

## Debt Management in Latin America How Safe Is the New Debt Composition?

Eduardo A. Cavallo

### Inter-American Development Bank

Department of Research and Chief Economist

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#### Abstract<sup>1</sup>

While public debt ratios in Latin America increased in 2009 amid the global financial crisis, they remain below levels reached following the Asian and Russian crises of the late 1990s. Moreover, debt composition has continued to shift towards "safer" debt (domestic debt with a higher prevalence of domestic currency liabilities). However, the current debt structure poses risks and policy challenges that should not be overlooked. Reviewing the latest available data on debt levels and composition for the region's largest countries, this brief concludes that debt managers should avoid complacency in thinking that the region is completely redeemed from old sins. Particularly overlooked is that there does not yet exist in the region a large investor base for debt denominated in domestic currency at fixed nominal rates and reasonably long maturities.

**Keywords**: Debt management, Public debt, Living with debt **JEL Classification:** H63

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#### **1. Introduction**

Public debt levels as a share of GDP declined substantially in the Latin American region during the five years preceding the great global crisis of 2008 and 2009. Data available for the largest seven countries in the region (LAC-7)<sup>2</sup> show that the ratio of total public debt to GDP fell from 53 percent of GDP in 2003 to 32 percent in 2008, reaching the lowest level since the late 1990s, when the Asian and Russian financial crises wreaked havoc on financial stability in many parts of the emerging world, including Latin America. However, the declining trend was partially reversed during the peak of the crisis. In 2009, average ratios of public debt to GDP in the region reached 36 percent, approximately the same level as in 1998 (Figure 1).



Figure 1.

*Source*: Latin Macro Watch Database (LMW) and data from national public sources. Figures for 2009 are provisional.

Despite the increase in public debt ratios during 2009, debt composition has continued to shift towards domestic debt. Since the late 1990s, there has been a steady increase in the share of domestic vis-à-vis external debt.<sup>3</sup> Figure 2 shows that domestic debt now accounts for

<sup>&</sup>lt;sup>2</sup> LAC-7 consists of the seven largest countries in the region, namely, Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela, which account for 90 percent of Latin America's GDP.

<sup>&</sup>lt;sup>3</sup> Domestic debt refers to the liabilities issued under national law and subject to domestic courts' jurisdiction. External debt is issued in a foreign country and subject to that country's court jurisdiction. The difference between the two types of debt has narrowed considerably in recent year, as the holders of bonds issued in domestic markets may be international investors and domestic investors may hold bonds issued in international markets.

approximately 63 percent of total public debt in LAC-7, almost 13 percentage points higher than in the year 2000.



Figure 2.

*Source*: Latin Macro Watch Database (LMW) and data from national public sources. Figures for 2009 are provisional.

This change in turn has implications for the currency composition of debt. Unlike external debt, which is issued predominantly in foreign currencies, domestic debt includes a greater share of local currency (IDB, 2007). Consequently, as shown in Figure 3, the ratio of foreign currency debt as a share of total public debt has decreased steadily from 64 percent in 1997 to 37 percent in 2009. Furthermore, the ratio for 2009 is the same as in 2008. This suggests that not even the cheap financing in US dollars available amidst the unprecedented injection of dollar liquidity into financial markets by the Fed since the outbreak of the crisis seems to have persuaded debt managers in the region to increase borrowing in foreign currencies. The unchanged ratio further suggests that much of the increase in the financing needs observed during 2009 has been satisfied through domestic-currency issuances in local markets.





*Source*: Latin Macro Watch Database (LMW) and data from national public sources. Figures for 2009 are provisional.

#### **2. Implications**

The shift in the composition of public debt in recent years has led some observers to conclude that Latin American countries are gradually reducing their balance-sheet vulnerabilities. This is because the new debt structures (based on domestic debt with a higher percentage of domestic currency) are less sensitive to an external credit crunch than structures based on foreign currency-denominated external debt that were prevalent until recently. Seen through the lenses of the crises of the 1990s, this change represents a step in the direction of "safer" debt composition. When foreign currency external debt represents a lower share of total debt, the effects of the typical combo shock of "sudden stop-cum-real exchange rate depreciation" on countries' solvency are likely to be reduced.

However, the current debt structure poses risks and policy challenges that should not be overlooked. The purpose of this note is to explore its implications for debt management. We begin by suggesting that the current debt composition is the result of choices made by debt managers based on a combination of two exogenous factors: (i) the benevolent external environment faced by countries in the period 2003-2007 and (ii) the short duration of the reverberations from the great crisis of 2008/2009 in the region. Because exogenous factors are by definition outside the direct control of local policymakers, debt managers should avoid complacency in thinking that the region is completely redeemed from old sins. Next we discuss

the pending challenges in the quest for a permanently safer debt environment in the Latin American region.

#### **3. A Paradigm Shift?**

Before the beginning of the great crisis of 2008/2009, it could be conjectured that Latin America's improved debt composition resulted in part from the highly favorable external environment that the region faced during the preceding expansion phase of 2002 to 2007:<sup>4</sup> it is easier to issue debt at longer terms and fixed rates when interest rates are expected to fall, and to issue in domestic currency when the currency is expected to appreciate. The shift towards "safer" forms of debt in the region coincided with a phase of historically low international interest rates and abundant global liquidity. Global investors were searching for relatively high yields, and emerging market debt instruments of all kinds provided attractive investment opportunities. Nevertheless, if expectations regarding the direction of interest rates and the exchange rate changed, adjustments in debt composition across the abovementioned dimensions could tilt towards riskier debt very quickly.

Those expectations did change as the financial crisis intensified in the last quarter of 2008. The collapse of Lehman Brothers in September 2008 marked the beginning of a phase in the global crisis in which international and financial conditions suffered a severe deterioration. For the region it marked an abrupt end to the expansionary cycle.<sup>5</sup>

The good news is that the available high-frequency data for LAC-7 countries show that debt composition did not change significantly during the global financial crisis. This is remarkable, as experience with past episodes of global financial duress suggests that debt composition can very quickly mutate into more precarious structures.<sup>6</sup> However, part of this success must be attributed to the fact that the duration of the crisis—at least in regard to the financial stress felt in the region—was relatively short-lived.

The financial stress began to recede in the second quarter of 2009, and by the end of the year the financial markets appeared to have recovered a sense of normalcy. The average spread for sovereign debt instruments issued by LAC dropped from 914 basis points in October of 2008

<sup>&</sup>lt;sup>4</sup> This argument was forcefully made in IDB (2008)

<sup>&</sup>lt;sup>5</sup> See IDB (2009).

<sup>&</sup>lt;sup>6</sup> Examples of the speed at which debt composition can change on the eve of a sudden stop are provided by Mexico in 1994 and Brazil in 1998 and were extensively discussed in (IDB, 2008).

to 375 in December 2009. In all countries in LAC for which data are available, spreads have dropped considerably through December, and in most cases they are currently at levels only slightly above those prevailing before the crisis.

If the effects of the global credit crunch had turned out to be more persistent for the region, the story could have been different and we may have observed a reversion of debt structures towards more risky compositions. To illustrate this point, we perform a simple counterfactual exercise using high-frequency (i.e., monthly) debt data available for Brazil. The Brazilian Finance Ministry and Central Bank publish detailed monthly data on domestic and external debt composition on their websites, including maturity, duration, currency composition and indexation, with data availability extending all the way back to the mid-1990s. Using these data we compute the simple historical correlation between debt composition and a measure of global risk aversion-JP Morgan's EMBI-Global spreads. The results reveal a significant negative correlation between debt maturities (also duration) and the measure of global risk, and a positive correlation between foreign-currency debt (and Selic-indexed debt) and the same measure of global risk.<sup>7</sup> While historical correlations are no proof of causality, they are nonetheless strongly suggestive. The counterfactual exercise consisted of using this information to answer the following question: Assuming that the historical correlation between these variables is stable (admittedly a very strong assumption), and that the EMBI spreads remain at crisis-peak levels for a long time (i.e., there is a protracted crisis), what is the predicted debt composition for Brazil at crisis-peak spreads levels? The answer, shown in Table 1, suggests a sharp reversion to riskier debt levels along all dimensions of debt composition.

	Actual value on December 2008	Predicted at crisis spread levels
Maturity (months)	36.3	15
Duration (months)	25	7
Share of domestic debt in foreign currency	1.1%	22%
Share indexed to Selic	36%	68%
Share of Domestic Debt in Local Currency	32%	4%

**Table 1. Counterfactual Debt Composition Exercise** 

<sup>&</sup>lt;sup>7</sup> Foreign currency-indexed debt and SELIC-indexed interest rate (the overnight reference interest rate) are considered "risky" as they are vulnerable to variations in the exchange rate (in the first case) or in overnight domestic interest rates (in the second case), which are known to be very volatile during sudden stops.

As it is virtually impossible to know what debt managers would have done under different scenarios, the exercise above represents a thought experiment. Nonetheless, debt managers (like all economic agents) respond to incentives, and therefore the portfolio composition of debt depends on the relative costs of the different financing options available to them at the time of issuance. The trade-offs debt managers face, moreover, are oftentimes very complex. For example, maintaining high shares of domestic currency debt amid a protracted crisis might require employing short-term maturities. If the shock to the region's economy is an increase in local currency funding costs, concentrating exposure on the maturity side may not prove to be a prudent bet. In contrast, re-dollarizing debts to lower interest rates and extending maturities may prove to be harmful if exchange rates depreciate later. Inflation-indexed instruments provide an alternative that can help improve the terms of the trade-off between currency denomination and maturity, as it may be possible to issue long-term inflation-indexed instruments at moderate costs, because investors are protected from the risk of unexpected inflation (IDB, 2007). Up to a few years ago, only Chile had made extensive use of price indexation of nominal debt. More recently, other countries in the region have begun to experience success in using this tool proactively. Still, this approach will continue to be feasible only if the integrity and credibility of the underlying indices is maintained despite momentary temptations of short-term gain. To the extent that the price index is measured with long lags or mismeasured, it will not fully protect investors from the underlying risk, and the cost of issuing indexed instruments will consequently soar.8

#### 4. How "Safe" Is the New Debt Composition?

The shift in the composition of public debt portfolios in recent years has led some observers to conclude that Latin American countries are gradually reducing their vulnerabilities in relation to the composition of debt. In the previous section we argued that, despite the crisis, there has been no reversion to more precarious debt structures. However, this time around we were lucky in part because the duration of the crisis turned out to be fairly short (the peak of financial stress for the region being felt between September 2008 and March of 2009). But what if we have to face a more protracted crisis in the future? Is the new debt structure really "safe"?

<sup>&</sup>lt;sup>8</sup> At the same time, efforts should be made to prevent financial indexation from spreading to indexation of public wages, pensions, and other contracts. This could risk repeating past experiences that led to stubborn inflation and inflexibility in relative prices that proved to be very costly to remove.

Often overlooked in these debates is the fact that there does not yet exist a large investor base in the region for debt denominated in domestic currency at fixed nominal rates and reasonably long maturities (IDB, 2007). This implies that the increase in the share of domestic debt issued in local currencies in recent years was in part possible through an increase in the presence of foreign investors in local securities markets. In the case of Brazil, for example, Borensztein and Loungani (2009) report that the net asset value of the total holdings of local securities by foreign investors increased from approximately \$50 billion in the 1990s to \$250 billion by mid-2008, a development that can increase liquidity pressures during a protracted sudden stop. While before (when debt composition was tilted towards external debt) attempts to liquidate positions by external investors remained circumscribed to the secondary debt markets and the liquidity crunch was limited to the rollover needs, a sudden stop might now trigger a selloff of domestic assets as foreign investors try to repatriate their holdings. Therefore, with the current financial structure, the potential sell-off of the domestic currency is the total investment position in domestic markets, albeit devalued by the crash in asset prices that is likely to take place.

Going forward, this suggests that the strategy for gaining access to long-term, fixed-rate, domestic-currency denominated debt hinges on the development of local bond markets that are underpinned by a stable local investor base rather than frugal foreign investors (IDB, 2007). Domestic institutional investors such as pension funds are increasingly forming the core of that investor base in many countries. In that respect, attempts by some governments to capture the resources of institutional investors through regulation, moral suasion or outright confiscation defy the effectiveness of any policy aimed at encouraging the development of domestic bond markets. Without a stable investor base, Latin America will remain vulnerable to swings in global financial markets despite the transformation of foreign currency-denominated external debt into domestic currency-denominated domestic debt.

As the share of domestic debt in total debt continues to grow, its evolution should be placed in historical perspective. Reinhart and Rogoff (2008) show that the issuance boom of domestic government debt in recent years is not something new or entirely different from past experiences. In Latin America in particular, domestic debt markets were dealt a severe blow in the 1970s and 1980s by many governments' propensity to inflate debt away. Before that, just like today, domestic debt accounted for the lion's share of total debt, and, even for long periods of

time, this debt carried a market interest rate. An interesting feature of the Reinhart and Rogoff study is the documentation of episodes of overt default on and rescheduling of domestic public debt. The evidence is that while this phenomenon appears to be somewhat rarer than defaults on external debt, it is still fairly common, suggesting that domestic debt is not totally safe. Furthermore, when overt default on domestic debt does occur, it appears to occur under situations of greater distress than pure external defaults—both in terms of an output collapse and a marked escalation of inflation. Thus, the region's governments should not take too much comfort in the increase in the share of domestic debt issued at market rates or assume that an old problem has now been permanently solved. The empirical evidence shows that the development of domestic debt markets is neither unprecedented nor exempt from change in the context of policy mismanagement.

Altogether, the evidence suggests that recent improvements in debt composition—and and the stability shown during the global credit crunch—should not be taken for granted. Governments need to remain alert in pursuing prudent debt management strategies (including debt reduction!) that prevent a repetition of past debt distress episodes while being alert to the potential fragilities of the new debt composition.

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