2005-2012 was driven by demand as well as supply. Investor demand for corporate bonds picked up by the end of the second quarter of 2009, however, as Mexico's economy began pulling out of its first recession in eight years, and it peaked in 2010. Finally, Mexican

borrowers seem to have been less willing to take on dollar-denominated debt and its corresponding currency risk during this period, with some issuers recurring to the local capital debt markets and alternative local currency financial vehicles instead.

Together, Brazilian and Mexican corporates accounted for 72% of total corporate issuance in the Latin American and Caribbean region in 2012. Chile, Colombia, Jamaica, Panama and Peru accounted for another 23% of the total. Corporate issuers from Chile increased their volumes sharply in comparison with their pre-2008 volumes, from less than 1% of the total in 2007 to 8% in 2012. Colombian corporations similarly increased their issues from less than 2% of the region's total in 2006 to 6% in 2012. Peruvian share of corporate issues grew from 1% in 2007 to 6% in 2012 (see table IV.2).

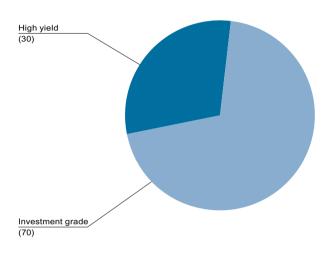
Not only has the issuer base become more diversified by country, but the Latin American and Caribbean corporate asset class has also developed a broader ratings and sectoral base. Although investment-grade corporate issuers continue to dominate annual supply, high-yield instruments have increased notably as a percentage of total issuance. In 2011, 30% of total regional corporate issuances (including private, quasi-sovereign and supranational issuers) were high-yield issuances, and 70% were investment grade (see figure IV.10). In 2012, however, the share of high-yield issuances declined to 21%. These ratings are consistent with sovereign debt and credit metrics, especially those of Brazil, Chile, Colombia, Mexico and Peru. Sovereign local- and foreign-currency bonds are the benchmark for corporate issuers (it is uncommon to find a corporate issuer with a higher rating than its host's sovereign rating). The region's external corporate debt is thus healthy from a ratings perspective.

From a sectoral perspective, about 56% of corporate debt issuances in 2012 came from two sectors: the financial and energy sectors. The financial sector was the main driver of the growth in corporate issuance in 2012, accounting for 34% of the total volume (see figure IV.11). Issuances from this sector include banks and financial services companies. The energy sector, including oil, gas and power, was the second most relevant sector in terms of aggregate volume (22% of total issuances). These two sectors were followed by telecommunications (12% of the total), mining and metals (11%), construction (6%), agriculture, agribusiness and food (5%) and industrial sectors such as petrochemicals, pulp and paper (5%). The remaining 5% include retail (2%), transportation (1%), infrastructure (1%) and utilities (1%).

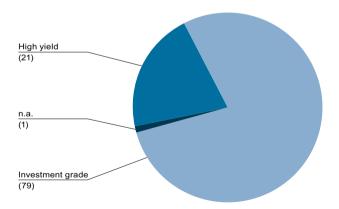
Figure IV.10

LATIN AMERICA AND THE CARIBBEAN: BREAKDOWN OF INTERNATIONAL CORPORATE BOND ISSUANCES BY RATING, 2011 AND 2012 (Percentage of total)

2011



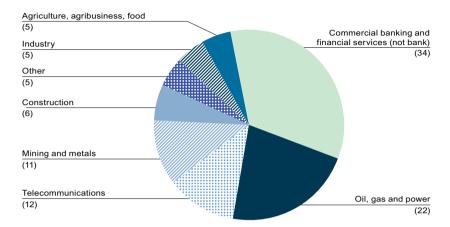
2012



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

Figure IV.11

LATIN AMERICA AND THE CARIBBEAN: BREAKDOWN OF INTERNATIONAL
CORPORATE BOND ISSUANCES BY SECTOR, 2012
(Percentage of total)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

#### C. Improving terms of borrowing

Terms of borrowing improved in the 2000s with respect to the late 1990s. The annual average maturity of new external bond issuance (weighted by the amount issued in United States dollars) peaked in 1997 and then declined steadily through the end of the decade. In the 2000s, the weighted average maturity of new external bond issuance improved from 2000 to 2006, when it reached a peak. In particular, from 2005 to 2008, Brazilian and Mexican corporations issued perpetual bonds in response to improved terms of borrowing. In 2012, after a hiatus, four Brazilian corporations and Brazil's Banco do Brasil once again issued perpetual bonds.

Average maturity declined after the 2006 peak, particularly during the global financial crisis, but started to improve again in 2009 (see figure IV.12). In October 2010, Mexico issued an unprecedented 100-year bond. The government reopened the series in August 2011, as it looked to lock in historically low yields on the back-to-safety rally in United States Treasuries. This brought the total amount issued to US\$ 2 billion. This trend towards longer average maturities contributes to reducing the potential volatility of bond flows.

Figure IV.12

NEW EXTERNAL BOND ISSUANCE IN LATIN AMERICA AND THE CARIBBEAN:
ANNUAL WEIGHTED AVERAGE MATURITY
(Number of years weighted by amount issued in United States dollars)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

Note: Annual averages do not include perpetual bonds.

Borrowing costs, measured by the behaviour of spreads, followed a similar pattern. Spreads recorded a downward trend from 2002 to May 2007 and widened during the global financial crisis, but they have narrowed since then. At the end of 2012 spreads were close to the levels prevailing before the Asian crisis in 1997. However, although lower than during the global financial crisis, they were more volatile between 2009 and 2012 than in the 2002-2007 period. The evolution and performance of bond spreads are discussed in the next section.

#### Chapter V

# Debt spreads rollercoaster: evolution and performance

Emerging market bond spreads over United States treasuries are often used as an indicator of sovereign risk, and they can be used to gauge a country's access to international capital markets. The factors that influence bond spreads in emerging market economies have been subject to extensive debate. Most analysts agree that economic fundamentals have an impact on the level of spreads. Improvement in fundamentals, for example, should contribute to lowering the risk to investors, leading to tighter spreads. At the same time, external factors, such as investor sentiment or international interest rates, are also believed to influence the behaviour of bond spreads.

The borrowing costs for Latin America and the Caribbean, as measured by the behaviour of spreads, improved in the 2000s relative to the second half of the 1990s. Latin American debt spreads followed a downward trend from October 2002 to May 2007, when they reached a historic low (see figure V.1). Faster growth, lower inflation and tighter public finances in most countries played a role, as did investors' increased appetite for risk due to abundant global liquidity. The spread compression was also supported by the broadening of the investor base.

The broader class of investors, including new buyers such as Asian central banks and United States pension funds, changed the nature of the commitment between buyers and issuers. In the past, Latin American markets received only short-term capital flows, but in the 2000s buyers were willing

to commit to longer-term goals, making liability management programmes more feasible. Sovereigns launched a variety of debt management operations during these years of spread compression, such as deleveraging, extending maturities, retiring expensive debt, switching from hard currency to local currency and increasing the proportion of fixed-income debt.

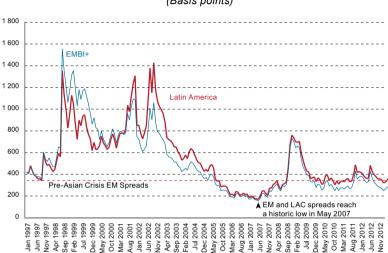


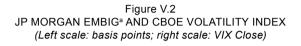
Figure V.1
JP MORGAN EMBI+ AND LATIN AMERICAN COMPONENT
(Basis points)

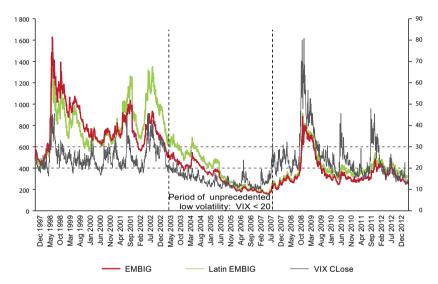
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from JP Morgan, Emerging Markets Bond Index (EMBI).

Following a record low in May 2007, Latin American and Caribbean debt spreads reflected the increased volatility in the external backdrop, widening significantly during the global economic and financial crisis of 2008-2009, following Lehman Brothers' collapse, and tightening back after peaking in November 2008. There were spikes in volatility in May and June 2010 and in the second half of 2011, when financial markets moved to reflect substantial downside economic risks from the fiscal turmoil in the euro area. Volatility was remarkably low from 2003 to 2007, but increased after the global financial crisis of 2008-2009, more so than during the second half of the 1990s (see figure V.2).

Risk premiums in the region rose less during the 2008-2009 crisis than in other critical episodes, such as the Asian, Russian and Argentine crises. This reflects the region's improved macroeconomic policies and economic fundamentals. Although debt spreads did not return to the record low levels of 2007, by the end of 2012 they were close to the low levels of the pre-Asian crisis period in the mid-1990s.

EMBIG spreads have closely tracked the CBOE Volatility Index (VIX), a proxy for international investors' appetite for risk in recent years, as depicted in figure V.2. Global financial conditions, such as the availability of international liquidity and international investors' risk appetite, have had an important impact on borrowing costs for emerging markets.





Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from JP Morgan, Emerging Markets Bond Index (EMBI) and from the Chicago Board Options Exchange [online] www.cboe.com/micro/vix/historical.aspx.

The JP Morgan EMBI Global Index (EMBIG) includes Chile and Uruguay in addition to the Latin American and Caribbean countries included in the EMBI+. The EMBIG expands on the composition of the EMBI+ by using a different country selection process and instrument selection process. The EMBI Global defines emerging market countries based on the World Bank's definition of per capita income brackets and each country's debt-restructuring history. These two criteria allow the EMBI Global to include a number of higher-rated countries that international investors have nevertheless considered part of the emerging market universe.

Note: The Chicago Board Options Exchange (CBOE) Volatility Index (VIX) is a key measure of market expectations of near-term volatility and a barometer of investor sentiment (conveyed by S&P 500 stock index option prices). Values greater than 30 are generally associated with a large amount of volatility, while values below 20 generally correspond to less stressful, even complacent, times in the markets.

## A. From reeling highs to historical lows: the driving forces behind spreads evolution

Most analysts agree that fundamentals have some impact on bond spreads in emerging market economies. Min (1998) stresses the importance of economic fundamentals in the determination of bond spreads. He finds that strong macroeconomic fundamentals in a country, such as low domestic inflation rates, improved terms of trade and increased foreign assets (as measured by the cumulative current account, the terms of trade and the real exchange rate), are associated with lower yield spreads. Specifically, in Latin America the volatility of bond spreads is highly correlated with the domestic inflation rate, the debt-to-GDP ratio and the ratio of international reserves to GDP.

Kamin and von Kleist (1999) analyse the launch spreads of 304 bonds issued in the 1990s, drawn from Euromoney's Bondware. They conclude that spreads on emerging market instruments have strong and well-defined relationships to credit rating, maturity and currency denomination. Credit ratings on sovereign bonds, in this analysis, were based on a country's adherence to financial fundamentals. In the 1990s, higher-rated bonds from countries that had better financial prospects were rewarded with tighter spreads than lower-rated bonds from countries that were less strict in their adherence to fundamentals. The authors admit, however, that investors required higher spreads from borrowers in Latin America and Eastern Europe than from borrowers in Asia and the Middle East. Although they do not elaborate as to the reason for this discrepancy, it is likely that market sentiment played a role in the determination of the level of spreads.

Eichengreen and Mody (2000) analyse data on about 1,000 developing country bonds issued during 1991-1996, considering both the issue decisions of debtors and underwriters and the pricing decisions of investors. Their results suggest that adherence to economic fundamentals leads to a higher probability of bond issuance and initially lower spreads. However, the authors believe that changes in fundamentals only partially explain the spread compression leading up to the Mexican crisis in 1994.

Ades and others (2000) developed a framework to assess whether spreads are at their fair value, called the Goldman Sachs Equilibrium Sovereign Spread (GS-ESS). A country's fair value spread is a function of the probability that it will default on its external obligations. This probability is a function of variables related to the country's solvency, liquidity and debt-service track record, as well as global financial conditions. The valuation framework is based on a theoretical model that views emerging market economies as small borrowers in imperfect international capital markets. To generate the GS-ESS estimates, monthly data from 1996 onwards were assembled for 15 emerging market economies. For each country, one benchmark bond was selected, typically between 10 and 20 years of maturity. The results of the model, which are robust

to a variety of diagnostic and statistical tests, indicate that with the exception of Mexico, all Latin American countries in the sample were undervalued at the time the paper was written (October 2000), with prices below, and spreads above, the long-term equilibrium level. The implication was that other factors must have influenced the determination of bond spreads in emerging markets, which could explain the volatility of bond flows in the 1990s.

Some studies hold the view that external factors are the main determinants of bond spreads. They try to measure market sentiment by identifying external factors that affect bond spreads, such as the level of interest rates in major developed countries as a gauge of liquidity in global bond markets, measures of stock market volatility as proxies for risk appetite or aversion and commodity prices, which affect emerging market spreads and emerging market economies in general. In doing this, these papers compare the relative effects of internal factors (fundamentals) versus external ones.

Cline and Barnes (1997) suggest that a global capital surplus led to the decline in bond spreads before the Asian crisis. Their study finds that emerging market spreads fell systematically from 1995 to mid-1997 by more than can be explained by improved borrower fundamentals. They believe that spreads were too low to be sustainable and the crisis was a correction. Eichengreen and Mody (2000) also suggest that global interest rates affect bond spreads in emerging markets. Their study shows that the slow compression of spreads before the Mexican and Asian crises was caused by liberal credit conditions in the world's major money centres. On the other hand, Kamin and von Kleist (1999) find no relationship between industrial country interest rates and emerging market bond spreads, while Min (1998) also finds that external shocks such as oil prices and the international interest rate are insignificant in determining bond spreads.

Maier and Vasishtha (2008) summarize two views for the decline in emerging market bond spreads in the 2000s. First, the decline in spreads was a result of structural reforms and the improvement in emerging markets' macroeconomic policies and economic fundamentals. Second, favourable global economic factors and financial conditions explain much of the improvement in spreads, given that risk spreads fell for all asset classes. Using factor analysis to study the extent to which emerging market bond spreads were driven by global factors, as opposed to country-specific macroeconomic fundamentals, the authors conclude that better macroeconomic policies, including lower inflation and lower debt, were the most important factor in the reduction in spreads after 2002. On the other hand, Fostel and Kaminsky (2007), who examine Latin America's access to international capital markets from 1980 to 2005, conclude that sound fundamentals matter, but the upsurge in international lending to Latin America starting in 2003 was mainly driven by a dramatic increase in global liquidity and investors' changing risk behaviour.

Although country-specific macroeconomic fundamentals play an important role in the determination of spreads, global conditions are also significant. Whether domestic or external factors have the biggest influence on spreads depends, for the most part, on the time period in question. In the following section, we focus on the external drivers of bond spreads, examining empirically whether market sentiment was a significant factor in determining Latin American and Caribbean bond spreads in the 1990s and the 2000s.

#### B. Market sentiment and the behaviour of debt spreads

To assess whether market sentiment was significant in the determination of bond spreads in Latin America in the 1990s and the 2000s, we estimated the elasticity of the Latin component of the JP Morgan EMBI+ with respect to its non-Latin component using monthly data for December 1996 to December 2012. The period covers the Asian crisis, the Russian default, Brazil's devaluation, Argentina's debt crisis, the boom of 2003-2008 and the 2008-2009 global financial crisis. An elasticity higher than zero would imply that the cost of borrowing in Latin American markets is correlated with the cost of borrowing in non-Latin countries, regardless of whether or not Latin American fundamentals justified any change. Interestingly, we found a significant elasticity of 0.56 for the period as a whole (see table V.1). Thus, an increase of 1.0% in spreads in non-Latin countries in this period meant an increase of roughly 0.5% in Latin American spreads. Part of the change in Latin American spreads, therefore, was explained by events in other emerging markets, which may have influenced investors' perception of Latin American risk.

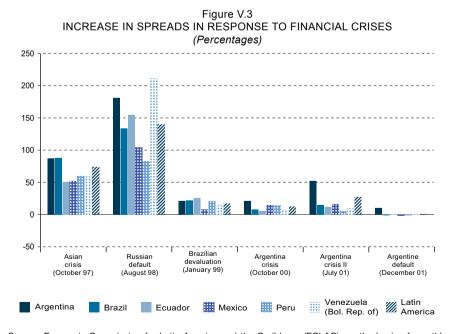
Table V.1
ELASTICITY COEFFICIENTS OF LATIN VERSUS NON-LATIN COMPONENTS
OF THE EMBI+

	Elasticity coefficient	t statistic
1997 - 2012	0.56	18.96
*1997 - 2002	0.28	4.10
First half:1997 -1999	0.54	16.80
Second half: 2000 - 2002	-0.35	-3.44
*2003 - 2008	1.24	19.70
First half: 2003 - 2005	1.41	27.69
Second half: 2006 - 2008	0.89	29.85
*2009 - 2012	0.63	21.35

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of monthly JP Morgan EMBI+ spreads.

However, the elasticity changes throughout the period. During the financial crises of the late 1990s (1997 to 2002), the elasticity of the Latin component of the JP Morgan EMBI+ with respect to its non-Latin component is lower: 0.28. When we break this period in two, the elasticity is 0.54 in the first half (1997-1999) and negative in the second half (2000-2002). Contagion was higher in the first half than it was in the second half. The Asian crisis of 1997 and the Russian crisis of 1998 were very contagious, affecting several countries. In contrast, the 2001 Argentine crisis had a smaller impact on the rest of the region and on other emerging markets (except for the impact on neighbour Uruguay, which was very significant) than the Asian and Russian crises. Argentina's crisis was foreseen, whereas the earlier emerging markets crises had the element of surprise, causing financial markets to react strongly to unanticipated events.

Didier, Mauro and Schmukler (2006) argue that investors' anticipation of the Argentine crisis could explain the lack of contagion compared with the Asian and Russian crises. More than two years before the crisis, mutual funds began reducing their exposure to Argentina. By the time of Argentina's default in December 2001, the impact on spreads in other countries of the region was muted (see figure V.3). In contrast, mutual funds did not seem to reduce their exposure in advance of the other crises.



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of monthly JP Morgan EMBI+ spreads.

The elasticity increased to 1.24 during the commodity price boom from 2003 to 2008. This seems to suggest that global conditions did have a role in the decline of emerging market bond spreads during this period. As noted earlier, risk spreads also fell for all other asset classes. The amount of global liquidity available at that time likely played a role in the reduction of the debt spreads in the region, regardless of the improvement in macroeconomic variables in each country. Here again, the elasticity coefficient was higher in the first half of the period (2003-2005), at 1.41, than in the second half (2006-2008), at 0.89, but it remained very high throughout.

Finally, the elasticity decreased to 0.63 from 2009 to 2012, a period that covers the global financial crisis and the subsequent recovery. The cost of borrowing in Latin American markets continued to be correlated with the cost of borrowing in non-Latin countries, meaning that events in other emerging markets continue to play a role in the level of spreads in Latin America and the Caribbean.

To evaluate the effect of changes within the region on individual countries, we calculated the elasticity coefficient of individual Latin American country spreads relative to the spread for Latin American countries as a group (with the specific individual country excluded from the total). The results are shown in table V.2. The spreads for all individual Latin American countries in the sample were responsive to changes within the region in the period analysed (December 1997 to December 2012). The coefficients are statistically significant, but the very high t statistics suggest that the data points might be serially correlated, that is, that the individual country spreads may be correlated with the regional spread.

Table V.2
ELASTICITY COEFFICIENTS FOR INDIVIDUAL COUNTRIES WITH RESPECT
TO THE REGIONAL TOTAL

Country	Elasticity coefficient	t statistic
Argentina	0.48	3.81
Brazil	1.08	20.42
Colombia	1.00	24.75
Ecuador	0.74	15.53
Mexico	0.89	37.54
Panama	0.71	29.89
Peru	1.00	34.88
Venezuela (Bolivarian Republic of)	0.50	8.47

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of monthly JP Morgan EMBI+ spreads.

We also look at correlation coefficients between spreads of the Latin American countries in the sample, first for the period between December 1997 and December 2012 and then for the period between May 1999 and December 2012 to include Colombia. Our results indicate that although markets had some capacity to differentiate among Latin American countries on the basis of policies and fundamentals throughout the period, they also perceived them as a group when assigning risk. This practice was conducive to market volatility, and it indicates that market sentiment was an important component in the determination of spreads (tables V.3 and V.4).

Table V.3
CORRELATION COEFFICIENTS, DECEMBER 1997 TO DECEMBER 2012

	Argentina	Brazil	Ecuador	Mexico	Panama	Peru	Venezuela (Bolivarian Republic of)	EMBI+	Latin
Argentina	1.00								
Brazil	0.59	1.00							
Ecuador	-0.03	0.40	1.00						
Mexico	0.13	0.70	0.76	1.00					
Panama	0.45	0.81	0.68	0.88	1.00				
Peru	0.39	0.88	0.56	0.85	0.93	1.00			
Venezuela, (Bolivarian Republic of)	0.14	0.30	0.52	0.49	0.40	0.40	1.00		
EMBI+	0.31	0.83	0.68	0.95	0.91	0.93	0.47	1.00	
EMBI+ Latin America	0.56	0.93	0.52	0.80	0.88	0.92	0.52	0.92	1.00

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of monthly JP Morgan EMBI+ spreads.

Table V.4
CORRELATION COEFFICIENTS. MAY 1999 TO DECEMBER 2012

	Argentina	Brazil	Colombia	Ecuador	Mexico	Panama	Peru	Venezuela (Bolivarian Republic of)	EMBI+	Latin
Argentina	1.00									
Brazil	0.59	1.00								
Colombia	0.48	0.89	1.00							
Ecuador	-0.03	0.40	0.55	1.00						
Mexico	0.13	0.70	0.82	0.76	1.00					
Panama	0.45	0.81	0.94	0.68	0.88	1.00				
Peru	0.39	0.88	0.95	0.56	0.85	0.93	1.00			
Venezuela, (Bolivarian Republic of)	0.14	0.30	0.33	0.52	0.49	0.40	0.40	1.00		
EMBI+	0.31	0.83	0.88	0.68	0.95	0.91	0.93	0.47	1.00	
EMBI+ Latin America	0.56	0.93	0.89	0.52	0.80	0.88	0.92	0.52	0.92	1.00

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of monthly JP Morgan EMBI+ spreads.

External factors thus play an important role in determining the behaviour of emerging market spreads. Rozada and Yeyati (2006) indicate that a large fraction of the variability of emerging market bond spreads is explained by the evolution of global, or exogenous, factors such as risk appetite (as reflected in the spread of high-yield corporate bonds in developed markets), global liquidity (measured by the international interest rates) and contagion (from systemic events like the Russian default). Hartelius, Kashiwase and Kodres (2008) set out to empirically distinguish between improved economic fundamentals and ample global liquidity in the determination of emerging market spreads; they conclude that although fundamentals, as embedded in credit ratings, are very important, expectations for future United States interest rates and the volatility of those expectations are a key determinant of emerging markets spreads as well. In the following sections, we examine the effects of changes in United States interest rates on emerging market bond spreads and the behaviour of United States high-vield corporate bond spreads compared to the behaviour of Latin American and Caribbean spreads to determine whether their behaviour pattern is similar.

#### United States interest rates and Latin American and Caribbean debt spreads

The relationship between movements in mature and emerging markets can be weaker or stronger at times, and there are channels through which this link takes place. One natural channel is the effect of interest rates in mature markets on spreads in emerging markets. Calvo, Leiderman and Reinhart (1993) stress the importance of United States interest rates in driving the international capital flow cycle and show that the surge of capital inflows in the early 1990s was closely associated with a combination of three factors: lower United States interest rates, lower stock market and real estate returns and a slackening in economic activity.

Fernández-Arias (1995) shows that international interest rates have both a direct effect on the cost of capital in a financially integrated economy and an indirect impact on the countries' creditworthiness, which in turn affects risk spreads and the cost of capital. This indirect channel of transmission is due to the fact that a country's capacity to pay depends on the present value of its future resources, which increases as the discount rate declines. In countries with high-risk spreads, this indirect effect may be large and may predominate over the direct effect. Evidence presented in Fernández-Arias (1995) and Frankel and Roubini (2000) suggests that country risk and creditworthiness in many emerging markets are indeed influenced by international interest rates in a way that amplifies the interest cycle in industrial countries.

Theoretically, a rise in United States interest rates would lead to an increase in emerging market spreads through its impact on the ability of debtor countries to repay loans. A rise in United States interest rates could also reduce investors' appetite for risk, leading to a reduction in their exposure in risky markets and the availability of financial resources in borrowing countries (Kamin and von Kleist, 1999). Conversely, a fall in United States interest rates would ease debt-service payments, reducing the likelihood of default and compressing emerging market spreads. Another reason for a positive correlation between a fall in United States interest rates and a reduction in emerging market spreads is that investors, seeking to enhance the overall return on their portfolios, switch to emerging market debt whenever yields in mature markets fall.

The empirical evidence on how United States monetary policy affects emerging market spreads is less conclusive, as shown in table V.5. From March 1996 to December 2012, we find a statistically significant positive correlation of 0.26 (at the 95% confidence level) between the 10-year United States Treasury bond yield and the Latin component of the EMBI+, as expected. The correlation between Latin American spreads and the United States federal funds target rate over the period was also positive and statistically significant, albeit weaker: 0.08.1

However, if we isolate periods of change in United States monetary policy in the second half of the 1990s and in the 2000s, the correlation between United States interest rates and Latin American spreads becomes negative. During the United States Federal Reserve's last tightening cycle (June 2004 to July 2006), Latin American external debt spreads were negatively correlated to the increase in the United States federal funds target rate (see figure V.4). The negative correlation between the EMBI+ LATIN monthly spreads and the monthly United States federal funds rate from June 2004 to June 2006 was strong (–0.96) and significant at the 95% confidence level. Latin American external debt spreads were negatively correlated with the increase in the 10-year United States Treasury bond yield as well, showing a negative correlation coefficient of –0.51. Although theoretically Latin American spreads were expected to move in the same direction as United States interest rates, substantial current account surpluses, along with a more

In much of the existing literature, the yield on United States Treasury bonds has been used as a proxy for United States monetary policy. The 10-year United States Treasury bond yield is used as an approximate benchmark for the J. P. Morgan EMBI+. However, there are occasions when shocks to United States Treasury yields are not necessarily the result of changes in United States monetary policy. Table V.4 shows, for example, that the correlation between the yield on 10-year United States Treasury bonds and the federal funds target rate was not always very marked in the second half of the 1990s. Likewise, during the Asian crisis, short-term United States Treasury bond yields fluctuated dramatically even in the absence of changes in United States monetary policy. The United States federal funds target rate seems to be a more direct measure of the monetary policy stance in the United States, so we used both measures —the yield on 10-year United States Treasury bonds and the United States federal funds target rate— when calculating correlations with emerging market spreads.

prudent fiscal stance in most countries of the region in years prior, increased the region's resilience to sudden changes in the external environment and in global interest rates.

Table V.5
CORRELATIONS BETWEEN UNITED STATES INTEREST RATES AND
THE LATIN COMPONENT OF THE EMBI+

All Period: March 1996 - December 2012			
	FED fund (effective) (percentages)	United States 10-Year	EMBIPLUS_LAT strip spread (percentages)
FED fund (effective) (percentages)	1		
United States 10-Year	0.84	1	
EMBIPLUS_LAT strip spread (percentages)	0.08	0.26	1
Easing: June 1998 - January 1999			
	FED fund (effective) (percentages)	United States 10-Year	EMBIPLUS_LAT strip spread (percentages)
FED fund (effective) (percentages)	1		
United States 10-Year	0.76	1	
EMBIPLUS_LAT strip spread (percentages)	-0.19	-0.43	1
Tightening: May 1999 - June 2000			
	FED fund (effective) (percentages)	United States 10-Year	EMBIPLUS_LAT strip spread (percentages)
FED fund (effective) (percentages)	1		
United States 10-Year	0.54	1	
EMBIPLUS_LAT strip spread (percentages)	-0.64	-0.71	1
Easing: November 2000 - July 2003			
	FED fund (effective) (percentages)	United States 10-Year	EMBIPLUS_LAT strip spread (percentages)
FED fund (effective) (percentages)	1		
United States 10-Year	0.67	1	
EMBIPLUS_LAT strip spread (percentages)	-0.34	-0.25	1

Table V.5 (concluded)

Tightening: June 2004 - July 2006			
	FED fund (effective) (percentages)	United States 10-Year	EMBIPLUS_LAT strip spread (percentages)
FED fund (effective) (percentages)	1		
United States 10-Year	0.63	1	
EMBIPLUS_LAT strip spread (percentages)	-0.96	-0.51	1
Easing: September 2007 to December 2008			
	FED fund (effective) (percentages)	United States 10-Year	EMBIPLUS_LAT strip spread (percentages)
FED fund (effective) (percentages)	1		
United States 10-Year	0.73	1	
EMBIPLUS_LAT strip spread (percentages)	-0.81	-0.71	1

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of monthly data from the United States Federal Reserve and JP Morgan Latin EMBI+ spreads.

During the Federal Reserve's easing cycle between September 2007 and December 2008, the correlation between United States interest rates and Latin American spreads was also negative. The negative correlation between the EMBI+ LATIN monthly spreads and the United States federal monthly funds rate from September 2007 to December 2008 was strong (–0.81) and significant at 95% level of confidence. Latin American external debt spreads were also negatively correlated to declines in the 10-year United States Treasury Bond yield (with a negative correlation coefficient of –0.71). This was a period of turmoil in global financial markets, with high levels of volatility and uncertainty, causing spreads to shoot up. United States interest rates were dropping in response to the global financial crisis in an attempt to stimulate the United States economy, but risk aversion continued to increase, leading to a widening of debt spreads in emerging markets and Latin America and the Caribbean (see figure V.4).

Although United States interest rates have an impact on the level of emerging market spreads, the relationship can become more nuanced during periods of turmoil in global financial markets. In addition, the strengthening of macroeconomic fundamentals and the accumulation of current acocunt surpluses and foreign reserves by Latin American and Caribbean countries in the 2000s have given them a degree of independence from United States interest rates. Consequently, Latin American spreads continued their descent from June 2004 to June 2006 despite a series of increases in United States interest rates.

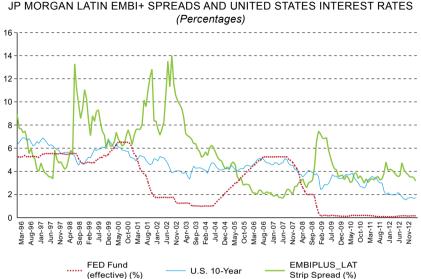


Figure V.4

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of monthly data from the United States Federal Reserve and JP Morgan Latin EMBI+ spreads.

Latin American bond spreads were thus positively correlated with United States interest rates during the period as a whole, but the correlation became stronger and changed direction for isolated periods. The correlation coefficients do not identify which variable is driving the other, but the assumption is that United States interest rates are external drivers of Latin American and emerging market spreads. Until recently, market participants held the view that capital flows could not affect interest rates in the United States.

However, Warnock and Warnock (2006) show that international capital flows had an economically important effect on the 10-year United States Treasury bond from June 2004 to July 2006, when the United States Federal Reserve raised the target federal funds rate in 17 consecutive meetings, taking it from 1% to 5.25%. The puzzling feature in this epsiode was that long-term interest rates did not increase as much as they did in previous tightening cycles. In fact, long-term rates declined throughout most of 2004 and 2005, despite the steady increases in short-term rates. The authors find that foreign flows had an economically large and statistically significant impact on long-term United States interest rates. Their work also suggests that large foreign purchases of United States government bonds contributed substantially to the low levels of United States interest

rates observed over the previous years. The improvement in growth and macroeconomic conditions in some large emerging market economies have thus had an impact on the relationship between emerging market spreads and the United States interest rates.

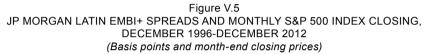
The current fragile global financial environment has placed the United States in a unique position. The United States debt burden has become heavier as a result of the unprecedented policy response to the global financial crisis and economic recession, when the Federal Reserve brought the federal funds target rate to a range of 0 to 25 basis points and embarked on quantitative easing, launching three rounds of asset purchases to ease monetary conditions. Foreign investors have been accumulating United States assets at a rapid rate, and they owned more than US\$ 25 trillion of United States assets at the end of 2012, according to the United States Bureau of Economic Analysis. More than US\$ 5.5 trillion in United States Treasury securities alone are held by foreign official institutions, mainly central banks and government investment funds.

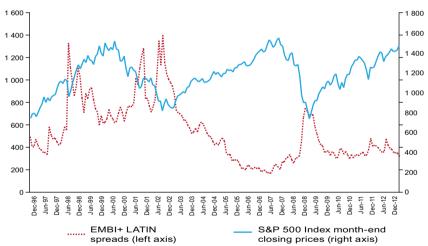
The United States absorbs roughly 70% of all net savings produced by the world's current account surplus countries. Borrowing on this scale by any large country is unprecedented in modern world history, and this has had an impact on the relationship between United States interest rates and emerging market spreads. When investors buying Treasury securities cease to be satisfied with the scanty returns (given the low interest rate environment set by the Federal Reserve's monetary policy), the United States' dependence on foreign borrowing may become a significant vulnerability, particularly in the event of a shock.

From the region's perspective, the prospect of higher United States interest rates and Treasury yields following the end of the Federal Reserve's quantitative easing and easy monetary policy is a concern for many buyers of Latin American bonds. The end of quantitative easing will almost certainly slow the flow of money into the region. Given the high degree of global financial interconnectedness, it is safe to assume that Latin American bonds would not be insulated from an increase in risk aversion. Bond spreads would probably increase as a result, but it is difficult to estimate the impact on the region's bond markets. As we have just shown, the existing empirical evidence shows that during isolated periods of change in United States monetary policy and of financial turmoil, the relationship between United States interest rates and emerging market spreads is more nuanced and complicated than the theory implies. This means that during these periods of change and turbulence, the other determinants of emerging markets spreads (other than United States interest rates) tend to play a larger role.

#### Latin American and Caribbean debt spreads and mature equity markets

Another intuitive channel for the relationship between mature and emerging markets is the link with stock markets. Short-run correlations between emerging and United States equity markets have historically been high, but volatile. Since the late 1990s, world equity values (United States equity in particular) have also been closely associated with emerging bond markets (figure V.5). One explanation for the close relationship is that spread changes in the United States corporate sector may trigger corresponding spread changes in emerging market sovereign debt, as investors engage in arbitrage between similarly risky assets.





Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from JP Morgan EMBI+ and Standard & Poor's.

Between December 1996 and December 2012, Latin EMBI+ spreads and the S&P 500 index were negatively correlated (-0.38). This correlation became positive (0.04), but very weak, during the period of financial crises in the late 1990s (December 1996 to December 2002) (see table V.6). The positive correlation was much stronger (0.55) in the first half of this period, from December 1996 to December 1999. Given the increased volatility of the period and the presence of contagion, the positive correlation may be explained by investors seeking to retrench from a variety of risky assets, and not only emerging market debt.

For most of the 2000s, on the other hand, investors did not retrench from risky assets, but sought them (engaging in arbitrage between available risky assets), as risk aversion remained low. The emerging market external debt and the Standard & Poor's stock market index have been fairly strongly (negatively) correlated in recent years. It seems that the EMBI+ Latin tends to tighten when the Standard & Poor's index rises, and to widen when the Standard & Poor's index falls. This relationship was even closer in the 2003-2008 period (figure V.6).

Figure V.6

JP MORGAN LATIN EMBI+ SPREADS AND MONTHLY S&P 500 INDEX CLOSING,
JANUARY 2003-DECEMBER 2012
(Basis points and month-end closing prices)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from JP Morgan EMBI+ and Standard & Poor's.

During the 2003-2008 commodity boom, the negative correlation between the S&P 500 index month-end closing prices and the monthly EMBI+Latin spreads was particularly strong (–0.93) and statistically significant. Latin American spreads and the S&P 500 remained strongly negatively correlated from 2009 to 2012 (–0.67), although the correlation was a little weaker than in the previous boom years. Assuming that Latin American spreads and the S&P 500 remain negatively correlated in the coming months, trends in the S&P 500 index may offer insight on what could happen to Latin American debt spreads.

Table V.6
CORRELATIONS BETWEEN S&P 500 INDEX AND THE LATIN COMPONENT
OF THE EMBI+

December 1996 - December 2012		
	EMBI+ LATIN spreads	S&P 500 Index month- end closing prices
EMBI+ LATIN spreads	1	
S&P 500 Index month-end closing prices	-0.38	1
December 1996 - December 2002		
	EMBI+ LATIN spreads	S&P 500 Index month- end closing prices
EMBI+ LATIN spreads	1	
S&P 500 Index month-end closing prices	0.04	1
December 1996 - December 1999		
	EMBI+ LATIN spreads	S&P 500 Index monthend closing prices
EMBI+ LATIN spreads	1	
S&P 500 Index month-end closing prices	0.55	1
January 2003 - December 2008		
	EMBI+ LATIN spreads	S&P 500 Index monthend closing prices
EMBI+ LATIN spreads	1	
S&P 500 Index month-end closing prices	-0.93	1
January 2009 - December 2012		
	EMBI+ LATIN spreads	S&P 500 Index month- end closing prices
EMBI+ LATIN spreads	1	
S&P 500 Index month-end closing prices	-0.67	1

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from JP Morgan EMBI+ and Standard & Poor's.

## E. Latin American and Caribbean debt spreads versus United States high-yield corporate bonds

Another financial linkage between the United States and the region is through United States bond markets. On average, Latin American assets have become more attractive relative to other asset classes, such as United States high-yield corporate bonds. In the past, Latin American and Caribbean debt spreads were comparable to the spreads on United States junk bonds in terms of riskiness (see figure V.7); in the 1990s

through mid-2005, United States high-yield spreads were actually lower than Latin American spreads. At the end of 2007, Latin American spreads were roughly half the spreads on United States junk bonds, and although this gap has diminished, Latin American and Caribbean assets continue to post much lower spreads.

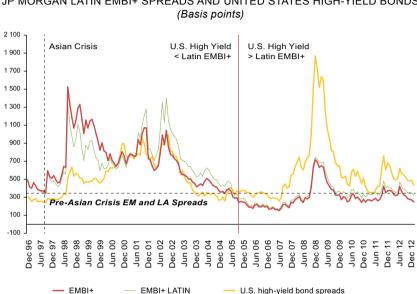


Figure V.7 JP MORGAN LATIN EMBI+ SPREADS AND UNITED STATES HIGH-YIELD BONDS

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Bank of America/Merrill Lynch United States High-Yield Master II Index (H0A0), Bank of America/Merril Lynch United States Treasury Current 10 years (GA10), and JP Morgan EMBI+.

Bond spreads tended to deteriorate after the Asian crisis. Although emerging market bond spreads generally recovered soon after each crisis period, the recovery was never in full, and from 1997 to the end of 2004 the level of the spreads remained a lot higher than in the pre-crisis period. The most immediate explanation for the increase in spreads in the second half of the 1990s is that investors perceived worse country prospects in emerging and Latin American markets. However, spreads not only increased in emerging countries in general, but also increased substantially for United States corporate high-yield bonds. Table V.6 shows the correlation between EMBI+ Latin spreads and Merrill Lynch Master High-Yield Index spreads, which is 0.45 for the period as a whole (December 1996 to December 2012), but much stronger for the period of the Asian, Russian and Brazilian crises (0.76).

The results suggest that the explanation of the deterioration of bond spreads after the Asian crisis may be unrelated to reassessments of countries' prospects. The results lend support to the liquidity crunch argument. On some occasions, heightened risk in emerging markets induces investors to lower their risk profile altogether and switch to investment-grade bonds or other instruments. For example, during the Russian crisis, between August and October 1998, the Merrill Lynch High-Yield Master Index widened by 275 basis points against Treasuries, even though the corporate credit quality in the United States was not central to the problem affecting financial markets.

Flows between emerging markets and the high-yield sector have not followed a consistent pattern. From December 1996 to December 2003, which includes the financial crises of the late 1990s, the correlation between monthly EMBI+ LATIN and Merrill Lynch United States High-Yield Master Index spreads was strongly positive (0.76) and statistically significant at the 95% confidence level (see table V.7).

Table V.7
CORRELATIONS BETWEEN UNITED STATES HIGH-YIELD MASTER INDEX AND THE
LATIN COMPONENT OF THE EMBI+

December 1996 - December 2012		
	EMBI+ LATIN	U.S. high-yield bond spreads
EMBI+ LATIN	1	
U.S. high-yield bond spreads	0,45	1
December 1996 - December 2003		
	EMBI+ LATIN	U.S. high-yield bond spreads
EMBI+ LATIN	1	
U.S. high-yield bond spreads	0,76	1
January 2004 - May 2007		
	EMBI+ LATIN	U.S. high-yield bond spreads
EMBI+ LATIN	1	
U.S. high-yield bond spreads	0,14	1
June 2007 - December 2012		
	EMBI+ LATIN	U.S. high-yield bond spreads
EMBI+ LATIN	1	
U.S. high-yield bond spreads	0,91	1

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Bank of America/Merrill Lynch United States High-Yield Master II Index (H0A0), Bank of America/Merril Lynch United States Treasury Current 10 years (GA10), and JP Morgan EMBI+.

Emerging markets were well cushioned against financial market volatility by the end of 2003, however. Latin American and emerging market spreads decoupled from United States corporate spreads during the turmoil in United States credit markets in May 2005, caused by the downgrading of General Motors and Ford. Latin American and emerging market spreads peaked earlier (in mid-April) and returned more quickly to their previous lows. The correlation index between Latin American and United States monthly high-yield spreads fell to only 0.14 from January 2004 to May 2007, when emerging market and Latin American spreads reached a historical low. This episode of weakening linkages with United States corporate bonds coincided with a commodity price boom and the accumulation of current account surpluses and international foreign reserves by emerging market and Latin American countries.

In the period following the global financial crisis, Latin American bond apreads were strongly correlated with United States corporate yields (0.91). It is hard to determine statistically which variable has been driving the other, and it is very possible that both variables are in reality driven simultaneously by other factors, such as changes in the external backdrop. In 2009-2012, both Latin American and United States high-yield bond spreads benefited from the Federal Reserve's accommodative policies and the global search for yield, as well as from a larger investor base.

Investors have many choices, and there may be situations in which they choose to swap high-yield corporates for emerging market debt, as occurred during the turbulence in the United States automobile sector in May 2005. Alternatively, heightened risk aversion could cause them to lower their risk profile and leave high-yield and emerging market bonds altogether, switching to investment-grade bonds. However, many emerging market and Latin American issuers have earned higher credit ratings in recent years, bringing them closer to investment grade. This trend has contributed to a decline in emerging markets' external vulnerability in moments of increased risk aversion.

#### Chapter VI

### The long road to improved credit quality

The increasing trend towards higher credit ratings for emerging market issuers in recent years reflected faster growth, lower inflation and tighter public finances in most emerging markets, as well as the benign global environment, with plentiful liquidity and an increasing risk appetite. This trend supported the sharp compression of bond spreads beginning in late 2002. Moreover, the higher overall credit quality of emerging market debt and the risk-adjusted returns of the asset class attracted a broader investor base to absorb the significant amounts of new debt issued between 2003 and 2012.

Credit rating agencies (CRAs) are designed to reduce information asymmetries between borrowers and lenders, and as such they play a key role in financial markets in gathering and analysing data that can be used to assess the credit quality of a corporate or sovereign issuer. The role of CRAs has expanded with financial globalization and received an additional boost from Basel II, which incorporates CRA ratings into the rules for weighting credit risk.

The CRAs have fallen under renewed criticism since the 2008 global financial crisis. Their poor performance has brought back questions about their methods, their regulatory status and their role in financial markets, which first arose during the financial crises in emerging markets in the late 1990s and the collapse of Enron in 2001. However, ratings can be useful for assessing credit quality where accounting standards are low and where creditor markets are not well developed. In this specific context, CRAs provide additional scrutiny and undertake the costly task of gathering and inspecting data.

The role of credit rating agencies is to provide investors with assessments of borrowers' present and future willingness to pay. This task involves gathering information about what may happen in the future, which is naturally dominated by expectations. Even well-informed agents, such as rating agencies and institutional investors, are subject to expectations. Whether credit rating agencies can contribute to the dynamics of a financial crisis by either accentuating or attenuating it has been subject to extensive debate. The literature examines the determinants of sovereign ratings, their alleged procyclicality and the relationship between spreads and sovereign ratings.

Cantor and Packer (1996) show that five variables —namely, GDP per capita, indicator variables for economic development and for sovereign default history, inflation and external debt— explain 90% of the ratings issued by Standard & Poor's and Moody's in 1995.¹ The authors also find that the market, as gauged by sovereign debt yields, broadly shared the relative rankings of sovereign credit risks made by Standard & Poor's and Moody's during the 1987-1994 period. However, credit ratings "appeared to have some independent influence on yields over and above their correlation with other publicly available information" (p. 37). In particular, their results show that rating announcements had immediate effects on market pricing for non-investment-grade issues.

Larraín, Reisen and von Maltzan (1997) find that a "negative outlook" review by Moody's and Standard & Poor's had a significant impact in 1987-1996, and conclude that rating agencies have the potential to soothe boom-bust spread cycles. Reisen and von Maltzan (1998), who study changes in ratings and outlooks by Fitch, Moody's and Standard & Poor's between 1989 and 1997, conclude that downgrades have a significant impact on spreads, whereas upgrades are anticipated by the markets. Jaramillo and Tejada (2011), using a panel dataset for 35 emerging market economies for the period 1997-2010, find that sovereign spreads for investment-grade countries are 36% lower than for speculative-grade countries, which the authors say is "above and beyond what is implied by macroeconomic fundamentals" (p. 3). They conclude that spreads are reduced more significantly when sovereigns cross the threshold to investment-grade than when sovereigns are upgraded within credit categories (sub-investment or investment grade).

Ferri, Liu and Stiglitz (1999) examine the alleged procyclicality of sovereign ratings during financial crises, concluding that Moody's and Standard & Poor's failed to predict the Asian crisis and even exarcebated it by downgrading Asian countries more than was justified by the fundamentals. In contrast, Kräussl (2000) argues that massive downgrades do not necessarily intensify a crisis, as was the case of South Korea in 1997. Sy (2001) emphasizes that the strong negative relationship between ratings and EMBI+ spreads

<sup>&</sup>lt;sup>1</sup> Afonso (2003) updated Cantor and Packer's study to find similar results.

declines during periods of market turbulence. The  $R^2$  coefficient of a simple regression of log spreads on ratings declined during periods of market turmoil, indicating that the relationship between spreads and ratings is less significant during a crisis.

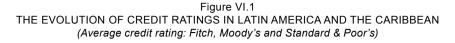
Credit ratings and spreads are negatively related, but the role of the CRAs and the impact of their announcements on bond spreads vary depending on the period analysed. The ratings/spreads relationship is very important, but the causality is not always clear. In the following sections, we look at the evolution of credit ratings in Latin America and the Caribbean in the 1990s and 2000s and at the relationship between credit ratings and bond spreads during this period.

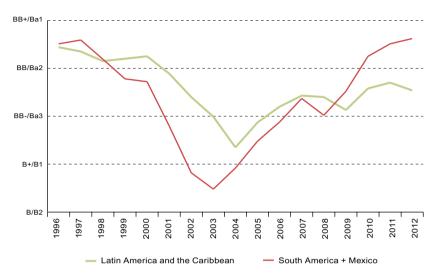
## A. The evolution of Latin American and Caribbean credit ratings

The 1990s witnessed a sharp increase in the number of rated Latin American and Caribbean sovereigns, particularly after 1992 (see table VI.1). The most rapid increase in the number of rated sovereigns occurred in 1992-1997, as a growing number of governments began to tap global bond markets. By the end of the decade, twenty Latin American and Caribbean countries were rated, as opposed to only one in 1990 (namely, the Bolivarian Republic of Venezuela). By the end of the 2000s, twenty-six sovereign issuers in Latin America and the Caribbean were rated.

The evolution of credit ratings closely followed the region's business cycle. During the financial shocks of the second half of the 1990s, many countries in the region were downgraded, but there was a trend towards improved credit quality in the 2000s, especially after 2003 (see figure VI.1). By the end of the period, many countries in the region had received an investment-grade rating.

For South America and Mexico, credit quality has recorded an upward trend for a few years now, with upgrades outpacing downgrades on a yearly basis. The upgrade cycle was momentarily interrupted during the global financial crisis, but the positive trend soon returned. Lower financing needs on the part of the countries, good economic policies, including improvement in key vulnerability indicators, and strong economic growth have led to a steady and continued trend of credit upgrades in the region.





Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Fitch, Moody's and Standard & Poor's.

Note:

South America: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

Latin America and the Caribbean: South America and Mexico, plus Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama) and the Caribbean (Barbados, Belize, Dominican Republic, Jamaica and Trinidad and Tobago).

Investment grade: BBB-/Baa3 and above. Sovereign ratings were converted to numerical values (see table VI.2 at the end of the section) and averaged across the three CRAs (Fitch, Moody's and Standard & Poor's).

Overall, credit ratings for the Caribbean and Central American countries have not followed the same trajectory as the rest of the Latin American region. While credit ratings for South America and Mexico suffered a negative impact during the global financial crisis, they have already recovered and have been on an upward trend since then. The majority of the countries in the Caribbean also suffered downgrades following the onset of the 2008 financial crisis, but so far they have not recovered their previous standing. This reflects their more sluggish post-crisis recovery relative to the rest of the region (see figure VI.2). The Caribbean downgrades were based on credit weakness and fiscal deterioration, as financial instability stemming from the global financial crisis weighed heavily on the Caribbean countries' fiscal accounts.

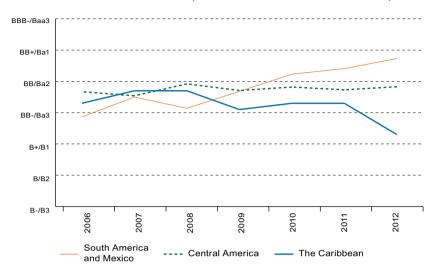


Figure VI.2

AVERAGE CREDIT RATINGS (MOODY'S AND STANDARD & POOR'S)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Moody's and Standard & Poor's.

Note:

South America: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

The Caribbean: Barbados, Belize, Dominican Republic, Jamaica and Trinidad and Tobago.

Investment grade: BBB-/Baa3 and above.

The current outlook for sovereign ratings provides a prospective indication of the agencies' credit views on the countries of the region. By the end of 2011, twelve of the rated sovereign issuers in the region had a positive outlook from one or more of the three main CRAs (Fitch, Moody's and Standard & Poor's), and only two had a negative outlook. By the end of 2012, there were six countries with a positive outlook, despite the series of upgrades that took place in 2012 and previous years. This suggests that, at the end of 2012, the recent trend towards improving credit quality had not reached an end just yet. However, the number of countries with a negative outlook had increased to seven (with four in the Caribbean, one in Central America and two in South America).

The leading credit rating agencies have warned that, after so many years of improvement in credit ratings, it will be a difficult challenge for countries in the region to achieve higher credit ratings from now on, unless they address institutional problems. According to Moody's, while rating upgrades in previous years were largely driven by increased resilience to

external shocks, improved government debt profiles and strong economic performances, further upgrades for countries already in the investment grade category will depend on the strengthening of institutions in general, with particular attention being focused on credible institutional arrangements that reinforce fiscal management.

The list of investment-grade countries in the region increased from four in 2002 (Barbados, Chile, Mexico and Trinidad and Tobago) to nine by the end of 2012 (Brazil, Chile, Colombia, Costa Rica, Mexico, Panama, Peru, Trinidad and Tobago and Uruguay).<sup>2</sup> Investment-grade status reduces financing costs significantly by improving market expectations and encouraging greater inflows from a broader and more diversified investor base. Reaching investment grade can lower sovereign spreads significantly (Jaramillo and Tejada, 2011).

There is a negative relationship between credit ratings and the level of spreads. Sovereigns with better credit ratings usually have lower spreads than sovereigns with worse credit ratings, as illustrated by the exponential trend line shown in figure VI.3. The figure shows that the number of investment-grade countries in Latin America and the Caribbean increased significantly in the 2000s. It also shows that spreads tend to increase substantially for countries with speculative credit ratings.<sup>3</sup> By the end of 2002, Argentina's average spreads reached 6,342 basis points following its downgrade to selective default by Standard & Poor's<sup>4</sup> and restricted default by Fitch. Because of its high bond spreads, Argentina was removed from the 2002 sample in figure VI.3. In addition, more countries are included in the 2012 sample, as JP Morgan added Belize and Jamaica to its EMBIG index in 2007.

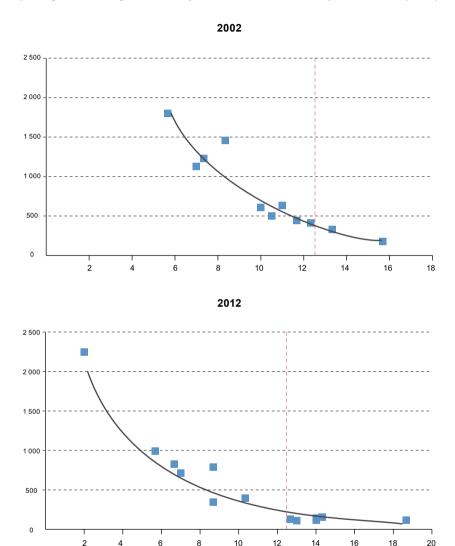
Colombia and Uruguay kept an investment grade from all three agencies for a period of time before 2002: from September 1995 to August 1999 in the case of Colombia, and from June 1997 to February 2002 in the case of Uruguay.

The terms investment grade and speculative grade are shorthand for the categories AAA to BBB (investment grade) and BB to D (speculative grade). Investment-grade categories indicate relatively low to moderate credit risk, while ratings in the speculative range signal either a higher level of credit risk or a recent default.

<sup>&</sup>lt;sup>4</sup> A selective default (SD) rating is assigned when Standard & Poor's believes that while the obligor has selectively defaulted on a specific issue or class of obligations, it will continue to meet its payment obligations on other issues or classes of obligations in a timely manner.

Figure VI.3 LATIN AMERICA AND THE CARIBBEAN: SOVEREIGN CREDIT RATINGS AND SPREADS IN 2002 AND 2012

(Average credit rating: Fitch, Moody's and Standard & Poor's, spreads in basis points)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Fitch, Moody's, Standard & Poor's and JP Morgan.

Note: The horizontal axis corresponds to average sovereign credit ratings; the vertical axis shows EMBIG spreads in basis points. The vertical line indicates the investment-grade threshold. Two of the four investment grade countries in 2002 — Barbados and Trinidad and Tobago— and two of the nine investment grade countries in 2012 —Costa Rica and Trinidad and Tobago— are not included in the EMBIG index; accordingly, they do not figure in the charts.

The gap in credit quality between emerging and developed markets has been narrowing as credit quality improves in emerging economies and deteriorates in developed countries. The upgrades that took place in the region in 2011 and 2012 contrast with the situation in Europe and the United States. For example, in 2011 the United States faced the first-ever downgrade of its credit rating, while Fitch, Moody's and Standard & Poor's all raised their foreign- and local-currency ratings for Brazil to a higher investment-grade category to reflect the government's strong finances. In the region, there were eight countries in the triple-B investment-grade space at the end of 2012: Brazil, Colombia, Costa Rica, Mexico, Panama, Peru, Trinidad and Tobago, and Uruguay. Italy and Spain fell into the same category, as the deepening European crisis resulted in a wave of sovereign ratings downgrades in developed markets in 2012. Chile, the ninth Latin American investment-grade country, had even higher credit ratings at the end of 2012: Aa3, AA– and A+.

The situation following the global financial crisis contrasts with the late 1990s and early 2000s. Back then, with credit ratings deteriorating, emerging market countries voiced significant doubts about the credit rating process and the usefulness of sovereign credit ratings in particular. They argued that the improvements in sovereign credit ratings in the first half of the 1990s and the sharp declines later in the decade inserted a procyclical element into global capital flows by accelerating capital inflows in the mid-1990s and contributing to their collapse after the Asian crisis emerged. Some studies on the role of credit rating agencies in this period suggested that the agencies had a substantial influence on the size and volatility of lending to emerging markets (see Kräussl, 2003).

The roles reversed in the past few years, and advanced economies were the ones raising questions regarding the role and usefulness of the credit rating process. Frustration with the role of credit rating agencies escalated following the global financial crisis and the fiscal crisis in the euro zone. It can be expected that there will be increased scrutiny of credit rating actions going forward, as advanced economies implement regulatory reforms and work to reduce the possibility of a recurrence of the global financial crisis.

In the past, rating agencies were criticized for reacting to market events rather than leading. Now they are trying to pre-empt economic events in an attempt to re-establish their credibility after the global financial crisis, during which the top rating agencies failed to spot the liquidity problems facing big banks around the world. In the next section, we examine the relationship between credit ratings and spreads and whether credit rating agencies lag (or lead) the markets when assigning risk.

Table VI.1 SOVEREIGN RATING HISTORY IN LATIN AMERICA AND THE CARIBBEAN

g Action  Upgrade  Downgrad  Downgrad  Downgrad  Downgrad  Downgrad  Upgrade,  Upgrade,  Upgrade,  Upgrade,  Upgrade,  Upgrade,  Upgrade,  Owngrad  Owngrad  Owngrad  Owngrad  Owngrad  Affirmed, i		İ	Moody's Rating Action	Date Rating	Fitch ng Action	Date
Radia R			ig Action		- 1	Date
8 B B B B B B B B B B B B B B B B B B B						,
- +	, .	02-Apr-97 B3	Downgrade	26-May-89 BB	Affirmed, O/L stable	03-Dec-97
		14-Nov-00 B1	Upgrade	13-Jul-92 BB	Affirmed, O/L negative	21-Sep-00
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		26-Mar-01 Ba3	Upgrade	02-Oct-97 BB-	Downgrade, Rating Watch negative	20-Mar-01
		08-May-01 B1	Downgrade, stable	06-Oct-99 B+	Downgrade, Rating Watch negative	28-Mar-01
	Ū	12-Jul-01 B2	Downgrade, Review (-)	28-Mar-01 B-	Downgrade, O/L negative	11-Jul-01
C C C C C C C C C C C C C C C C C C C		39-Oct-01 B3	Downgrade, Review (-)	13-Jul-01 CCC-	<ul> <li>Downgrade, O/L negative</li> </ul>	12-Oct-01
S D G G G G G G G G G G G G G G G G G G	•	30-Oct-01 Caa1	Downgrade, O/L (-)	26-Jul-01 CC	Downgrade, Rating Watch negative	02-Nov-01
		06-Nov-01 Caa3	Downgrade, stable	12-Oct-01 C	Downgrade, Rating Watch negative	06-Nov-01
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		01-Jun-05 Ca	Downgrade	20-Dec-01 RD	Downgrade, outlook withdrawn	03-Dec-01
4 4 4 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		23-Mar-06 Caa1	Upgrade, stable	20-Aug-03 RD	Affirmed	18-Dec-08
8 8 8 8 8 4 4 4 4 4 8 8 8 8 8 8 8 8 8 8		02-Oct-06 B3	Upgrade, stable	29-Jun-05 B	Upgrade	12-Jul-10
		11-Aug-08 B3	O/L changed to (+)	16-Jan-07 B	Affirmed, O/L stable	22-Jul-11
B B B A A A A B B B B A A A A A B B B B		31-Oct-08 B3	O/L changed to stable	14-Aug-08 CC	Downgrade, O/L not meaningful	27-Nov-12
B B B B B B B B B B B B B B B B B B B	`	13-Sep-10 B3	O/L changed to (-)	17-Sep-12		
9 4 4 4 4 8 8 8 8 4 4 4 4 8 8 8 8 8 8 8	`	12-Sep-11				
4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4	,,	30-Oct-12				
4 4 4 8 8 8 8 4 4 4 8 8 8 8 8 8 8 8 8 8		03-Dec-03 A3	New	24-Jan-97 NA		
P P P P P P P P P P P P P P P P P P P		01-Aug-07 A3	O/L changed to (+)	06-Sep-01		
A A A A A A A A A A A A A A A A A A A		28-Jan-08 A3	O/L changed to stable	26-Jun-03		
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		24-Nov-08 A3	Affirmed, stable	14-Oct-09		
8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9		23-Dec-09 A3	O/L changed to (-)	31-Aug-11		
888 888 84- A- A- A- BBB+		06-May-11				
<b>BBB</b> A-A-A-BBB+		31-Oct-11				
A- A- BBB+		24-Sep-12				
	Ì	17-Dec-99 Ba2	New	05-Dec-94 NA		
		08-Jan-01 Ba2	Review (+)	13-Feb-97		
		02-May-02 Ba1	Upgrade	18-Abr-97		
		5-Aug-04 Baa2	Upgrade	08-Feb-00		
		29-Jul-05 Baa2	Affirmed, stable	09-Jul-02		
		26-Jul-06 Baa2	Review (-)	14-May-09		
BBB+ Affirmed, O/L stable		17-Aug-07 Baa3	Donwgrade, O/L stable	13-Oct-09		
BBB+ O/L changed to (-)		38-Apr-09 Baa3	O/L changed to (-)	13-Jun-11		

Table VI.1 (continued)

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Country					Moody's		Fitch	
country .	Rating	Action	Date	Rating	Rating Action	Date R	Rating Action	Date
		O/L changed to (-)	15-Nov-09	Ba1	Downgrade, O/L (-)	20-Dec-12		
	BBB	Affirmed, O/L (-)	28-Apr-10					
		Affirmed, O/L (-)	07-Sep-10					
		Downgrade, O/L stable	22-Oct-10					
	- 1	O/L changed to (-)	21-Nov-11					
	<b>BB</b> +	Downgrade, O/L stable	17-Jul-12					
Belize	BB	New	18-Aug-00	Ba2	New	21-Jan-99 NA	+	
	BB-	Downgrade	23-Oct-01	Ba2	O/L changed to (-)	06-Aug-02		
	BB-	O/L changed to (+)	25-Jul-02	Ba3	Downgrade, stable	28-May-03		
	B+	Downgrade, stable	30-Dic-02	Ba3	Review (-)	18-Jun-04		
	÷	Affirmed, stable	04-Jun-03	B2	Downgrade, stable	05-Aug-04		
	÷	Affirmed, stable	12-Mar-04	B3	Downgrade, O/L (-)	07-Jun-05		
	÷	O/L changed to (-)	20-Jul-04	Caa1	Upgrade, O/L stable	13-Feb-07		
	В	Downgrade, O/L (-)	23-Aug-04	B3	Upgrade, O/L stable	10-Feb-09		
	ф	Downgrade, O/L (-)	31-Aug-04	Caa1	Downgrade, Review (-)	16-Feb-12		
	CCC	Downgrade, O/L (-)	01-Jun-05	Ca	Downgrade, developing outlook 01-Jun-12	01-Jun-12		
	В	Upgrade, O/L stable	20-Feb-07	Ca	O/L changed to (-)	21-Aug-12		
	В	Affirmed, O/L stable	10-Dec-07					
	В	Affirmed, O/L stable	16-Feb-10					
	ф	Downgrade, O/L stable	04-Aug-11					
	† CCC	Downgrade, O/L stable	06-Feb-12					
	000	Downgrade, O/L (-)	29-Feb-12					
	SD	Downgrade, O/L not meaningful	21-Aug-12					
Bolivia	BB-	New	06-Jul-98	B1	New	29-May-98 B	Assigned	17-Mar-04
(Plurinational	B+	Downgrade, stable	18-Oct-00	Caa1	Downgrade, stable	16-Apr-03 B-	Affirmed, O/L negative	17-Jun-05
State of)	B+	Downgrade, O/L (-)	17-Dec-02	B2	Upgrade, O/L stable	28-Sep-09 B-	O/L changed to stable, Affirmed	ffirmed 27-Jul-07
	В	Downgrade, O/L (-)	26-Feb-03	B1	Upgrade, O/L chngd to (+)	02-Dec-10 B	Upgrade, O/L stable	08-Sep-09
	Ъ	Downgrade, O/L (-)	20-Oct-03	B1	Affirmed. O/L (+)	08-Sep-11 B+	<ul> <li>Upgrade, O/L stable</li> </ul>	05-Oct-10
	В	Upgrade, O/L changed to (+)	06-May-10	Ba3	Upgrade, O/L stable	08-Jun-12 B	BB- Upgrade, O/L stable	02-Oct-12
	÷	O/L chngd to (+), Affirmed	22-Aug-11					
	BB-	Upgrade, O/L stable	18-May-12					
		Affirmed, stable	16-Oct-12					
Brazil	В	New	01-Dec-94	Ba1	New	18-Nov-86 B+	+ Assigned	01-Dec-94
		Upgrade	18-Jul-95	B1	Downgrade	04-Dec-87 B+	+ Affirmed	26-Oct-95

Table VI.1 (continued)

		Standard & Poor's			Wood's			Fitch	
Country	Rating	Action	Date	Rating	Rating Action	Date	Rating	Action	Date
	BB-	l	02-Apr-97	B2	Downgrade	31-Mar-89	B+	Affirmed	03-Dec-97
	<b>B</b>	Downgrade, O/L (-)	14-Jan-99	B1	Upgrade	30-Nov-94	В	Downgrade	26-Jan-99
	BB-	Upgrade, stable	03-Jan-01	B2	Downgrade, stable	03-Sep-98	B+	Upgrade	22-Feb-00
	<b>B</b>	Downgrade, O/L (-)	02-Jul-02	B1	Upgrade	16-Oct-00	BB-	Upgrade	19-May-00
	BB-	Upgrade, stable	17 Sep 04	B2	Downgrade, stable	12-Aug-02	BB-	Affirmed, O/L stable	21-Sep-00
	88	Upgrade, stable	28-Feb-06	B1	Upgrade, stable	09-Sep-04	BB-	Affirmed, O/L negative	17-Jul-01
	BB+	Upgrade, O/L (+)	16-May-07	Ba3	Upgrade, O/L (+)	12-Oct-05	B+	Downgrade, O/L negative	20-Jun-02
	BBB-	Upgrade, O/L stable	30-Apr-08	Ba2	Upgrade, stable	31-Aug-06	B+	Rating Watch negative	01-Aug-02
	BBB-	Affirmed, O/L changed to (+)	23-May-11	Ba1	Upgraded, O/L stable	23-Aug-07	В	Downgrade, O/L negative	21-Oct-02
	BBB	Upgrade, O/L stable	17-Nov-11	Baa3	Upgraded, O/L (+)	22-Sep-09	В	Affirmed, O/L stable	10-Mar-03
	888	Affirmed, O/L stable	18-Dec-12	Baa2	Upgraded, O/L (+)	20-Jun-11	В	Affirmed, O/L positive	03-Jun-03
				Baa2	Affirmed, O/L (+)	21-Nov-12	B+	Upgrade, O/L stable	06-Nov-03
							BB-	Upgrade, O/L stable	28-Sep-04
							BB-	Affirmed, O/L positive	11-Oct-05
							BB	Affirmed, O/L stable	28-Jun-06
							BB	Affirmed, O/L positive	05-Feb-07
							BB+	Upgrade, O/L stable	09-May-07
							BBB-	Upgrade, O/L stable	29-May-08
							BBB	Upgrade, O/L stable	04-Apr-11
							BBB	Affirmed, O/L stable	25-Oct-11
							888	Affirmed, O/L stable	26-Jul-12
Chile	BBB	New	17-Aug-92	Baa2	New	17-Feb-94	BBB+	Assigned	10-Nov-94
	BBB+	Upgrade	21-Dec-93	Baa1	Upgrade	29-Jun-95	- ۷	Upgrade	30-Aug-95
	Ą	Upgrade	11-Jul-95	<b>A</b> 2	Upgrade, stable	07-Jul-06	-Ł	Affirmed, O/L (+)	02-Feb-04
	۷	Upgrade, stable	14-Jan-04	A	Upgrade, O/L change to (+)	23-Mar-09	∢	Upgrade, O/L stable	28-Mar-05
	¥	Upgrade, O/L stable	18-Dec-07	Aa3	Upgrade, O/L stable	16-Jun-10	⋖	O/L changed to (+), Affirmed	15-May-07
	¥	O/L changed to (+), Affirmed	16-Dec-10	Aa3	Affirmed, O/L stable	08-Sep-11	⋖	Affirmed, O/L stable	10-Nov-08
	¥	Affirmed, O/L (+)	08-Feb-12	Aa3	Affirmed, O/L stable	24-Apr-12	<b>+</b>	Upgrade, O/L stable	01-Feb-11
	AA-	Upgrade, O/L (+)	26-Dec-12				<b>+</b>	Affirmed, O/L stable	07-Sep-11
							A+	Affirmed, O/L stable	30-Jan-12
Colombia	BBB-	O/L Chg (+)	21-Sep-94	Ba1	New	04-Aug-93	BBB	Assigned	10-Aug-94
		Downgrade, stable	21-Sep-99	Baa3	Upgrade	19-Sep-95	BBB-	Downgrade	01-Sep-99
		Downgrade, O/L (-)	24-May-00	Ba2	Downgrade	11-Aug-99	BB+	Downgrade	17-Mar-00
	BB+	Upgrade, O/L stable	05-Mar-07	Ba3	Affirmed,O/L changed to stable 09-Mar-06	9 09-Mar-06	BB+	O/L changed to (-)	24-Oct-00

Table VI.1 (continued)

1		Standard & Poor's			Moody's			Fitch	
Country	Rating	Action	Date	Rating	Rating Action	Date	Rating	Action	Date
	BBB-	Upgrade	12-Jun-07	Ba2	O/L changed to (+)	25-Jul-07	BB	Downgrade, O/L stable	10-Jan-02
	BB+	Affirmed, O/L stable	25-Feb-08	Ba1	Upgrade, stable	19-Jun-08	BB	O/L changed to (-)	29-Aug-02
	BBB-	Upgrade, O/L stable	16-Mar-11	Baa3	Upgrade, O/L stable	31-May-11	BB	O/L chnaged to stable	03-May-04
	888-	Affirmed, O/L chngd to (+)	15-Aug-12				BB	O/L changed to (+), Affirmed	90-unf-90
							BB+	O/L changed to (+), Affirmed	21-Jun-07
							BBB-	Upgrade, O/L stable	22-Jun-11
							888-	Affirmed, O/L stable	19-Jun-12
Costa Rica	BB	New	16-Jul-97	Ba1	New	08-May-97	BB	Assigned	11-May-98
	BB+	Upgrade	12-Jun-07	Baa3	Upgrade, O/L stable	09-Sep-10	BB	Affirmed, O/L stable	21-Sep-00
	BB	Affirmed, O/L stable	08-Oct-07	Baa3	Affirmed, O/L stable	08-Sep-11	BB	O/L changed to (-), Affirmed	28-Apr-03
	88	Affirmed, O/L stable	07-Feb-11				BB	Affirmed, O/L stable	01-Nov-07
							BB+	Upgrade, O/L stable	04-Mar-11
							BB+	Affirmed, O/L stable	14-Feb-12
Cuba	NA			Caa1	New	05-Apr-99	ΝΑ		
				Caa1	Affirmed, O/L stable	28-Feb-12			
Dominican	B+	New	13-Feb-97	B1	New	30-May-97	B+	Assigned	11-Aug-03
Republic	BB-	Upgrade, stable	05-Sep-01	Ba2	Upgrade, O/L stable	29-Aug-01	B+	Rating Watch negative	08-Oct-03
	÷	Downgrade, O/L (-)	09-Jun-03	B1	Downgrade, O/L (-)	07-Oct-03	В	Downgrade, Rating Watch negative	24-Oct-03
	Ъ	Downgrade, O/L (-)	01-Oct-03	B2	Downgrade, O/L (-)	10-Nov-03	CCC+	Downgrade, Rating Watch negative	30-Jan-04
	000	Downgrade, O/L (-)	18-Dec-03	B3	Downgrade, O/L (-)	30-Jan-04	O	Downgrade, Rating Watch negative	21-Apr-05
	ပ္ပ	Downgrade, O/L (-)	02-Feb-04	B3	Affirmed, O/L (-)	11-Aug-04	۵	Downgrade, Default	05-May-05
		Downgrade, stable	01-Feb-05	B3	O/L changed to stable	24-May-05	۵	Default	11-May-05
		Upgrade, stable	29-Jun-05	B2	Upgrade, O/L stable	02-May-07	Ъ	Upgrade, O/L stable	19-Jul-05
		Upgrade, O/L stable	04-Sep-07	B1	Upgrade, O/L stable	22-Apr-10	В	Upgrade, O/L stable	05-May-06
		CreditWatch (-)	08-Feb-08	20	Affirmed, O/L stable	10-Oct-11	В	O/L changed to (+), Affirmed	26-Sep-06
		Downgrade, O/L stable	23-Dec-08				В	O/L changed to stable	25-Sep-08
		O/L changed to (+_	05-May-10				В	O/L changed to (+), Affirmed	05-Jan-11
	÷	Upgrade, O/L stable	13-Jun-11				ш	O/L changed to stable, Affirmed	11-Dec-12
		Affirmed, O/L stable	27-Apr-12						
Ecuador		New	31-Jul-00	<b>B</b>	New	24-Jul-97	CCC+	Assigned, O/L stable	08-Nov-02
		Upgrade, stable	28-Aug-00	B3	Downgrade	14-Sep-98	CCC+	O/L changed to (+)	24-Mar-03
		Downgrade, O/L (-)	02-Apr-01	Caa2	Downgrade	05-Oct-99	CCC+	O/L changed to stable	26-Sep-03
	Ъ	Upgrade, stable	24-Jan-05	Caa1	Upgrade, stable	24-Feb-04	ф	Upgrade, O/L stable	07-Oct-04
	+ CCC+	Downgrade, stable	20-Jun-05	Caa2	O/L changed to positive	30-Jan-06	Ъ	O/L changed to (-)	29-Aug-05

Table VI.1 (continued)

Country   Rating Action   Date	Date ged to (-) 19-Jan-07	1,00					
2000	ged to (-) 19-Jan-07		Rating Action	Date	Kating	Action	Date
00000000000000000000000000000000000000		Caa2	Downgrade, O/L changed to (-)	30-Jan-07	၁၁၁	Downgrade, Credit Watch (-)	23-Jan-07
	20-Nov-0	7 B2	Upgrade, stable	02-May-07	RD	CreditWatch (-)	17-Nov-08
	gative 14-Nov-08	3 B3	Upgrade, stable	20-Mar-08	000	Upgrade	04-Sep-09
OO OO OO OO OO OO OO OO OO OO OO OO OO	rawn 15-Dec-0	8 Ca	Downgrade, O/L developing	16-Dec-08	-b	Upgrade, O/L stable	05-Nov-10
	to stable 15-Jun-09	Caa3	Upgrade, O/L changed to stable	24-Sep-09	-b	Affirmed, O/L stable	28-Oct-11
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	to stable 02-Aug-10	Caa2	Upgrade, O/L stable	01-Feb-11	ė	O/L changed to (+)	24-Oct-12
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	ned 04-Aug-11	Caa1	Upgrade, O/L stable	13-Sep-12			
88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	07-Jun-12	•					
	26-Aug-96	5 Baa3	New	07-Jul-97	BB	Assigned	23-Sep-96
	29-Apr-99	Ba1	Downgrade, O/L changed to (-) 15-Nov-09	15-Nov-09	BB+	Upgrade, O/L stable	05-May-98
	ged to stable 12-May-09	9 Ba2	Downgrade O/L changed to stable 24-Mar-11	24-Mar-11	BB+	O/L changed to (-)	21-Aug-02
	e 14-Jan-11	Ba2	Affirmed, O/L stable	07-Nov-11	BB+	O/L changed to stable, Affirmed	31-Jan-05
	firmed 21-Dec-12	2 Ba3	Downgrade, O/L stable	05-Nov-12	BB+	O/L changed to (-)	13-Oct-08
					BB	Downgrade, O/L (-)	18-Jun-09
					BB	O/L changed to stable, Affirmed	29-Jul-11
					88	O/L changed to (-), Affirmed	24-Jul-12
	18-Oct-01	Ba2	New	8-Jul-97	BB+	Affirmed, O/L stable	19-Jul-07
	09-May-03	3 Ba1	Upgrade, O/L stable	01-Jun-10	BB+	Affirmed, O/L stable	04-Aug-11
	firmed 06-Jul-07				BB+	Affirmed, O/L stable	31-Jul-12
	irmed 02-Sep-11						
± ± ± ± ± ± ± ± ± ±	e, Affirmed 06-Sep-12	2					
± • • • ± ± ± ±	08-Oct-08	3 B2	New	29-Sep-98	ΑN		
a a a a a a a a	30-Jun-09	) B2	Affirmed, stable	13-Jun-02			
a a a a a a a	e 11-Sep-09	9 B2	Affirmed, stable	21-Jul-03			
<b>a</b> a a a a a	14-Jun-11	B2	Affirmed, stable	28-Dec-11			
a a a a a a	07-Jun-12						
	66-voN-60	9 Ba3	New	30-Mar-98	B+	Assigned, O/L stable	29-Aug-06
	13-Dec-00	0 Ba3	Affirmed, stable	18-May-00	B+	Affirmed, O/L stable	12-Oct-07
	02-May-01	1 Ba3	Review (-)	17-Apr-03	В	Downgrade, O/L (-)	18-Nov-08
	19-Mar-02	2 B1	Downgrade, stable	27-May-03	200	Downgrade, O/L (-)	24-Nov-09
	18-Jun-02	B1	Review (-)	04-Nov-08	200	Affirmed, O/L (-)	14-Jan-10
	19-Dec-02	2 B2	Downgrade, O/L stable	04-Mar-09	CCC	Rating Watch negative	03-Feb-10
	28-Jul-03	Caa1	Downgrade, O/L (-)	18-Nov-09	RD	Downgrade	03-Feb-10
	10-Dec-04	4 B3	Upgrade, O/L stable	02-Mar-10	В-	Upgrade, O/L stable	16-Feb-10

Table VI.1 (continued)

		Standard & Poor's			Moody's			Fitch	
Country	Rating	Action	Date	Rating	Rating Action	Date	Rating	Action	Date
	В	Affirmed, stable	16-Jan-06				B-	Affirmed, O/L stable	08-Feb-11
	В	Affirmed, stable	07-Mar-07				å	Affirmed, O/L stable	06-Feb-12
	В	Affirmed, stable	19-May-08						
	В	O/L changed to (-)	21-Oct-08						
	ф	Downgrade, O/L (-)	18-Mar-09						
	000	Downgrade, O/L (-)	02-Nov-09						
	SD	Downgrade	14-Jan-10						
	ф	Upgrade, O/L stable	24-Feb-10						
	ф	Affirmed, O/L stable	22-Dec-10						
	ф	O/L changed to (-)	31-Oct-11						
	ф	Affirmed, O/L (-)	08-Oct-12						
Mexico	BB+	New	30-Jul-92	Ba2	New	18-Dec-90	BB	Assigned	30-Aug-95
	BB	Downgrade, stable	10-Feb-95	Ba1	Upgrade, O/L (+)	10-Aug-99	BB	Rating Watch positive	11-Apr-00
	BB+	Upgrade, O/L (+)	10-Mar-00	Baa3	Upgrade, stable	07-Mar-00	BB+	Upgrade, O/L stable	03-May-00
	BBB-	Upgrade, stable	07-Feb-02	Baa2	Upgrade, stable	06-Feb-02	BB+	O/L changed to (+)	21-Sep-00
	BBB	Upgrade, stable	31-Jan-05	Baa1	Upgrade, stable	06-Jan-05	BBB-	Upgrade, O/L stable	15-Jan-02
	BBB+	Upgrade, O/L stable	08-Oct-07	Baa1	Affirmed, O/L stable	18-Aug-11	BBB	Upgrade, O/L stable	07-Dec-05
	BBB	Affirmed, O/L stable	17-Dec-10				BBB	O/L changed to (+), Affirmed	29-Mar-07
	888	Affirmed, O/L stable	09-Jul-12				BBB+	Upgrade, O/L stable	19-Sep-07
							BBB+	O/L changed (-), Affirmed	10-Nov-08
							BBB	Downgrade, O/L changed to stable	23-Nov-09
							BBB	Affirmed, O/L stable	12-Jan-11
							BBB	Affirmed, O/L stable	11-May-12
Nicaragua	AN			B2	New	27-Mar-98	NA		
				Caa1	Downgrade, stable	30-Jun-03			
				B3	Upgrade, O/L stable	26-May-10			
Panama	BB+	New	22-Jan-97	4	New	30-Jun-58	BB+	New	08-Sep-98
	BB+	Affimed, stable	22-Apr-97	×	Withdrawn	14-Oct-77	BB+	Rating Watch positive	14-Feb-00
	BB+	O/L changed to (-)	10-Dec-99	Aa	Reinstated/Up	27-Jun-78	BB+	O/L changed to stable	21-Sep-00
	BB	Downgrade	20-Nov-01	×	Withdrawn	11-Nov-85	BB+	Rating Watch negative	04-Sep-02
	BB	O/L changed to (-)	10-Mar-03	Ba1	New	22-Jan-97	BB+	O/L changed to stable	03-Dec-03
	BB	O/L changed to stable	18-Feb-05	Ba1	Affirmed, stable	18-Dec-01	BB+	O/L changed to (+)	29-Jan-08
	BB	O/L changed to (+)	03-May-07	Ba1	Affirmed, stable	07-May-03	BBB-	Upgrade, O/L (+)	23-Mar-10
	BB+	Upgrade, O/L stable	26-Feb-08	Ba1	Review	12-Feb-10	BBB	Upgrade, O/L stable	02-Jun-11

Table VI.1 (continued)

Paraguay BB+ O/L changed to (+) BB+ O/L changed to (+) BBB- Upgrade, O/L stable BBB Upgrade, O/L stable BB- New B+ Downgrade, O/L (-) B- Downgrade, O/L (-) B- Downgrade, O/L (-) B- Downgrade, O/L (-) B- Downgrade, O/L (-) B- Downgrade, O/L (-) B- Downgrade, O/L (-) B- Downgrade, O/L (-) B- Downgrade, O/L table BB- Upgrade, O/L stable BB- Upgrade, O/L stable BB- Affirmed, O/L changed to stable BB- Downgrade, stable BB- Upgrade, O/L stable BB- Upgrade, O/L stable BB- Upgrade, O/L stable BB- Upgrade, O/L stable BB- Upgrade, O/L stable BB- Upgrade, O/L stable BBB- Upgrade, O/L stable		Rating Action Baa3 Upgrad Baa3 O/L cha	e, O/L stable	<b>Date</b> 09-Jun-10	Rating BBB	1 1	Date
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		Baa3 Baa3 Baa2		9-Jun-10	BBB	Affirmed Oll of the	
988- 944- 944- 944- 944- 944- 944- 944-		Baa3				Allitined, O/L stable	31-May-12
BB. SD. SD. BB. BB. BB. BB. BB. BB. BB. BB. BB. B		Baa2	O/L changed to (+) 0	04-Aug-11			
90ay 888			Upgrade, O/L stable 3	31-Oct-12			
88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8							
		B2	New 1	13-Jul-98	NA		
		Caa1	Downgrade, stable 2	28-Apr-03			
		B3	Upgrade, O/L stable 0	09-Apr-08			
S		B1		02-Dec-10			
		<u>8</u>	0	02-Nov-12			
+ + + + + + + + + + + + + + + + + + + +							
8     8       8 <td>30-Aug-11</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	30-Aug-11						
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	25-Jun-12						
88 + 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	ed to stable 29-Aug-12						
	18-Dec-97	B2	New	5-Feb-96	BB	New	14-Oct-99
	01-Nov-00	Ba3	Upgrade, stable	27-Mar-98	BB	Rating Watch Negative	08-Nov-00
d a m	08-Jun-04	B2	Upgrade, stable 0	07-Sep-04	BB-	Downgrade, O/L (-)	18-Apr-01
	20-Nov-06	Ba3	O/L changed to (+) 0	07-Nov-06	BB-	O/L stable	29-Apr-02
	14-Jul-08	Ba2	Upgrade, O/L changed to stable 16-Jul-07	16-Jul-07	BB-	O/L changed to (-)	21-Aug-02
	30-Aug-11	Ba1	Upgrade, O/L changed to stable 19-Aug-08	19-Aug-08	BB-	O/L stable	22-Oct-03
	Affirmed 28-Aug-12	Baa3	Upgrade, O/L changed to stable 16-Dec-09	16-Dec-09	BB-	O/L changed to (+)	04-Jun-04
		Baa3	O/L chngd to (+), Affirmed 2	21-Mar-11	BB	Upgrade, O/L stable	18-Nov-04
		Baa3	Affirmed, O/L (+)	02-Jul-12	BB	O/L changed to (+)	04-Nov-05
		Baa2	Upgrade, O/L (+)	16-Aug-12	BB+	Upgrade, O/L stable	31-Aug-06
					BB+	O/L changed to (+), Affirmed	06-Mar-07
					BBB-	Upgrade, O/L stable	02-Apr-08
					BBB-	O/L changed to (+)	02-Jun-10
					BBB-	Affirmed, O/L (+)	27-Jul-11
					BBB	Upgrade, O/L stable	10-Nov-11
					BBB	Affirmed, O/L stable	9-Nov-12
	11-Jan-02	B1	New 0	03-Feb-04	В	New	18-Jun-04
B- O/L changed to (+)	29-May-02	Ba3	Upgrade, O/L (+)	14-Aug-12	В	O/L changed to (+)	20-Oct-09
	28-Jul-03				B+	Upgrade, O/L stable	29-Jul-11

Table VI.1 (continued)

		Standard & Poor's			Moody's			Fitch	
Country	Rating	Action	Date	Rating	Rating Action	Date	Rating	Action	Date
	Ъ	O/L changed to (+)	09-Nov-05				BB-	Upgrade, O/L stable	10-Jul-12
	В	Upgrade, O/L (+)	11-Dec-06						
	÷	Upgrade, stable	16-Nov-07						
	÷	O/L changed to (+)	22-Dec-09						
	BB-	Upgrade, stable	19-Aug-11						
	BB-	Affirmed, stable	30-Apr-12						
Saint Vincent and the Grenadines	pu			2	New	10-Dec-07			
Trinidad and	BB+	New	14-Mar-96	Ba2	New	08-Feb-93	ΑN		
Tobago	BBB-	Upgrade, stable	13-Sep-99	Ba1	Upgrade	10-Oct-95			
	BBB-	O/L changed to (+)	26-Feb-02	Ba1	Review (+)	11-Jan-00			
		Upgrade, stable	02-Apr-03	Baa3	Upgrade	06-Apr-00			
	BBB+	Upgrade, O/L (+)	16-Jun-04	Baa2	Upgrade, stable	09-Aug-05			
	Ą	Upgrade, stable	21-Jul-05	Baa1	Upgrade, stable	13-Jul-06			
	Ą	Affirmed, stable	17-Aug-06						
	Ą	O/L changed to (+)	27-Sep-07						
	⋖	Upgrade, O/L stable	15-Aug-08						
	⋖	Affirmed, O/L stable	14-Jan-11						
	⋖	Affirmed, O/L stable	16-Dec-11						
	4	Affirmed, O/L stable	21-Dec-12						
Uruguay	BB+	New	14-Feb-94	Ba1	New	15-Oct-93	BB+	New	18-Jan-95
	BBB-	Upgrade	18-Jun-97	Baa3	Upgrade	10-Jun-97	BB+	Rating Watch Positive	14-Jan-97
	BB+	Downgrade, O/L (-)	14-Feb-02	Ba2	Downgrade	03-May-02	BBB-	Upgrade	23-Jan-97
		Downgrade, O/L (-)	14-May-02	B1	Downgrade	10-Jul-02	BBB-	Affirmed, O/L stable	21-Sep-00
		Downgrade, O/L (-)	26-Jul-02	B3	Downgrade	31-Jul-02	BBB-	O/L changed to (-)	23-Jul-01
		Downgrade, O/L (-)	21-Nov-02	<b>B</b>	Upgrade, O/L stable	21-Dec-06	BB+	Downgrade, O/L negative	13-Mar-02
		Downgrade, O/L (-)	11-Feb-03	Ba3	Upgrade, O/L stable	12-Jan-09	B+	Downgrade, Rating Watch negative	28-May-02
		Downgrade, O/L (-)	10-Apr-03	Ba1	Upgrade, O/L stable	08-Dec-10	В	Downgrade, O/L negative	30-Jul-02
	SD	Downgrade, stable	16-May-03	Ba1	O/L changed to (+)	26-Jan-12	В-	Downgrade, O/L negative	07-Jan-03
		Upgrade, stable	02-Jun-03	Baa3	Upgrade, O/L (+)	31-Jul-12	CCC-	Downgrade, O/L negative	12-Mar-03
		Upgrade, stable	21-Jul-04				O	Downgrade	10-Apr-03
		Upgrade, stable	28-Sep-06				۵	Downgrade	16-May-03
		Upgrade	12-Jun-07				В-	Upgrade, O/L stable	17-Jun-03
		Upgrade, O/L stable	22-Jul-08				В	Upgrade, O/L stable	29-Mar-04

Table VI.1 (concluded)

1		Standard & Poor's			Moody's			Fitch	
country	Rating	Action	Date	Rating	Rating Action	Date	Rating	Rating Action	Date
		Upgrade, O/L stable	06-Sep-10				B+	Upgrade, O/L stable	07-Mar-05
	BB+	Upgrade, O/L stable	25-Jul-11				B+	O/L changed to (+)	24-May-06
	888-	Upgrade, O/L stable	03-Apr-12				BB-	Upgrade, O/L stable	27-Jul-07
							BB-	O/L changed to (+)	13-Jul-09
							BB	Upgrade, O/L changed to (+)	27-Jul-10
							BB+	Upgrade, O/L stable	14-Jul-11
							BB+	O/L changed to (+), Affirmed	24-Apr-12
Venezuela		New	05-Oct-77	Aaa	New	29-Dec-76	BB-	New	15-Sep-97
(Bolivarian		Downgrade	13-Aug-82	Aa	Downgrade	04-Feb-83	BB-	Rating Watch negative	02-Sep-99
Republic of)		Downgrade	11-Feb-83	×	Withdrawn	25-Mar-83	BB-	Affirmed	15-May-00
		Downgrade	28-Mar-83	Ba3	Reassigned/New	03-Jun-87	BB-	Affirmed, O/L stable	21-Sep-00
		Downgrade	17-Jan-89	Ba1	Upgrade	07-Aug-91	BB-	O/L changed to (-)	18-Dec-01
		Upgrade	24-Jul-91	Ba2	Downgrade	08-Apr-94	<b>B</b> +	Downgrade, O/L negative	06-Feb-02
		Downgrade	4-Mar-94	B	Downgrade	22-Jul-98	В	Downgrade, O/L negative	28-Jun-02
		Downgrade, O/L (-)	27-Jul-94	B2	Downgrade	03-Sep-98	CCC+	Downgrade, O/L negative	10-Jan-03
		Downgrade, O/L (-)	23-Feb-96	B3	Downgrade, stable	20-Sep-02	B-	Upgrade, O/L stable	23-Jun-03
		Upgrade	5-Jun-97	Caa1	Downgrade	21-Jan-03	B+	Upgrade, O/L stable	20-Sep-04
		Downgrade, stable	21-Dec-99	B2	Upgrade, stable	07-Sep-04	BB-	Upgrade, O/L stable	14-Nov-05
		Downgrade, negative	24-Sep-02	B2	Affirmed, O/L, stable	15-Jan-09	BB-	O/L changed to (-)	18-Oct-07
		Downgrade, O/L (-)	13-Dec-02	B2	Affirmed, O/L stable	13-Mar-12	<b>B</b> +	Downgrade, O/L stable	15-Dec-08
		Upgrade, stable	30-Jul-03				B+	Affirmed, O/L stable	11-Apr-11
	В	Upgrade, stable	25-Aug-04				B+	Affirmed, O/L stable	12-Oct-11
		Downgrade, stable	18-Jan-05				<b>#</b>	O/L changed to (-), Affirmed	04-Apr-12
		Upgrade, stable	03-Mar-05						
		Upgrade, stable	12-Aug-05						
		Upgrade, stable	03-Feb-06						
		Downgrade, O/L stable	19-Aug-11						
		Affirmed, O/L stable	10-Aug-12						
		Affirmed, O/L stable	10-Aug-12						

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of information from Fitch, Moody's and Standard & Poor's. Note: The most current ratings (as of end of 2012) are shown in red.

Table VI.2 CREDIT RATING SCALE

Upper Investment Grade       AAA       22       Aaa       22       AAA         Grade       AA+       21       Aa1       21       AA+         AA       20       Aa2       20       AA         AA-       19       Aa3       19       AA-         A+       18       A1       18       A+         A-       16       A3       16       A-         Lower Investment Grade       BBB+       15       Baa1       15       BBB+         BBB       14       Baa2       14       BBB         BBB-       13       Baa3       13       BBB-         Non-Investment Grade       BB+       12       Ba1       12       BB+         BBB       11       Ba2       11       BB							
Grade       AA+       21       Aa1       21       AA+         AA       20       Aa2       20       AA         AA-       19       Aa3       19       AA-         A+       18       A1       18       A+         A-       16       A3       16       A-         Lower Investment       BBB+       15       Baa1       15       BBB+         Grade       BBB       14       Baa2       14       BBB         BBB-       13       Baa3       13       BBB-         Non-Investment       BB+       12       Ba1       12       BB+         Grade       BB       11       Ba2       11       BB         BB-       10       Ba3       10       BB-         Lower Non-Investment Grade       B       8       B2       8       B         B-       7       B3       7       B-         CCC+       6       Caa1       6       CCC+         CCC+       5       Caa2       5       CCC         CCC-       4       Caa3       4       CCC-         CCC-       4       Caa3       4		Fitch	Score	Moody's	Score	S&P	Score
AA+ 21 Aa1 21 AA+ AA AA AAA AAA AAA AAA AAAA AAAA		AAA	22	Aaa	22	AAA	22
AA-  A+  A+  A 17  A2  17  A-  A-  16  A3  16  A-  Lower Investment Grade  BBB+  BB-  BB-  BB-  BB-  BB-  BB-  B	Grade	AA+	21	Aa1	21	AA+	21
A+ 18 A1 18 A+ A+ A 17 A2 17 A A A- 16 A3 16 A- A- 16 A3 16 A- BBB+ BBB 14 BBB BBB- 13 BBB- 13 BBB- BBB- BBB- 11 BBB BBB- BBB-		AA	20	Aa2	20	AA	20
A 17 A2 17 A A- 16 A3 16 A-  Lower Investment BBB+ 15 Baa1 15 BBB+  Grade BBB 14 Baa2 14 BBB  BBB- 13 Baa3 13 BBB-  Non-Investment BB+ 12 Ba1 12 BB+  Grade BB 11 Ba2 11 BB  BB- 10 Ba3 10 BB-  Lower Non- B+ 9 B1 9 B+  Investment Grade B 8 B2 8 B B- 7 B3 7 B-  CCC+ 6 Caa1 6 CCC+  CCC 5 Caa2 5 CCC  CCC- 4 Caa3 4 CCC-  CC 3 Ca 3 CC C		AA-	19	Aa3	19	AA-	19
A- 16 A3 16 A-  Lower Investment Grade BBB+ 15 Baa1 15 BBB+  BBB 14 Baa2 14 BBB BBB- 13 Baa3 13 BBB-   Non-Investment Grade BB 11 Ba2 11 BB BBB-  BB- 10 Ba3 10 BB-   Lower Non- B+ 9 B1 9 B+  Investment Grade BB BB- 7 B3 7 B-  CCC+ 6 Caa1 6 CCC+  CCC 5 Caa2 5 CCC  CCC- CCC 4 Caa3 4 CCC-  CC CC 3 Ca 3 CC C		A+	18	A1	18	A+	18
Description		Α	17	A2	17	Α	17
Grade         BBB         14         Baa2         14         BBB           BBB-         13         Baa3         13         BBB-           Non-Investment Grade         BB+         12         Ba1         12         BB+           BB         11         Ba2         11         BB           BB-         10         Ba3         10         BB-           Lower Non-Investment Grade         B+         9         B1         9         B+           Investment Grade         B         8         B2         8         B           B-         7         B3         7         B-           CCC+         6         Caa1         6         CCC+           CCC+         6         Caa2         5         CCC           CCC-         4         Caa3         4         CCC-           CC         3         Ca         3         CC           CC         2         C         2         C		A-	16	A3	16	A-	16
BBB 14 Baa2 14 BBB BBB BBB BBB BBB BBB BBB BBB BBB		BBB+	15	Baa1	15	BBB+	15
Non-Investment Grade BB+ 12 Ba1 12 BB+ Grade BB 11 Ba2 11 BB BB- 10 Ba3 10 BB- BB- Investment Grade B B BB- 7 B3 7 B- CCC+ 6 Caa1 6 CCC+ CCC CCC- 4 Caa3 4 CCC- CC CCC- CC CCC- CCC- CCC- CCC-	Grade	BBB	14	Baa2	14	BBB	14
Grade         BB         11         Ba2         11         BB           BB-         10         Ba3         10         BB-           Lower Non-Investment Grade         B+         9         B1         9         B+           B-         7         B3         7         B-           CCC+         6         Caa1         6         CCC+           CCC         5         Caa2         5         CCC           CCC-         4         Caa3         4         CCC-           CC         3         Ca         3         CC           C         2         C         2         C		BBB-	13	Baa3	13	BBB-	13
BB 11 Ba2 11 BB BB BB BB BB BB BB BB BB BB BB BB		BB+	12	Ba1	12	BB+	12
B	Grade	BB	11	Ba2	11	ВВ	11
B   8   B2   8   B   B   B   B   B   B   B   B   B		BB-	10	Ва3	10	BB-	10
B 8 B2 8 B B- 7 B3 7 B- CCC+ 6 Caa1 6 CCC+ CCC 5 Caa2 5 CCC CCC- 4 Caa3 4 CCC- CC 3 Ca 3 CC C 2 C 2 C		B+	9	B1	9	B+	9
CCC+       6       Caa1       6       CCC+         CCC       5       Caa2       5       CCC         CCC-       4       Caa3       4       CCC-         CC       3       Ca       3       CC         C       2       C       2       C	Investment Grade	В	8	B2	8	В	8
CCC       5       Caa2       5       CCC         CCC-       4       Caa3       4       CCC-         CC       3       Ca       3       CC         C       2       C       2       C		B-	7	В3	7	B-	7
CCC- 4 Caa3 4 CCC- CC 3 Ca 3 CC C 2 C 2 C		CCC+	6	Caa1	6	CCC+	6
CC 3 Ca 3 CC C 2 C 2 C		CCC	5	Caa2	5	CCC	5
C 2 C 2 C		CCC-	4	Caa3	4	CCC-	4
		CC	3	Ca	3	CC	3
Default RD 1 1 SD		С	2	С	2	С	2
	Default	RD	1		1	SD	1
D 0 0 D		D	0		0	D	0

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of ratings from Fitch, Moody's and Standard & Poor's.

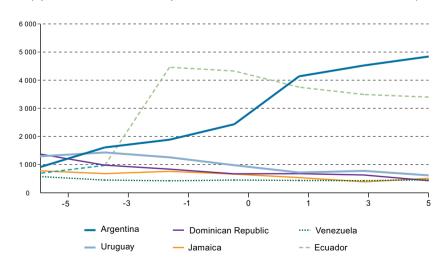
# B. Sovereign credit ratings and their impact on spreads

Trends in Latin American credit ratings roughly matched the business cycle in the 1990s, falling during the Mexican peso crisis of 1994, rising in 1995-1997 and falling sharply in 1998 and 1999. A similar pattern occurred in the 2000s as well, when credit ratings improved substantially during the boom years between 2003 and 2007, momentarily worsened during the global financial crisis and then resumed a positive trend (see figure VI.1 in the previous section).

Credit ratings and spreads have a negative relationship. When a country's creditworthiness improves, the country risk as measured by debt spreads is expected to decline; if a country's creditworthiness deteriorates, country risk as measured by debt spreads is expected to rise. However, the causality of this inverse relationship is hard to determine. Does the behaviour of debt spreads respond to changes in credit ratings, or do credit ratings respond to changes in spreads? Do the credit rating agencies take action in response to spreads that become excessively low or high?

Gaillard (2009) analyses the interactions between JP Morgan EMBIG spreads and Fitch, Moody's and Standard & Poor's sovereign ratings from December 1993 to February 2007. Using an unbalanced panel data estimation, the author finds that beyond the obvious negative relationship between spreads and ratings, Moody's disagrees with the market more often than Fitch and Standard & Poor's. The results show that credit ratings are very stable overall: 87% of ratings (average of the three agencies) remain unchanged one month after spreads post excessively high or low levels, and 77% of ratings are still unchanged after three months. He also finds that rating changes are asymmetric, in that the agencies are more reluctant to upgrade when spreads are excessively low than to downgrade when spreads are excessively high.

Figure VI.4
EMBIG SPREADS BEFORE AND AFTER A DOWNGRADE
TO SELECTIVE DEFAULT BY S&P
(Spreads measured in basis points one, three and five months before and after)

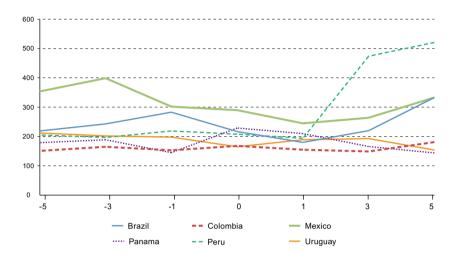


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Standard & Poor's and JP Morgan EMBIG.

Note: The countries in the sample are Argentina (selective default announcement date: 6 November 2001), the Bolivarian Republic of Venezuela (18 January 2005), Dominican Republic

(1 February 2005), Ecuador (15 December 2008), Jamaica (14 January 2010) and Uruguay (16 May 2003).

Figure VI.5
EMBIG SPREADS BEFORE AND AFTER AN UPGRADE
TO INVESTMENT GRADE BY S&P
(Spreads measured in basis points one, three and five months before and after)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Standard & Poor's and JP Morgan EMBIG.

Note: The countries in the sample are Brazil (investment-grade rating announcement: 20 April 2008), Colombia (16 March 2011), Mexico (7 February 2002), Panama (25 May 2010) and Peru (14 July 2008).

Figures VI.4 and VI.5 summarize the behaviour of JP Morgan EMBIG spreads during six S&P downgrades to selective default (SD) and six S&P upgrades to investment grade (IG) in Latin America and the Caribbean. In three of the six downgrades, spreads were already moving in the direction of the rating change three months prior to their announcement, suggesting that the credit rating agency lagged the market in its response in those cases.

In the case of the upgrades to investment grade, spreads were already moving in the direction of the rating change three months prior to their announcement in two cases. One month before the announcement, spreads began moving in the direction of the rating change in four of the six upgrades (table VI.3). After the downgrades were announced, however, spreads moved in the expected direction (up) in only one of the six cases. In the case of the upgrades, spreads moved in the expected direction (down) in five of the six upgrades one month after the announcement and in two of the six three months after.

### Table VI.3 STANDARD & POOR'S DOWNGRADES TO SELECTIVE DEFAULT AND UPGRADES TO INVESTMENT GRADE

	Noven	nber 2001 - April 2	2012
(A) Was the marke before it was anno	, ,	he direction sugges	sted by S&P's downgrade to SD
	Υ	N	Not conclusive
3 months	3	3	-
1 month	3	3	<del>-</del>
(B) Did the market	move in the expecte	ed direction after the	e Agency's announcement?
	Υ	N	Not conclusive
1 month	1	4	1
3 months	1	5	-
(A) Was the marke before it was anno		he direction sugges	sted by S&P's upgrade to IG
	Υ	N	Not conclusive
3 months	2	4	-
1 month	4	2	-
	<u> </u>	<del>-</del>	- e Agency's announcement?
	<u> </u>	<del>-</del>	- Agency's announcement?  Not conclusive
	move in the expecte	d direction after the	
(B) Did the market	move in the expecte	d direction after the	
(B) Did the market	move in the expected Y 5 2	ed direction after the	Not conclusive
(B) Did the market  1 month 3 months	move in the expecte  Y  5  2  Suit already moving in t	N 1 4 mmary of 12 Action	Not conclusive
(B) Did the market  1 month  3 months  (A) Was the market	move in the expecte  Y  5  2  Suit already moving in t	N 1 4 mmary of 12 Action	Not conclusive  s
(B) Did the market  1 month  3 months  (A) Was the market	move in the expected  Y  5  2  Suit already moving in tunced?	N 1 4 mmary of 12 Action the direction suggest	Not conclusive  s sted by S&P's Announcements
(B) Did the market  1 month  3 months  (A) Was the market before it was anno	move in the expected  Y 5 2 Suit already moving in tunced?	N 1 4 mmary of 12 Action he direction sugges	Not conclusive  s sted by S&P's Announcements
(B) Did the market  1 month 3 months  (A) Was the market before it was anno 3 months 1 month	move in the expected  Y 5 2 Suit already moving in tounced?  Y 5 7	N 1 4 mmary of 12 Action he direction sugges N 7 5	Not conclusive  s sted by S&P's Announcements
(B) Did the market  1 month 3 months  (A) Was the market before it was anno 3 months 1 month	move in the expected  Y 5 2 Suit already moving in tounced?  Y 5 7	N 1 4 mmary of 12 Action he direction sugges N 7 5	Not conclusive  - s sted by S&P's Announcements  Not conclusive
(B) Did the market  1 month 3 months  (A) Was the market before it was anno 3 months 1 month	move in the expected  Y 5 2 Suit already moving in tounced?  Y 5 7 move in the expected	nd direction after the N 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Not conclusive  - s sted by S&P's Announcements  Not conclusive

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of information from Standard & Poor's announcements and JP Morgan EMBIG spreads.

The two cases in which the agency seems to have led the market are the case of Argentina's downgrade to selective default in November 2001 and the upgrade of Panama to investment grade in May 2010. In the first case, spreads continued to go up within one, three and five months of the downgrade; in the second, spreads continued to fall within one, three and five months of the upgrade. In other cases, when the market moved in the direction of the change, either spreads changed direction within a month and were already going in the opposite direction of the change three months later, or they did not respond within the first month of change, but only after a lag. It is therefore hard to determine whether the cause of the change was the credit rating announcement or some other factor.

Whether Latin American spreads changed their trend before or after an announcement may suggest whether credit rating agencies were leading the markets in pricing risk or just following the region's business cycle and not adding more information than the market actually had prior to the announcement. Overall, credit rating agencies did not seem to add more information than the market actually had prior to the change in ratings in the 12 cases examined. Spreads were already moving in the direction the change in rating would have suggested in 42% of the cases three months prior to the announcement and in 58% of the cases one month before. Spreads actually moved in the opposite direction one month after the announcement in more than 42% of the cases and in 75% of the cases three months after.

This is not a comprehensive exercise, of course, since we have selected just a few specific actions and a few countries and have examined the actions of only one of the credit rating agencies. Other factors may be playing a role in the changes in spreads and credit ratings. However, it serves to illustrate that although credit ratings and spreads are interdependent, as Gaillard (2009) concludes in his paper, their movements are not necessarily synchronized.

#### Chapter VII

## Unequal access: a closer look at Central America and the Caribbean

Access to international capital markets and flows of private capital towards Latin America and the Caribbean increased significantly in the past twenty years, as discussed in the previous chapters. However, not all countries have borrowed as frequently or on the same terms as some of the larger economies. For the most part, access to international capital markets is more limited and costly for some Central American and Caribbean countries than for other countries in Latin America, as they face peculiar constraints in attracting global capital. Their small size, which implies a narrow range of economic activities and limited economies of scale, and vulnerability to economic shocks are among the factors that impair access.

Vulnerability tends to increase during periods of external shocks and financial turbulence. During the 2008 global financial crisis and more recent bouts of volatility, some Central American and Caribbean countries seem to have felt a stronger impact than the rest of the region, with larger increases in their sovereign debt spreads and sharper downgrades in their credit risk ratings.

The financial turmoil in developed markets led investors to liquidate their holdings of Latin American and Caribbean assets in 2008, causing borrowing costs for governments in the region to surge to levels unseen in the previous six years. The region felt the collapse of global financial markets

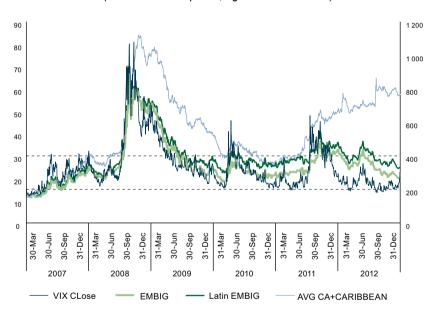
through a slowdown in capital inflows, large declines in stock price indexes, significant currency adjustments and increased debt spreads.

In contrast to past downturns, however, Latin America and the Caribbean showed increased resilience and posted a robust recovery. The Latin component of the JP Morgan EMBIG index rose sharply from mid-September to the end of 2008, but it then embarked on a declining trend, only increasing during periods of higher volatility (see figure VII.1). New international debt issuance in the region picked up in the first quarter of 2009, following a lull in the second half of 2008, and it has continued to be active since then (see figure VII.2).

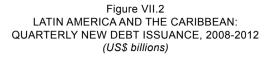
Figure VII.1

JP MORGAN EMBIG AND CBOE VOLATILITY INDEX: 2007-2012

(Left scale: basis points; right scale: VIX close)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from JP Morgan Emerging Markets Bond Index (EMBI) and from the Chicago Board Options Exchange [online] (www.cboe.com/micro/vix/historical.aspx).





Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

The post-crisis recovery in Central America and the Caribbean seems lackluster relative to the recovery of the region as a whole, however. Their average spreads measured by the EMBIG increased more sharply during the crisis, and the gap relative to average spreads for the region as a whole continued in the post-crisis period and actually widened from September 2011 to December 2012 (figure VII.1). In addition, their credit risk rating suffered a stronger negative impact, and their new debt issuance as a share of the region's total issuance had not yet recovered by the end of 2012.

The following sections focus on the trajectory of bond spreads and issuance, as well as credit quality, during the 2008 global financial crisis and in the post-crisis period. The behaviour of bond spreads and new debt issuance in the period supports the notion that access to international bond markets for small, vulnerable economies tends to be more sporadic and more costly than for larger economies. Countries in Central America and the Caribbean were hit harder during the crisis, and they had not yet regained their pre-crisis standings by the end of 2012.

The trend towards financial openness gained renewed impetus in the 1990s. It was widespread and seen in all subregions, although it was less intense in the Caribbean. Using the Chinn-Ito index of financial

openness, ECLAC (2012) shows that for the region as a whole, the index had surpassed the levels seen in the 1970s by the mid-1990s, but financial openness in the Caribbean did not return to the 1970s levels until the 2000s. By the late 2000s the economies of Latin America and the Caribbean had achieved the highest degree of financial-account openness of all developing economies, and in Central America and the Dominican Republic the indices were close to those of developed economies. Growing financial openness was accompanied by an increase in foreign-currency assets in the region, which grew to represent 18% of GDP in South America, 15% in Central America and Mexico and 17% in the Caribbean.<sup>1</sup>

Bonds were among those foreign-currency assets. In terms of size, total bond issuances in 2003-2011 represented 5% of GDP in the Caribbean, on average, 4% in Central America and 2% in South America and Mexico. As a share of total international reserves during the same period, bond issuances represented more than 50% of international reserves in the Caribbean, on average, 37% in Central America and 14% in South America and Mexico.<sup>2</sup>

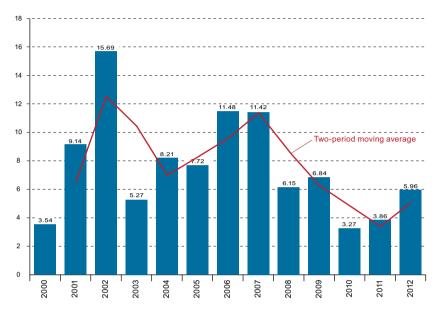
#### A. New debt issuance

The volume of international bond issuance in Latin America and the Caribbean rose considerably in the past decade, from US\$ 40 billion in 2000 to a record US\$ 114.5 billion in 2012. Despite the record issues in the region since 2009, debt issuance by the Central American and Caribbean countries as a share of the regional total had not yet recovered from the global financial crisis by the end of 2012 (see figure VII.3). In 2010 and 2011, this share reached its lowest level since 2000, offering further evidence that the small economies of the region were struggling to return to pre-crisis levels. The share increased slightly in 2012.

<sup>&</sup>lt;sup>1</sup> See ECLAC (2012, Chapter III, p. 106).

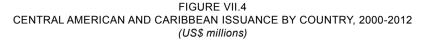
Data include sovereign and corporate issues (see table IV.1 in chapter IV). Caribbean countries that issued debt in international bond markets in 2003-2011 include Bahamas, Barbados, Dominican Republic, Jamaica and Trinidad and Tobago. Central American countries include Costa Rica, El Salvador, Guatemala, Honduras and Panama. South American countries include Argentina, The Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay. South America and Mexico are grouped together.

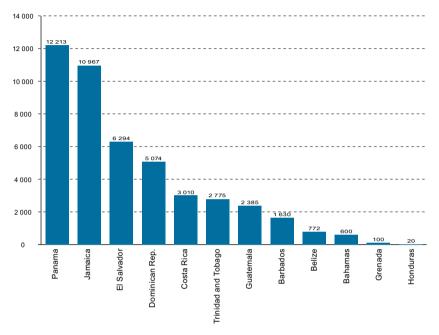
FIGURE VII.3
CENTRAL AMERICAN AND CARIBBEAN ISSUANCE AS A SHARE
OF THE REGIONAL TOTAL, 2000-2012
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

Issuance by Central American and Caribbean countries represented about 7% of the region's total in 2000-2012, totaling US\$ 46 billion. The biggest issuer was Panama, which issued a total of US\$ 12 billion and accounted for 27% of the total Central America and Caribbean issuance (see figures VII.4 and VII.5). Panama was followed by Jamaica, with US\$ 11 billion and 24% of the total; El Salvador, with US\$ 6 billion and 14% of the total; the Dominican Republic, with US\$ 5 billion and 11% of the total; Costa Rica, with US\$ 3 billion and 7% of the total; and Trinidad and Tobago, with US\$ 2.8 billion and 6% of the total. Together, those top six issuers accounted for almost 90% of total debt issuance —including both sovereign and corporate debt— in Central America and the Caribbean.





Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

One of the debt financing trends in the past decade, as described in previous chapters, was a shift in external funding from sovereign to corporate and bank debt. Central American and Caribbean countries have mirrored this trend, with the share of corporate bond issuance increasing after 2004 (with the exception of 2008, the onset of the global financial crisis). After increasing in 2009, however, corporate and total debt issuance declined again in 2010 and remained low in 2011, as countries faced a challenging growth environment in the post-crisis period. The global crisis intensified the fiscal imbalances already present in several of those countries, as governments sought to stabilize national economies through fiscal stimulus packages that led to the expansion of public expenditures in excess of revenue growth. The rest of the region recorded the opposite trend, with corporate and total issuance increasing sharply in 2010 and 2011. In 2012, issuance in Central America and the Caribbean followed the pattern of the rest of the region, showing an increase in both corporate and total new debt issuance.

Costa Rica

Dominican Rep
El Salvador
Jamaica
Panama

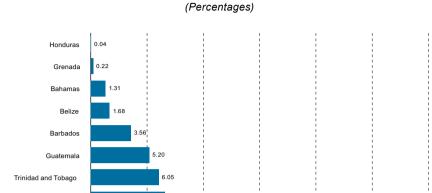


FIGURE VII.5
CENTRAL AMERICAN AND CARIBBEAN ISSUANCE: COUNTRY SHARES, 2000-2012
(Percentages)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

15

20

25

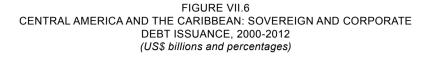
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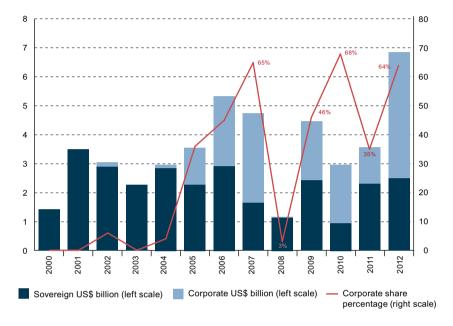
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11.07

In 2007, corporate issuance in Central America and the Caribbean amounted to 65% of total issuance, surpassing sovereign issuance for the first time. The trend towards a higher share of corporate issuance was interrupted by the global financial crisis of 2008 and 2009. After a drastic drop in both corporate and total issuance in 2008, the share of corporate issuance resumed its climb. In 2010 corporate issuance again surpassed sovereign issuance, peaking at an unprecedented 68% of the total (see figure VII.6). The trend was interrupted again in 2011, with the external context deteriorating drastically in the second half of the year and the corporate share falling to 35%. It recovered in 2012, reaching 64% of the total.





Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from LatinFinance, JP Morgan and Bank of America/Merrill Lynch.

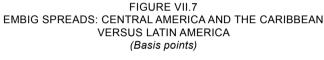
#### B. Sovereign debt spreads

Following the collapse of financial markets in September 2008, the Latin American spreads, measured by the EMBIG, widened by 238 basis points between September and October 2008, but the economies of Central America and the Caribbean experienced a much stronger impact. On average, EMBIG spreads for these countries (excluding Panama) widened by 433 basis points, almost twice the Latin average.

The Latin component widened 423 basis points from the end of August to the end of November 2008, versus 571 basis points for Central America and the Caribbean and 628 basis points for the Caribbean alone. Since then it has tightened by 439 basis points, from 765 basis points at the end of November 2008 to 326 basis points at the end of December 2012, more than recovering from the widening suffered during the crisis. In contrast, spreads tightened 218 basis points for Central America and the Caribbean

during the same period and only 14 basis points for the Caribbean alone.<sup>3</sup> While spreads had already recovered for the region as a whole by the end of 2012, in the case of Central America and Caribbean, spreads were far from recovering and have yet to regain their pre-crisis levels.

Spreads widened sharply following the onset of the crisis in September 2008, but they peaked by the beginning of 2009 (see figure VII.7). In the second half of 2009 and over the course of 2010, Central America and Caribbean saw their spreads tighten towards pre-crisis levels, thus closing some of the gap with the rest of the region. They widened more than the regional average in 2011 and 2012, however, and the gap opened again. Many Caribbean countries face significant challenges as they struggle with very high debt-to-GDP ratios in economies battered by natural disasters and a slump in tourism.





Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from JP Morgan.

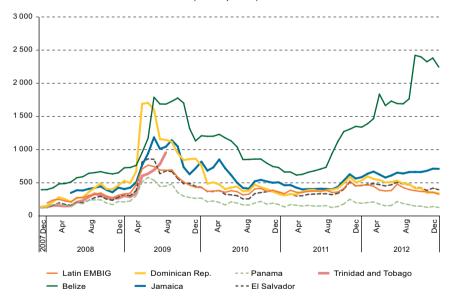
Note: The Caribbean average includes Belize, the Dominican Republic, Jamaica and Trinidad and Tobago (data for Trinidad and Tobago are available only from June 2007 to March 2009). The average for Central America and the Caribbean includes the previous countries plus El Salvador and Panama.

The average spread for Central America and the Caribbean based on JP Morgan EMBIG spreads include Belize, the Dominican Republic, El Salvador, Jamaica, Panama and Trinidad and Tobago (spreads for Trinidad and Tobago were available only until March 2009). The Caribbean average includes Belize, the Dominican Republic, Jamaica and Trinidad and Tobago.

Spreads for Belize widened 774 basis points in 2011 —the biggest increase by far among all the Central American and Caribbean countries in the sample. In addition, spreads increased 275 basis points for the Dominican Republic, 210 basis points for Jamaica, 176 basis points for El Salvador and 39 basis points for Panama. The Latin component widened 111 basis points in 2011.

In 2012, spreads tightened by 142 basis points in Latin America as a whole. In contrast, spreads widened by 225 basis points for the Caribbean region and by 104 basis points for Central America and the Caribbean combined. While spreads tightened in 2012 for the Dominican Republic (–254 basis points), El Salvador (–82), and Panama (–72), they widened by 854 points for Belize and by 74 basis points for Jamaica (see figure VII.8).

FIGURE VII.8
EMBIG AND LATIN COMPOSITE: CENTRAL AMERICAN AND CARIBBEAN COUNTRY SPREADS, DECEMBER 2007-DECEMBER 2012
(Basis points)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from JP Morgan.

The increase in Belize's spread reflects the restructuring of its US\$ 547 million 2029 super bond. On 20 September 2012, after the expiration of the 30-day grace period of a US\$ 23.1 million coupon payment on Belize's 2029 bond that was scheduled for August 20, the government announced that it would make a partial payment of US\$ 11.6 million, roughly

half of the interest owed to bondholders. The Coordinating Committee of Belize Bondholders described the government's announcement as a step in the right direction and agreed not to seek legal remedies for 60 days in order to provide enough time for the two sides to finalize negotiations on the debt restructuring process. Negotiations began on 2 October, and an exchange offer was made on 15 February 2013. On 8 March 2013, the government announced that the holders of 86.17% of the country's United States dollar bonds due in 2029 had decided to participate in the restructuring and exchange their bonds for new United States dollar bonds due in 2038.

In the case of Jamaica, the economy was marked by high deficits, a large public debt burden and challenging foreign exchange reserves, while facing a tough global economy. The concomitant uncertainty translated into higher spreads, which remained above the regional average at the end of 2012. The government has renegotiatied an agreement with the International Monetary Fund (a 48-month, US\$ 932 million extended arrangement), which was approved by the Fund's Executive Board on 1 May 2013.

The other countries in the EMBIG are the Dominican Republic, El Salvador and Panama, whose spreads tightened in 2012. With an IMF agreement in place, Dominican Republic bonds have been increasingly viewed in a more positive light by markets, after a default and a banking crisis in May 2003 led to a general loss of confidence on the part of investors. Its spreads are close to the Latin American regional average and, for the most part, have followed global conditions.

El Salvador's spreads had been broadly following the regional average, but in 2011 the sovereign was downgraded by S&P and Moody's. The agencies cited the high debt-to-GDP ratio, the high level of non-performing bank loans and the growing political uncertainty as reasons for the downgrades. Spreads tightened in 2012, however, and were at 396 basis points at the end of December 2012, versus 326 basis points for the Latin EMBIG.

Panama received an investment grade in 2010 and performed better than the regional average in the past two years. At year-end 2012, it had one of the lower spreads in the Latin EMBIG composite, at 129 basis points.

### C. Evolution of credit ratings

In parallel with the increase in EMBIG spreads, Central American and Caribbean countries experienced downgrades in their credit risk rating during the crisis, and at the end of 2012 many of them had yet to regain their previous rating. Because of the small size and underdeveloped capital markets in many of their economies, credit ratings can potentially play an important role in investors' decisions towards the region. Together, the three

main credit rating agencies —Fitch, Moody's and Standard & Poor's—provide ratings for about fifteen countries in Central America and the Caribbean, but the analysis that follows focuses on the twelve countries rated by at least two of the agencies.

Overall, credit ratings for the Caribbean and Central American countries did not follow the same trajectory as the rest of the region, as discussed earlier. While credit ratings for South America and Mexico were negatively affected by the global financial crisis, they recovered quickly and were soon on an upward trend. In contrast, at the end of 2012 a majority of the countries in the Caribbean had still to recover from the 2008 downgrades. This is the case of the Bahamas, Barbados, Belize and Jamaica. In these four cases, the downgrades reflected credit weakness and fiscal deterioration, as financial instability brought about by the global financial crisis weighed heavily on the countries' fiscal accounts. In the case of the Dominican Republic, ratings were downgraded by Standard & Poor's in the immediate aftermath of the crisis but had recovered by the end of 2012, while Trinidad and Tobago's ratings remained unchanged throughout the period and Suriname's actually improved.

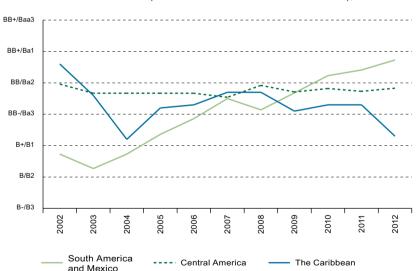


Figure VII.9 AVERAGE CREDIT RATINGS (MOODY'S AND STANDARD & POOR'S), 2002-2012

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Moody's and Standard & Poor's.

Note:

South America: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. The Caribbean: Barbados, Belize, Dominican Republic, Jamaica and Trinidad and Tobago. Investment grade: BBB-/Baa3 and above.

The Bahamas held an investment grade of A–/A3 by Standard & Poor's and Moody's prior to the crisis. In November 2008, Standard & Poor's revised its rating outlook to negative, stating that the United States economic downturn had severely affected the Bahamian economy, which depends heavily on the United States for investment, trade and tourism. The rating was then downgraded in December 2009 to BBB+ and in October 2011 to BBB, a lower investment grade. The outlook on the BBB rating was revised to negative from stable in September 2012 because of a deteriorating fiscal profile. The Bahamas thus had yet to recover its previous rating at the year-end 2012. According to Standard & Poor's, "the Bahamian economy is vulnerable to the country's dependence on one sector, tourism, and one geographic market, the United States." In August 2011, Moody's revised the outlook to negative, saying that the central government debt has increased by almost 150% over the past decade to nearly 50% of GDP at year-end 2010, with over 40% of the increase occurring in the previous two years alone.

Barbados held an investment grade of BBB/Baa2 by Standard & Poor's and Moody's prior to the crisis. The sovereign was downgraded one notch by Moody's in October 2009 and by Standard & Poor's in October 2010, and it lost its investment-grade status from both agencies in 2012. The main reasons given for the downgrades were the deterioration and weakening of the country's fiscal profile and key debt indicators, as well as weakening economic fundamentals, stemming, according to Standard & Poor's, from rising competitive challenges and other structural factors that the government can address only in the long-term.

Belize held a non-investment-grade rating of B by Standard & Poor's and B3 by Moody's (one notch lower than Standard & Poor's) prior to the crisis. The sovereign was downgraded one notch lower to B– by Standard & Poor's in August 2011, bringing the ratings of both agencies to the same level. The lowered rating reflected Belize's higher fiscal deficit and rising contingent liabilities, which, in Standard & Poor's view, reduced its fiscal flexibility. In February 2012, the two agencies downgraded the sovereign to CCC+ and Caa1, respectively, citing concerns about a possible debt restructuring. In June 2012, Moody's downgraded Belize's long-term ratings further to Ca from Caa1, with a developing outlook. The downgrade reflected concerns about the country's external debt and weakened growth prospects. In August 2012, Standard & Poor's downgraded Belize's foreign currency sovereign credit ratings to selective default, following the government's announcement that it would not pay the US\$ 23 million semi-annual interest coupon on its US\$ 547 million 2029 bond, which was due on 20 August 2012.

Prior to the crisis, Jamaica held a non-investment-grade rating of B1 by Moody's, B+ by Fitch and B (one notch lower than the other agencies) by Standard & Poor's. The sovereign's rating was immediately affected by the global crisis, with the three agencies changing the outlook to negative and proceeding to further downgrade the sovereign. The agencies indicated that shocks from global financial turbulence and the expected United States recession had heightened downside credit risks, given Jamaica's reliance on external funding for its comparatively high fiscal and external deficits. The sovereign was downgraded further in 2009. In 2010, however, Jamaica was upgraded by all three agencies after the successful outcome of a domestic debt exchange and the approval of a US\$ 1.27 billion IMF Stand-By Arrangement, which mitigated near-term external liquidity concerns. Jamaica had not yet recovered its previous ratings by the end of 2012, which were two-notches lower than before the crisis.

The Dominican Republic held a non-investment-grade rating of B+ by Standard & Poor's and B2 and B by Moody's and Fitch (one notch lower than Standard & Poor's). The sovereign was downgraded to B by Standard & Poor's in December 2008, bringing the rating on par with the other two agencies. Moody's upgraded the rating to B1 in 2010 to reflect a reassessment of the country's overall credit resilience after the global financial crisis, Standard & Poor's brought its rating back to B+ in June 2011, reflecting the country's progress in gradually improving its debt structure and debt management, advancing structural reforms and improving policymaking transparency.

Suriname was upgraded from B+ prior to the crisis to BB- in August 2011 by Standard & Poor's and from B to B+ in July 2011 by Fitch. The changes reflected improving macroeconomic fundamentals, good medium-term growth prospects and a low debt position. In July 2012 Suriname's rating was upgraded further by Fitch, from B+ toto BB-, with the agency citing government action to minimize fiscal imbalances while maintaining price and exchange rate stability as the reason. In August 2012, Moody's also upgraded Suriname to Ba3 from B1, with a positive outlook. The upgrade reflected prudent fiscal management, as well as robust growth, driven by the gold mining, petroleum and construction sectors. It was also supported by the country's ability to attract significant foreign investment in the extractive industries and offshore exploration.

Suriname is among the Caribbean's top commodity producers and exporters. Together with Guyana, Trinidad and Tobago and Belize (despite its debt restructuring), it benefited from higher commodity prices, showing more fiscal space and a more manageable debt burden than other countries in the region during the global financial crisis and in the post-crisis period. Suriname and Guyana benefited from high prices for gold and minerals and Trinidad and Tobago from high prices for oil and natural gas.

In Central America, Honduras and El Salvador suffered downgrades following the global financial crisis. Honduras recovered its pre-crisis standing in June 2012, but El Salvador had not yet recovered its standing by the end of 2012.

Costa Rica, Guatemala and Panama saw their ratings improve since the 2008 global financial crisis. Panama was upgraded by the three agencies to investment grade in 2010. It was upgraded further in July 2012 by Standard & Poor's (to BBB) and in October 2012 by Moody's (to Baa2 from Baa3), due to its ongoing economic dynamism, positive medium-term growth and continuing improvements in its debt metrics. Panama followed the trend of the rest of Latin America. Costa Rica also received an investment grade in 2010 by Moody's, but Standard & Poor's and Fitch still retained the non-investment-grade rating at year-end 2012.

El Salvador was downgraded by Fitch in June 2009 from BB+ to BB, to reflect what the agency considered a structural shift in the country's fiscal and growth trajectory. Moody's downgraded the sovereign from an investment-grade rating prior to the crisis (Baa3) to a non-investment-grade rating of Ba1 in November 2009. In March 2011, Moody's downgraded the sovereign rating once again. Among the factors cited for the downgrade were El Salvador's high debt-to-GDP ratio, high level of non-performing bank loans and weak economic growth. These are the same issues that have weighed down many of the Central American and Caribbean economies.

The evolution of credit ratings, debt issuance and debt spreads for many countries of the Central American and Caribbean region suggests that the advantage conferred by their openness, export-driven growth and linkages to developed countries can soon become a disadvantage with the onset of a global shock that originates in these same advanced economies. A potential explanation for why so many of these economies were so hard hit by the 2008 global financial crisis is their sensitivity to the economic cycle of advanced countries, particularly the United States. In addition, during the recovery phase, the weak linkages with the emerging countries that were driving the global recovery, such as China and India, prevented them from enjoying a stronger performance.

Many countries are still constrained by high levels of debt as a share of GDP and have limited fiscal space, which can slow down their policy response during economic downturns. Most of the credit rating downgrades that took place in the aftermath of the global financial crisis were motivated by fiscal deterioration, as financial instability brought about by the global financial crisis weighed heavily on the countries' fiscal accounts.

For the most part, Central American and Caribbean countries' access to private international capital markets was more costly and limited during

and after the global financial crisis than it was for many of the larger economies of Latin America. This underscores the importance of keeping financing from multilateral sources available. Multilateral development banks and bilateral aid agencies must remain fully cognizant of countries' vulnerability to shocks. The system of international cooperation should search for a comprehensive and broad-based response to the development challenge, one that considers Latin American and Caribbean economies' diverse needs, given that access to private international capital markets is not homogeneous and borrowing terms can be more or less favourable depending on the borrower.

Finally, financial stability and integration is integral to economic growth and development. The development agenda for the region should take into account the vulnerabilities of many Central American and Caribbean countries, their small size and sensitivity to global economic downturns. The ideal strategy will take into consideration the unique constraints and strengths of each of these countries to best fit their particular needs.

#### Chapter VIII

# Looking ahead: are emerging and developed debt markets converging?

Emerging market debt as an asset class has evolved in the past three decades, and the borderline between emerging market debt and developed market debt has been blurring over time as a result. In the past few decades, most investors operated on the basis that developed market debt was safe and predictable, that key variables could be factored into a spread sheet to calculate risks and returns. When investors analysed risk in emerging markets, they paid close attention to political risk and social challenges, variables that could not be factored into a spread sheet. The 2008 global financial crisis and the recent turmoil in the euro zone have left many investors confused, however. Social concerns are suddenly becoming crucial to the developed world as well, bringing questions of trust and social cohesion to the fore when calculating developed markets' risk.

In 2006 and 2007, the top two variables that best explained sovereign spread differences across a large pool of developed and emerging market countries, according to Credit Suisse (2011), were GDP per capita and inflation. The debt of emerging market countries (which tend to have lower GDP per capita than developed countries) systematically traded at higher yields than the debt of developed countries during those years. The bigger the income differential, the larger the yield differential. In 2008, however, GDP per capital dropped out of the top two spots and has not made it back since then.

The two macroeconomic variables that best explained sovereign spread differences across developed and emerging market countries by the end of 2011 according to Credit Suisse were inflation and external debt. This change probably reflects improvements in emerging markets' fiscal situation and external indebtedness. Moreover, the implementation of massively expansionary fiscal and monetary policy by developed countries in response to the 2008 global financial crisis has challenged the notion that emerging market countries are more prone to abrupt risky policy shifts than developed countries.

The expansionary central bank policies in the advanced economies implemented in response to the global financial crisis produced an unprecedented policy environment and created ample liquidity in international capital markets between 2009 and 2012. Flows into Latin American bonds increased considerably as a result. Several firms in the region made their debut in international bond markets during this period, and higher-yield issuance grew. Latin American and Caribbean debt capital market volumes topped US\$ 100 billion in 2012, a historical record, as private investors perceived many of the region's corporate and sovereign issuers as a flight-to-quality trade, given their net external credit position and strong balance sheets.

Structural changes have also played an important role in attracting capital inflows. Most countries in the region have become less prone to systemic crises over the past decade. Moreover, with so many countries in the region carrying investment-grade ratings, Latin American bonds have become an investment option for large institutional investors in advanced economies, such as pension funds and insurance companies. The region's larger and more diversified investor base, which has more investors willing to hold assets for the long term, has contributed to the increase in bond flows towards the region and, to a certain extent, made them more stable than they were in the 1990s, when the investor base was dominated by leveraged investors and short-term traders.

Latin American and Caribbean debt has come full circle since the 1982 debt crisis. Continuing the pattern of novelties of the past few years, there were several firsts in debt markets in 2012, such as the first wind energy project bonds, the first covered bond (a security backed by a separate group of assets), the second-ever issuance from a Paraguayan borrower, The Plurinational States of Bolivia's first foray into international bond markets since the 1920s to reintegrate itself into the international financial community, and the first issuances in Chinese offshore renmimbi and Australian dollars. These events highlight the significant evolution of the region's access to international bond markets in the past three decades.

From 1982 to 2012, countries in the region have moved from concerns about a shortage of funds towards how to best manage available financing

options. The increased access to private capital markets has provided many countries in the region with more funding options, considerably changing the landscape for development financing. Regional development banks such as Brazil's BNDES, the Development Bank of Latin America (CAF), and the Latin American Reserves Fund (FLAR), have also played an important role as suppliers of financing. Multilateral development finance, on the other hand, now has a smaller share in global financial flows to the region than in the recent past, although multilaterals still have a valuable role to play as providers of counter-cyclical funds.

Developments since the debt crisis have been remarkable. However, there is a high degree of heterogeneity among countries. Access to international bond markets is not universal, being more limited and costly for some countries than for others. This is the case for many Caribbean countries, given the unique constraints they face in attracting global capital because of their vulnerability to economic shocks and their small size. Financing from multilateral sources continues to be crucial.

Despite the region's increased resilience, vulnerability to external financial shocks can still be a threat. The current low interest rates are unprecedented, and as long as liquidity remains abundant, Latin American bond markets will continue to be an attractive place for fixed-income investors. However, the prospect of higher United States interest rates and Treasury yields with the end of quantitative easing is a concern for many buyers of Latin American bonds, as the withdrawal of liquidity is likely to uncover vulnerabilities that have persisted in the region. The end of quantitative easing will almost certainly slow the flow of money into the region, but how much of an impact this will have on local bond markets is hard to gauge.

Another concern is the end of the cycle of ever-rising commodity prices. In recent years, wagering that rising demand from China would continue to drive up prices for industrial commodities, investors poured money indiscriminately into companies in the energy and raw materials sectors. However, as demand from China slows, investors have already started to discrimate more and to focus on profitability, while money is beginning to shift from commodities to other sectors, such as technology.

In a changing external environment, it is safe to assume that investors will become more careful and discriminating, and will thus tend to differentiate more as well. Countries may need to focus on structural overhaul in order to be viewed as safer long-term bets. Corporate and sovereign issuers have taken advantage of the unprecedented demand in international capital markets, but caution must be exercised for a sudden change in the global backdrop.

Finally, following the past decade of growth, some of the competitive advantages of Latin American markets relative to developed markets have

started to erode. Financial valuations appear to be converging in emerging and developed markets, and domestic emerging market currencies seem less competitive than they used to be, which could reduce the diversification benefits of allocating to emerging markets. In this new context, investors may need to balance both macroeconomic and microeconomic factors when looking for investment prospects. This marks a new stage for the region in its long journey towards increased access to international debt markets: while remaining watchful of macroeconomic and policy risks, new investment opportunities will increasingly be found at the sector or industry level.

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## **Debt financing rollercoaster**

Latin American and Caribbean access to international bond markets since the debt crisis, 1982-2012

Inés Bustillo Helvia Velloso

This publication examines how external debt financing has evolved in the past three decades (1982-2012). It looks back 30 years and analyses the Latin American and Caribbean region's trajectory from the unique perspective of access to international financial markets. As the title implies, this trajectory has been a rollercoaster ride, with many ups and downs, and moments of anticipation and panic.

The developments of the past three decades as described in this book suggest that more widespread and cheaper access to international capital markets can play a role in the long process of achieving sustainable growth with equality, by broadening the options for financing investment and social initiatives.

Despite the lessons learned and the progress over this period, many challenges remain. Access to external debt financing is not universal and, despite increased resilience, vulnerability to external financial shocks can still be a threat. Moreover, the financial and economic advances of the past 30 years, and particularly of the past decade, have not brought about changes in the region's production structure. Structural change should be at the heart of a long-term growth process to make equality a reality.



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