

## International government debt denominated in local currency: recent developments in Latin America<sup>1</sup>

*Governments in Latin America have traditionally faced significant difficulties in issuing debt denominated in local currency in international markets. However, three countries in the region have recently issued this type of debt, perhaps signalling a permanent change in the manner in which Latin American borrowers tap international bond markets. Nonetheless, the degree to which issuing international debt in local currency complements the development of domestic debt markets remains to be seen.*

*JEL classification: E440, F340, G150, H630, O160.*

Governments in emerging markets can finance themselves domestically or internationally and in domestic or foreign currency. In Latin America, around two fifths of government bonds have been issued internationally, and virtually none of this is denominated in local currency. The fact that dependence on foreign currency borrowing contributes to currency mismatches and can make countries more vulnerable to crises in the event of adverse external shocks is by now well known.

Even as governments in Latin America have increased the size of their domestic bond markets, international issuance in local currency has remained modest. However, three countries have recently issued external debt denominated in local currency: Uruguay in 2003 and 2004; Colombia in 2004 and 2005; and, more recently, Brazil in September 2005. These debt issues have attracted the attention of policymakers and financial markets alike and represent an important change in the manner in which borrowers from these countries seek access to foreign investors.

This special feature focuses on the recent issuance by Latin American sovereigns of international debt denominated in local currency. It starts with a review of the specific characteristics of the securities issued. Next, it discusses critical changes in structural and cyclical factors that supported the issuance of these bonds. The third part of this feature assesses the prospects for such bonds to become a permanent fixture of the funding environment for these

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economies. The fourth section reviews their potential impact on the development of domestic bond markets in the region. A final section offers some concluding remarks.

### Sovereign global bonds denominated in local currency

The difficulties some countries encounter in borrowing abroad in their own currency have often been referred to in the academic literature as “original sin”, which suggests deeply rooted structural shortcomings as well as intrinsic characteristics of the global financial system.<sup>2</sup> Indeed, as noted above, Latin American sovereigns have only rarely borrowed in global markets in their own currency. Yet, over the past few years, three Latin American sovereigns have sought to break with this tradition.

In October 2003, Uruguay issued UYU 7.3 billion (\$290 million) worth of global bonds denominated in domestic currency as part of its debt restructuring programme (Table 1). These bonds are indexed to domestic inflation with a 10.5% coupon and have principal and interest settled in US dollars.<sup>3</sup> In August 2004, a new issue of global bonds was made for UYU 8.2 billion (\$250 million), this time with no inflation indexation. The issue turned out to be very costly for a bond with such a short maturity (two years), as its coupon exceeded 17%.

In Colombia, the government issued COP 954.2 billion (\$375 million) in November 2004, also settled in US dollars. The bonds (TES Global) were issued on very favourable terms for the borrower, as reflected by a coupon of 11.75% and a maturity of over five years. The demand for these bonds was strong, with subscriptions reaching \$1.1 billion. US investors reportedly purchased 65% of the bonds, Europeans 30% and Latin Americans 5%. The success of the issue was further reflected by its reopening in January 2005 for COP 293.7 billion (\$125 million). Both tranches of this bond were issued below comparable costs in the domestic bond market (by 50 and 31 basis points, respectively). In February 2005, a new issue was made on very similar conditions but with a longer-term maturity (10.7 years). The cost of external financing was again more favourable than domestic financing (20 basis points below the extrapolated cost of similar paper issued in the domestic market).<sup>4</sup>

More recently, in September 2005, Brazil followed the example of Uruguay and Colombia by issuing BRL 3.4 billion (\$1.5 billion) worth of global bonds with a maturity of over 10 years and a 12.5% coupon. These bonds, like the others described above, have interest and principal settled in US dollars. The

Global bonds in local currency that are settled in US dollars ...

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<sup>2</sup> According to proponents of the concept, original sin can have two dimensions: an international one that refers to an inability to borrow abroad in local currency, and a domestic one that refers to an inability to borrow domestically at long-term fixed rates. See Eichengreen et al (2005).

<sup>3</sup> Before being converted into and paid out in US dollars, the redemption amount of the bonds in Uruguayan pesos will be determined in accordance with changes in inflation-indexed monetary units (UI) from the time of issuance to the date of payment of the redemption amount. Similar calculations apply to interest payments at the rate stated over the cover.

<sup>4</sup> As reported by the Ministry of Finance and Public Credit of Colombia in the corresponding press release. See [www.minhacienda.gov.co](http://www.minhacienda.gov.co).

Selected international government debt in local currency						
Country	Issue date	Maturity date	Amount issued <sup>1</sup>	Coupon rate	Rating: Moody's/ Fitch/S&P	Market
Argentina	Dec 1996	Dec 1998	250	8.75	Not available	Eurobond
Argentina	Feb 1997	Feb 2007	500	11.75	Ca/D/D	Private placement
Argentina <sup>2,3</sup>	Jun 1997	Jul 2049	500	8.75	WR/D/NR	Private placement
Argentina <sup>3</sup>	Jul 1997	Jul 2049	500	8.75	WR/D/NR	Eurobond
Argentina <sup>4</sup>	Jun 2001	Sep 2008	931	12.00	Ca/NA/D	Global
Brazil	Sep 2005	Jan 2016	1,479	12.50	B1/NA/BB-	Global
Colombia <sup>5</sup>	Nov 2004	Mar 2010	500	11.75	Ba2/BB/BB	Global
Colombia	Feb 2005	Oct 2015	325	12.00	Ba2/BB/BB	Global
Uruguay <sup>6</sup>	Oct 2003	Oct 2006	290	10.50	B3/B/B	Global
Uruguay	Aug 2004	Feb 2006	250	17.75	B3/B/B	Global

Note: A private placement avoids the cost of registration with the Securities and Exchange Commission (which is required for a global issue), and has more restrictive protective covenants that are easier to renegotiate in the event of a default. Also, the cost of distributing bonds is lower.

<sup>1</sup> Calculated using the monthly average exchange rate when official numbers were not available; in millions of US dollars. <sup>2</sup> Issued under Rule 144A. <sup>3</sup> Offered in exchange for new debt. <sup>4</sup> Issued in exchange for eligible Argentine peso bonds. <sup>5</sup> This issuance was reopened in January 2005 for an additional amount of \$125 million. <sup>6</sup> These bonds are indexed to inflation and contain collective action clauses.

Source: Bloomberg. Table 1

Brazilian global issue was a successful placement as it was oversubscribed several times and the distribution was truly international, being purchased mainly by investors from Europe and the United States. The issue also extended the maturity of the yield curve for real-denominated fixed rate government debt to over 10 years. In the domestic market, it only goes up to seven years.

... transfer currency risk to investors while freeing them from convertibility risks

The Brazilian and Colombian issues are of particular interest for several reasons. First, in contrast to Uruguay's, they were not the result of a debt restructuring process. Second, the securities have relatively long maturities. Third, the bonds are not indexed to inflation, but denominated in local currency at a fixed interest rate, transferring both inflation and exchange rate risk from the government to investors. At the same time, in common with the Uruguayan issue, being settled in US dollars, the securities free investors from any *convertibility risks* associated with exchange controls.<sup>5</sup>

## Supporting factors

Past financial crises forced governments to find alternatives for financing

What made these bond issues possible? To some extent, the governments have had little choice but to explore new financing alternatives as a result of financial stress. In the past, countries that gradually overcame difficulties in

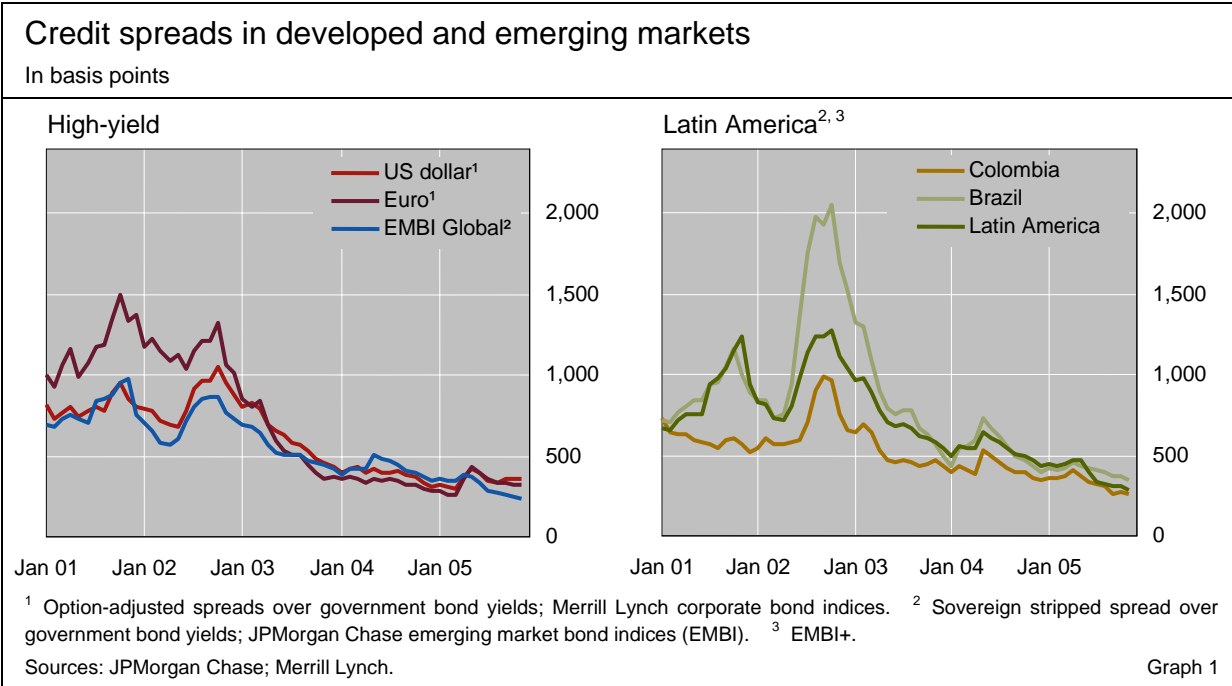
<sup>5</sup> Colombia recently adopted administrative controls that require a minimum holding period of one year for new short-term portfolio inflows from abroad. The measure took effect on 15 December 2004 and is still in place.

issuing local currency debt did so after significant shocks that encouraged them to bear the high startup costs of issuing in local currency.<sup>6</sup> In the cases at hand, the financial turmoil of the late 1990s and early 2000s forced the governments to search for alternative sources of financing to reduce their external vulnerability. Since the crises, the authorities have moved towards issuing debt in international markets with longer maturities, have avoided refinancing problems related to the bunching of maturities, and are now gravitating towards local currency issuance to avoid currency mismatches.

The crises also gave impetus to domestic structural improvements that attract investors. Brazil and Colombia furthered key economic and institutional reforms that were initiated in the early 1990s, and have made significant progress in adopting a flexible exchange rate regime and a credible inflation targeting scheme.<sup>7</sup> Major reforms have also been implemented in Uruguay since the debt restructuring of the early 2000s that have improved the economic and financial profile of the country.

Reforms and improved fundamentals attract investors ...

Structural changes on a global level have also facilitated international issuance in domestic currency. For one, the trend towards global disinflation has supported the efforts by emerging markets to control inflation, and the perceived risks associated with high inflation in emerging markets appear to be



<sup>6</sup> Bordo et al (2005) indicate that, in Canada's case, the shock was World War II. For Australia, New Zealand and South Africa, it was the breakdown of the Bretton Woods system with the advent of nominal floating and the end of capital controls. For measures of the aggregate currency mismatch of a country's assets and liabilities as an indicator of a country's vulnerability to crisis, see Goldstein and Turner (2004).

<sup>7</sup> The building-up of a credible monetary policy is an essential element of these reforms. Jeanne (2003) has argued that monetary policy credibility is a key determinant of the currency denomination of debt.

Macroeconomic indicators for Brazil, Colombia and Uruguay 2000–04						
	Brazil		Colombia		Uruguay	
	2000	2004	2000	2004	2000	2004
Real GDP <sup>1</sup>	4.4	4.9	2.9	4.0	-1.4	12.0
Consumer prices <sup>1</sup>	7.0	6.6	9.2	5.9	4.8	9.2
Budget balance <sup>2, 3</sup>	3.5	4.6	-6.8	-4.5	-4.0	-2.4
Current account <sup>2</sup>	-4.0	1.9	0.9	-1.0	-2.8	-0.8
Real effective exchange rate <sup>4</sup>	83.3	67.1	100.8	92.6	114.1	97.2
External debt <sup>2</sup>	39.5	36.4	43.1	41.1	72.7	99.3
Foreign exchange reserves <sup>5</sup>	32.5	52.7	8.4	12.8	2.4	2.5

<sup>1</sup> Year-on-year changes, in per cent. <sup>2</sup> As a percentage of GDP. <sup>3</sup> Primary balance. <sup>4</sup> 1995 = 100.  
<sup>5</sup> In billions of US dollars.  
Sources: IMF; IIF; national data. Table 2

declining. Meanwhile, the increasing integration of emerging and developed financial markets has broadened the range of investors investing in emerging market securities.<sup>8</sup>

... as do favourable cyclical factors ...

Other factors, more cyclical in nature, have also been supportive. An important global development has been the combination of the low level of interest rates in developed economies and abundant liquidity in financial markets. This has resulted in a willingness on the part of financial market participants to accept greater risk across a variety of instruments, including emerging market debt. Indeed, spreads on the debt of both developed country corporate and emerging markets have been in secular decline since 2002. Spreads for emerging market sovereign debt – including Latin America – have fallen to historically low levels over the last couple of years (Graph 1).

Another, probably largely cyclical, factor that has attracted investors has been the sustained exchange rate appreciation in Latin America. This appreciation has been magnified by international developments such as the recent increases in commodity prices and the weakness of the US dollar, together with the improved fundamentals of these economies (eg current account), all of which have a strong cyclical component.<sup>9</sup>

... but improved fundamentals are not sufficient to spur local currency debt issuance

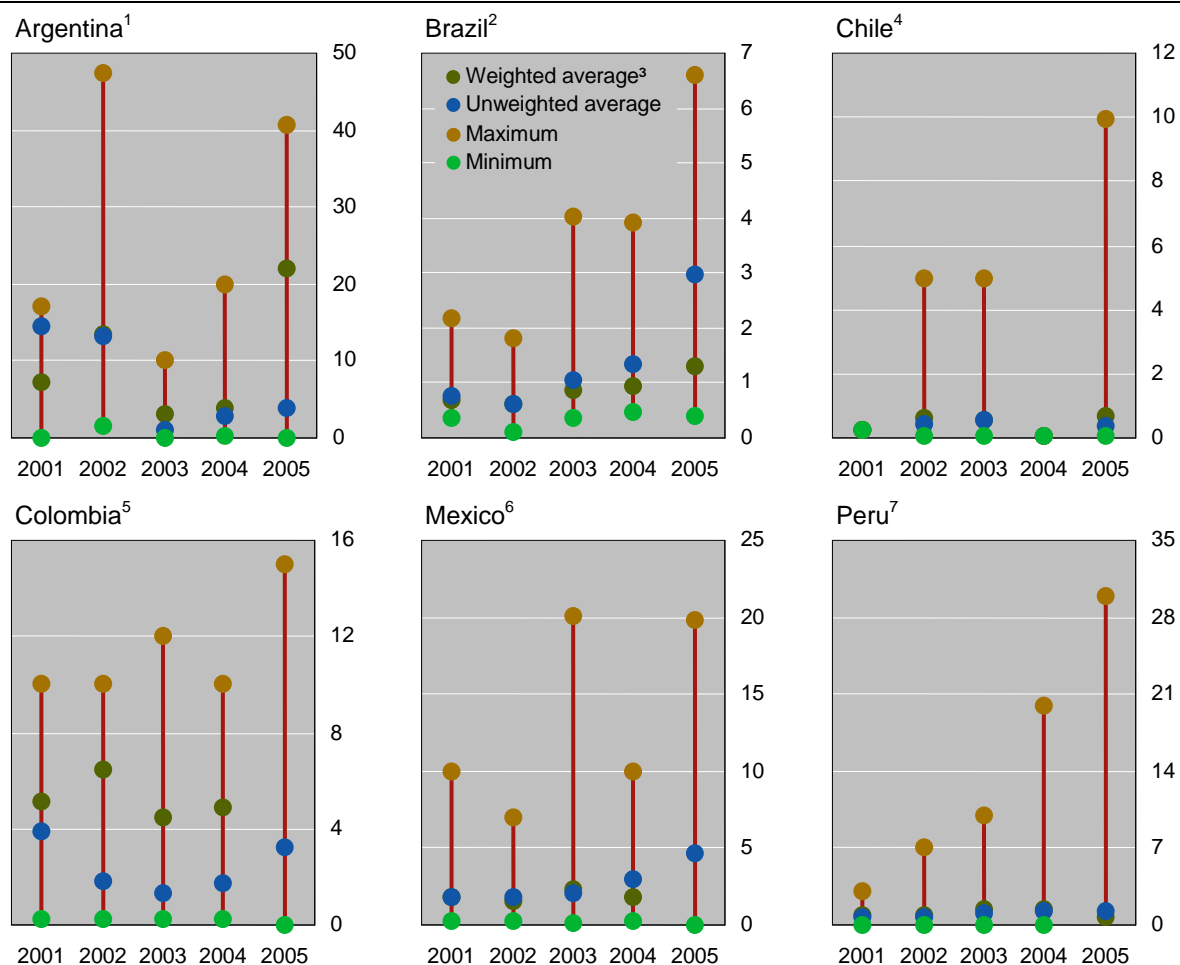
Nevertheless, a puzzle remains. The improvement in the fundamentals for the three countries in our sample (Table 2) was not noticeably better than in those of most other economies in the region that have not issued global bonds in local currency. The cases of Chile and Peru, where macroeconomic conditions have also improved significantly, suggest that improved fundamentals and a supportive external environment are not sufficient to spur global debt issuance denominated in local currencies. For Chile, there was

<sup>8</sup> See Wooldridge et al (2003) for a discussion of the changing links between mature and emerging financial markets.

<sup>9</sup> Cohen (2005) investigates the determinants of the currency denomination of international debt issuance and finds that there is more issuance in a given currency when the currency is strong relative to historical averages and when long-term interest rates in that currency are high relative to those available in other major currencies.

## Maturities of new domestic government bond issues in Latin America

Maturities at issue in years



<sup>1</sup> Treasury bills and bonds, and central bank securities; in 2002, most of the issues were placements related to the crisis. <sup>2</sup> LTN issues. <sup>3</sup> Weighted by the amounts. <sup>4</sup> Central bank issues. <sup>5</sup> TES issues. <sup>6</sup> Treasury bonds, savings protection bonds, udibonos and cetes. <sup>7</sup> Certificates of deposit, Treasury bills and government bonds.

Sources: Bloomberg; national data.

Graph 2

probably little need to experiment with new debt instruments as the country had maintained fiscal surpluses for years. In Peru, government officials focused rather on developing the local bond market in domestic currency, with the added aim of extending the maturity of the yield curve (Graph 2). In addition, both Chile and Peru have regulations that make it easier for foreign investors to access the domestic market than in Brazil or Colombia, which leaves local currency global bonds less attractive on a relative basis.

### The sustainability of recent trends

Are global issues of local currency denominated bonds here to stay in the region? On the face of it, there would appear to be considerable room for growth. For Brazil, real-denominated global bonds represent just 2% of total outstanding international government debt, while for Uruguay the share of peso-denominated debt in total international debt is only 4.8%. Despite the

Room for growth in the issuance of these bonds ...

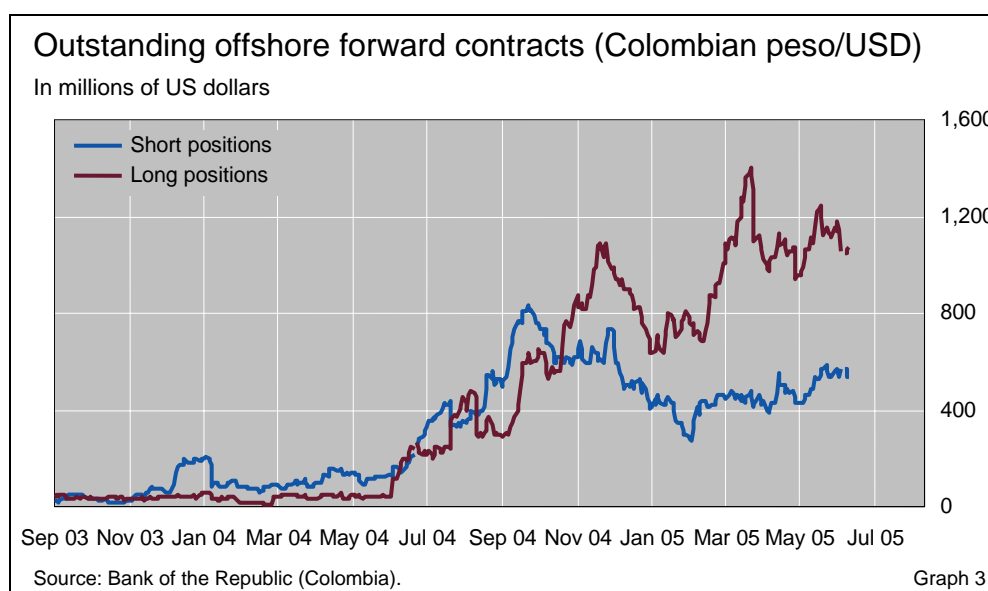
positive reception given to Colombian bonds, they still represent only 7% of the country's outstanding external government bond debt.

Yet, even given this potential, it remains unclear whether the recent trend towards global issues in local currencies will be permanent or transitory. The ability of a country to issue such debt in international capital markets at a given point in time does not guarantee a similar ability to do so in the future. For instance, Argentina issued a number of bonds denominated in local currency during the 1990s (Table 1), including \$500 million worth of bonds in 1997, denominated in pesos with a 10-year maturity that had no indexation at all. Though many might have argued at the time that access to international markets was no longer a problem for Argentina, it became much more difficult in the wake of the Russian government default in 1998.

Still, it is likely that increased commitment to more flexible FX regimes bodes well for the sustainability of this type of issuance. All three countries in our sample are in the process of consolidating a liberalised monetary and financial regime together with flexible and market-determined exchange rate policies. Floating regimes expose investors to higher short-term volatility but may lower future risks and vulnerabilities; in contrast, fixed regimes eliminate short-term volatility but carry the risk of sudden devaluation. In addition, currencies that are not fixed (or quasi-fixed) to the US dollar might offer greater diversification possibilities than those with virtual pegs.<sup>10</sup>

At the same time, it may be necessary to develop hedging markets to issue local currency denominated global bonds on a significantly larger scale.<sup>11</sup>

... though historical precedent provides no guarantee



<sup>10</sup> McCauley and Jiang (2004) analyse how local currency bond markets may fit in a global bond portfolio, and find that Asian local currency bonds offer scope for diversification. Turner (2005) reports correlations for monthly returns of 0.4, 0.14, 0.42 and 0.43 between a portfolio of Asian local currency bonds and dollar-denominated funds in emerging markets, Japan, the United States and Europe, respectively.

<sup>11</sup> Burger and Warnock (2004) argue that US-based investors that participate in local currency bond markets worldwide have historically avoided returns with high variance and negative skewness. For these investors, currency hedges play a key role since the variance of local currency bond returns is dominated by exchange rate risk volatility. In fact, Bordo et al (2005)

Though Uruguay has no formal market whatsoever, there is a well established and liquid non-deliverable forward contracts market for the Brazilian real. The Colombian peso has a liquid non-deliverable forward market (onshore and offshore), which at present is concentrated on short-term maturities. Interestingly, the turnover of the Colombian peso in the forward market increased significantly following the November 2004 issue (Graph 3), which suggests that local currency issuance can *stimulate* markets for hedging currency risk.

## Implications for the development of domestic bond markets

Latin American domestic bond markets are not particularly large (\$651 billion in 2004) compared with those of other emerging market regions of the world (Table 3). So why did certain governments prioritise the issuance of global bonds denominated in local currency rather than the development of their domestic markets?

Indeed, there are a number of respects in which issuance of local currency denominated global bonds might be detrimental to domestic bond market development. In particular, liquidity is essential for the development of domestic bond markets, and international issues of debt in local currency might fragment that liquidity.<sup>12</sup> Nonetheless, the three countries analysed in this feature seem to have been swayed by various other considerations.

In Uruguay's case, the decision was mostly driven by the debt restructuring process, where the principal objective was to reduce the debt burden over time. Domestic issuance was simply not an option in the aftermath of financial crisis, and global issues provided a reference on which to build future markets.

In Brazil and Colombia, institutional factors restricted the entry of foreign investors into local bond markets, so "going global" in local currency may have provided a "second best" solution for broadening a country's pool of investors, and reducing the risks of currency mismatch. In many cases, global bonds have allowed foreigners to short-circuit the impediments to foreign purchases in local markets.<sup>13</sup> For instance, the global bonds considered in this note all fall under the jurisdiction and laws of the State of New York, which make them

Issuance of global bonds in local currency might be detrimental to the domestic bond market ...

... but still optimal given impediments to foreign purchases of domestic securities

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stress that the innovation of FX derivative instruments was essential for former British dominions to issue external debt in their own currencies.

<sup>12</sup> McCauley and Remolona (2000) argue that a larger outstanding stock of publicly issued central government debt results in higher turnover in cash and futures trading and this, in turn, in better liquidity of government bond markets. Jiang and McCauley (2004) also find size to matter for liquidity in the context of Asian local currency bond markets.

<sup>13</sup> In Brazil, investment can only take place after registration with the Brazilian Securities and Exchange Commission and with the central bank. In addition, a legal representative is required. Investment is subject to 15% capital gains tax; other taxes may also apply in some cases. In Colombia, several restrictions apply for foreigners willing to invest in paper in the domestic market. For instance, an investment trust must be established, taxes must be paid depending on the tax status and investment types of the investor (currently, income tax rates go up to 35%; however, a 10% surcharge applies which raises the maximum rate to 38.5%; a 0.4% financial transaction tax is also in place), and since late 2004 there are capital controls that establish a minimum period of one year for all portfolio investment.



Size of local debt securities markets in Latin America in 2004				
Amounts outstanding				
	Government		Total	
	In billions of US dollars	As a percentage of GDP	In billions of US dollars	As a percentage of GDP
Argentina	9.6	6.3	24.3	16.0
Brazil	295.9	49.0	371.6	61.5
Chile	20.0	21.2	41.8	44.4
Colombia	29.6	30.4	30.2	31.0
Mexico	153.1	22.7	176.9	26.2
Peru	4.0	5.8	7.1	10.3
Latin America <sup>1</sup>	512.2	30.3	651.8	38.5
<i>Memo:</i>				
<i>Czech Republic</i>	<i>58.0</i>	<i>54.2</i>	<i>65.8</i>	<i>61.5</i>
<i>Korea</i>	<i>170.5</i>	<i>25.1</i>	<i>567.6</i>	<i>83.4</i>
<i>Indonesia</i>	<i>51.0</i>	<i>19.8</i>	<i>57.9</i>	<i>22.5</i>
<i>Philippines</i>	<i>24.9</i>	<i>29.4</i>	<i>25.2</i>	<i>29.7</i>
<i>South Africa</i>	<i>78.3</i>	<i>36.7</i>	<i>104.6</i>	<i>49.1</i>

<sup>1</sup> Sum of countries above.  
Sources: IMF; BIS.

Table 3

more attractive for international investors relative to domestic market bonds in the event of default. In addition, as they are issued in international markets, investors avoid any constraints (eg registration requirements, withholding taxes and capital controls) associated with purchases of domestic securities.

## Conclusion

The successful issuance of international debt denominated in local currency by Brazil, Colombia and Uruguay has offered important benefits for both governments and investors. Governments benefit from the improvement in the currency composition of their external debt and from the reduction of *currency risk*, thus diminishing any vulnerability associated with currency mismatches. Investors, in turn, benefit by broadening their portfolio and securing higher potential returns while avoiding any costs associated with the purchase of local currency securities in domestic markets. In addition, since settlement is in US dollars, investors avoid *convertibility risks* associated with the imposition of capital controls.

At the same time, there is no guarantee that the recent increase in this sort of issuance by sovereigns in the region reflects a permanent trend. History provides many examples of rapidly shifting preferences on the part of international investors. The degree to which the global market might be a stable source of local currency funding in turbulent times remains to be seen.

A major question going forward is the extent to which global bond issuance in local currency complements the development of the domestic bond market. On the one hand, the historical experience of some countries suggests that domestic markets can develop without the help of global issuance in local

currency. In fact, issuing global bonds could conceivably hinder the development of the domestic bond market if they limit the economies of scale in liquidity. However, in the presence of institutional impediments to foreign investment in domestic markets, local currency global bonds may provide a second best solution that helps to broaden the pool of investors and extend the maturity of the local currency yield curve, at least until such obstacles are eliminated.

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