

CHAPTER 1

Introduction

A national debt, if it is not excessive, will be to us a national blessing.

—Alexander Hamilton (1755-1804)

The budget should be balanced, the treasury should be refilled, public debt should be reduced, the arrogance of officialdom should be tempered and controlled . . . lest Rome become bankrupt.

—Marcus Tullius Cicero (106-43, BC)

PUBLIC DEBT IS ONE OF THE MOST POWERFUL instruments of economic policy and, like a power tool, it can be used to efficiently achieve one's goals, but it can also cause severe injury.¹ Governments can issue debt to finance new investment in human and physical capital, to affect the use over time of a country's resources, to respond to cyclical downturns, or to meet the financing needs caused by exceptional events such as financial crashes or natural disasters. However, excessive public debt can also have long-lived negative consequences: it can create a burden on future generations, it may crowd out private investment, and it may increase a country's propensity for financial crises or inflation outbursts. Thus, it is not surprising that discussion on the causes and consequences of public borrowing was central in the economic debate even before Adam Smith officially gave birth to what is now called "economics."

In order to understand why countries borrow, it is useful to draw an analogy with the behavior of a family. Families borrow for essentially three reasons. First, they borrow to finance purchases that will yield services for an extended period of time. So, usually households borrow long term (with mortgages or college loans) to buy a house or finance an education, or borrow medium term (with car loans or consumer loans) to buy durable goods like automo-

¹ This report uses the terms "public debt" and "sovereign debt" interchangeably to define the total outstanding financial liabilities resulting from the public sector debt obligations of a country's government. Balassone, Franco, and Zotteri (2004) provide a concise survey of the history of the academic debate on the role of public debt.

biles or appliances. Along similar lines, governments borrow to fund long-term development projects, which could be either physical infrastructure (like roads and bridges) or human capital investment (like providing more schooling and better health services).

Second, households may decide to borrow in the face of a temporary negative shock. Suppose, for instance, that the head of a household is temporarily laid off from work but knows that he or she will resume employment with similar pay within a few months. Then, instead of drastically reducing living standards during the unemployment period, the household can smooth consumption by borrowing (probably short term) during the unemployment period. Alternatively, the household may suffer a large negative shock, like a costly health problem. In this case as well, it would not make much sense to finance all the expenses out of current income and would be optimal to borrow (probably at a longer-term maturity) to distribute these expenses over time. Along similar lines, a government may decide to borrow to maintain current spending without increasing taxes during periods of cyclical downturns or to finance the expenses brought about by natural or man-made disasters (such as hurricanes, earthquakes, or wars).

Finally, a household may decide to borrow to smooth consumption over time. Take, for instance, the case of a student who has just been accepted at a top medical school. This person will face several years of possibly no income (while studying) and then fairly low income (while in residency training), but after those years, this future doctor will presumably earn a relatively high income. Then, this person may decide that it is optimal to anticipate future consumption by borrowing during the study and residency years, and repaying once he or she takes a well-paid position as a medical doctor. Along similar lines, countries that expect to grow at a fast rate—perhaps because they have already started along a take-off stage of development—may decide to borrow to anticipate some of their consumption spending, effectively redistributing resources from future generations to the current one.

There are, however, several limitations to the analogy between households' and governments' borrowing decisions. First, while heads of a household may make some poor decisions, because they underestimate risks or suffer from myopia, for example, it is reasonable to assume that all their financial decisions aim at maximizing the family's welfare. In contrast, public policy decisions may be distorted by nonaltruistic politicians and special interest groups who are more concerned with their short-term objectives than maximizing social welfare. Politicians may worry only about their own popularity, which may increase in step with the size of the country's budget. So, when a household head decides to buy a new house, this is expected to be a good decision for the family as a whole. By contrast, when a politician decides to build a bridge in a particular region of his or her country, the true motivation may be to favor his or her own constituency or, even worse, to extract bribes from the companies that will build the bridge. The ability to issue public debt makes this problem worse, because it allows politicians to increase spending without immediately increasing taxes, and this may temper the resolve of citizens to monitor whether the additional spending is desirable. Furthermore, while personal debts cannot be inherited by future generations, which limits individuals' ability to borrow, large public debts are regularly passed on to future generations. This may be problematic, because future generations are not directly represented in the current decision-making process.

Second, households can often post appropriable collateral in order to borrow at more favorable terms and reduce credit risk, but this option is generally not available to sovereign

borrowers, because legal recourse for attaching the sovereign's assets is limited. More generally, personal bankruptcy and the restructuring of government debt which is the equivalent of a sovereign bankruptcy procedure are governed by different legal structures and confer different legal rights on creditors.²

Third, countries have greater capacity to adjust their revenue (through taxation) than households and hence, when faced with the need to finance a given expenditure, they have available to them a broader set of options than an individual does.

Fourth, countries are large players in markets—at least in domestic ones—and hence the spillovers from a country's debt policy are likely to be much larger than any repercussion from decisions of individual households. For example, when a household borrows to smooth consumption in response to a large personal shock, there is no aggregate effect on the economy of the country where the household is located. But when a government increases its borrowing by a significant amount, it will probably cause an increase in interest rates, which will affect private borrowers and financial institutions directly, and almost every sector of the economy indirectly.

In short, like any individual, governments can use borrowing to improve the general welfare by financing long-lived investments and preserving living standards through periods of temporary hardship. But unlike those of individuals, government borrowing decisions may be distorted by political biases and fuzzy property rights, and governments' imposing size implies that mistakes and misdeeds will have far-reaching consequences.

DOES PUBLIC DEBT MATTER?

In order to analyze whether debt matters, it is useful to separate spending from financing decisions. A benevolent government that needs to decide whether to increase public expenditure will need to follow two steps. In the first step, the government needs to evaluate whether the social return on a given spending decision is higher than the cost incurred. In the second step, the government needs to choose whether it is better to finance the expenditure by issuing debt or increasing taxes.³ The debate on whether debt matters should focus on this second step, rather than on whether the size and composition of public expenditure matters—a distinction that is often missed in public debates. Hence, this debate could also be framed in terms of a government's choice of increasing taxes and retiring debt or decreasing taxes and issuing new debt, for a given level of public expenditure.

So does debt matter? This seems to be a trivial question from today's perspective in Latin America and the Caribbean, but there is a 200-year-old result in economics known as "Ricardian equivalence" that states that under certain conditions, public debt does not matter.⁴ More precisely, for any given level of expenditure, the decision regarding whether to finance the expenditure through debt or taxes is of no economic consequence. While

² Interestingly, it has been noted that personal bankruptcy has more in common with sovereign bankruptcy than corporate bankruptcy does (see Bulow, 2002).

³ There are, of course, further decisions that involve the choice of the particular type of tax to be used or the structure of the debt to be issued.

⁴ Incidentally, Ricardian equivalence is similar to one of the main theorems in corporate finance (the Modigliani-Miller theorem), which suggests that a firm's decision on whether to finance its activity by issuing debt or equity is irrelevant for the firm's value.

Ricardian equivalence holds only under a set of relatively restrictive assumptions, it is an important concept for at least two reasons. First, it is supported by a small but prominent set of economists. Second, and probably more important, a good grasp of the conditions under which Ricardian equivalence may hold is useful in understanding why it does not hold in most cases—in other words, why debt *does* matter.

WHEN PUBLIC DEBT IS IRRELEVANT: RICARDIAN EQUIVALENCE

Ricardian equivalence takes its name from the nineteenth-century British economist David Ricardo, who first noted that a government's debt-financed tax cut will lead to higher taxes in the future and hence it will only postpone, not reduce, a country's overall tax burden.⁵ Aware of the unchanged tax burden, forward-looking individuals, rather than increasing consumption, will save all the additional income brought about by the tax cut to finance their obligation to pay future taxes. As a consequence, national saving, consumption, and economic growth will be unchanged by the government's tax cut. While this had been in the mind of economists since the work of Ricardo, the first full-fledged formal framework of Ricardian equivalence was developed in a seminal 1974 article by Robert Barro.⁶

Barro's formulation made it clear that there are three main necessary conditions for Ricardian equivalence to hold. The first necessary condition is the presence of forward-looking individuals characterized by intergenerational altruism. The argument goes as follows: one of the reasons why debt may matter is that it redistributes resources from future to current generations. However, Barro notes that people care about the well-being of their children and, as future generations are the children of the current generation (the argument applies, recursively, to grandchildren), people will incorporate future generations' welfare into their current consumption decisions, and hence debt will not lead to any intergenerational transfers.

A second necessary condition for Ricardian equivalence is the presence of perfect capital markets. As noted above, households with a rising income profile may choose to borrow when they are young and repay the debt when they are old. However, in the presence of imperfect capital markets, such households may be credit constrained and hence unable to borrow and consume as much as they would want when they are young. A cut in current taxes relaxes this constraint by increasing current disposable income and leads to higher consumption, in violation of Ricardian equivalence.

Finally, Ricardian equivalence holds in the presence of nondistortionary (lump sum) taxation. Barro himself in a 1979 article recognized that debt management matters when taxes are distortionary. Consider, for instance, a distortionary tax that reduces the incentives to work or invest, and assume that this distortion grows as the level of the tax increases.⁷ In this case, textbook public finance shows that the policy that minimizes distortions is "tax

⁵ This subsection draws from Elmendorf and Mankiw (1999), which provides a detailed description of Ricardian equivalence and also of the history of the idea.

⁶ Interestingly, Barro did not refer to his theorem as "Ricardian equivalence"; it was a subsequent 1976 article by James Buchanan that recognized that the idea went back to Ricardo.

⁷ For instance, in the presence of a 100 percent tax, nobody will work or invest, because everyone will know that all the income generated by their efforts will be appropriated by the government.

smoothing,” which implies keeping tax rates unchanged over time.⁸ As a consequence, any change in the tax-debt policy would have real effects and violate Ricardian equivalence.

WHEN PUBLIC DEBT MATTERS: THE CONVENTIONAL VIEW

Most economists and policymakers agree that Ricardian equivalence is unlikely to hold in practice and subscribe to what Elmendorf and Mankiw (1999) call the “conventional view” of public debt, which states that debt management has important effects both in the short and the long run.

According to the conventional view, a debt-financed tax cut has a positive effect on output in the short run and hence can be used to speed recovery from a recession. This positive effect requires two conditions. The first is that Ricardian equivalence does not hold, and hence the debt-financed tax cut leads to an increase in aggregate demand through higher household consumption. The second is that the economy is characterized by slow-moving prices and wages, and hence an increase in aggregate demand, rather than leading to an immediate jump in prices and wages, translates into higher output in the short run. The effect is different in the long run, when prices and wages are allowed to fully adjust to their equilibrium level. In this case, the available productive resources determine the level of output, and the debt policy described above will result in lower output, because it increases consumption and reduces saving, thus crowding out private investment and leading to lower capital accumulation.

WHAT IS THE STORY IN LATIN AMERICA AND THE CARIBBEAN?

While in developed countries the debate on the consequences of public debt has mostly focused on the trade-off between its expansionary effects in the short run and its contractionary effects in the long run, these are largely second-order problems in Latin America and the Caribbean, or in emerging markets more generally. The central issue in these countries is how to avoid the risks linked to macroeconomic volatility and financial crises.

Risky sovereign debt in an emerging economy also increases the cost of borrowing in international markets by private firms in those economies. The level of risk assigned to sovereign debt usually serves as a benchmark for the valuation of private debt in the country, and unlike in advanced economies, where sovereigns have the highest rating, sovereign ceilings make it difficult for private firms in emerging economies to borrow at lower rates than the sovereign. Thus, the negative spillovers of country risk are usually larger than the classic crowding-out effect emphasized in the literature that focuses on advanced economies.

Research focusing on developing and emerging market countries has also shown that higher levels of debt place substantial constraints on the conduct of an independent mon-

⁸ Consider the following experiment: a country has an income of 100, a public expenditure of 30, a tax rate of 30 percent, and no debt. Suddenly, the government decides to push taxes to zero and finance expenditure by issuing debt that pays an interest rate of 10 percent. In the short run, economic conditions are likely to improve, because lower distortionary taxes will lead individuals and entrepreneurs to increase labor supply and investment. However, in the next period, the government will either need to push taxes to 63 percent (in order to retire the debt plus interest issued in the previous period and finance current spending) or permanently keep taxes at 33 percent and keep rolling over the debt. As distortions are increasing with the level of taxation, this increase in taxation will have a negative effect which is larger than the positive effect of the original tax cut.

etary policy. This is especially the case when most debt is denominated in foreign currency, and an accommodating monetary policy may lead to currency depreciations and substantial negative balance sheet effects (Hausmann, Panizza, and Stein, 2001; Calvo and Reinhart, 2002). But domestic currency debt is not problem free. High levels of domestic currency debt reduce a central bank's ability to credibly commit to a policy of low inflation because they generate the temptation to inflate the debt, and by lowering the central bank's credibility capital (which in most developing countries is not high to start with), they further limit the country's ability to conduct a countercyclical monetary policy. In fact, most hyperinflation episodes have been rooted in a combination of irresponsible fiscal and monetary policy and high levels of debt (Dornbusch, Sturzenegger, and Wolf, 1991).

On the positive side, while high levels of public debt constrain policy, moderate levels of debt in the form of liquid government bonds can nurture the development of the private bond market by providing a benchmark yield curve and improve the effectiveness of monetary policy by facilitating the central bank's open market operations. Therefore, public debt management can potentially play an important role in promoting the development of private domestic bond markets. This is particularly important in Latin America, which is characterized by small financial markets and excessive reliance on bank credit.

However, the most important effect of public debt in developing countries is that it makes them vulnerable to volatile capital markets and costly debt and financial crises. The design of policies aimed at reducing this vulnerability is the main theme of this report.

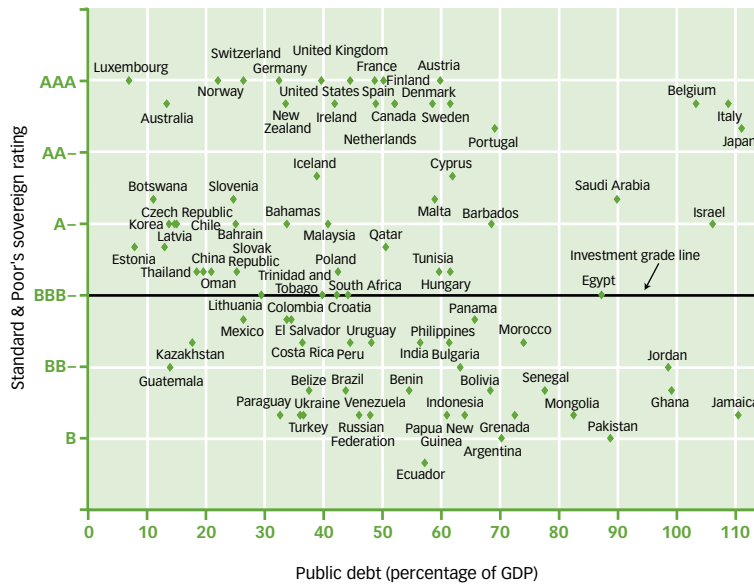
DEBT RISKS

Usually, the analysis of the risks of debt is framed in terms of debt levels. A conventional view in the literature is that higher levels of debt increase default risk, because the temptation to renegotiate the terms of the debt increases as the debt size (and thus the debt burden) goes up. Alternatively, the chance that an adverse shock to the economy (and hence to fiscal revenues) will deprive a government of the resources needed to service the country's debt rises in proportion to the country's level of indebtedness. However, recent research in the field has stressed the fact that, while important, debt levels are not the ultimate determinant of sovereign debt risk.

There is also evidence that debt levels are not crucial determinants of the perception of default risk, as measured, for example, by the credit ratings assigned by the international credit-rating agencies. A simple plot of debt levels against credit ratings illustrates the point, showing the weak correlation between the two variables. For instance, Figure 1.1 includes countries with high credit ratings (such as Belgium, Italy, and Japan) and debt levels well above 100 percent of GDP, and countries with similar debt levels but low, speculative grade credit ratings (such as Ghana, Jordan, and Jamaica). At the same time, there are countries with high credit ratings and negligible levels of debt (Luxembourg and Australia) as well as several countries with low debt and low credit ratings (Guatemala and Kazakhstan).⁹ In the same vein, research on early-warning prediction of debt crises has failed to identify any mea-

⁹ A formal statistical test shows that, with other factors controlled for, a 35 percentage point increase in the debt-to-GDP ratio would be associated with, at most, a one-notch decrease in credit rating (Eichengreen, Hausmann, and Panizza, 2005b).

Figure 1.1
Public Debt and Sovereign Rating (1995–2005)



Sources: Jaimovich and Panizza (2006b) and Standard & Poor's.

sure of the level of public debt as a significant indicator of a high probability of a subsequent debt crisis (Manasse, Roubini, and Schimmelpfennig, 2003).

If debt levels do not matter that much, what are the drivers of the large differences among countries in perceived (and actual) credit risks? Three main factors explain these differences. The first has to do with the country's economic quality, the second relates to the country's political and institutional quality, and the third involves the government's debt quality.

With respect to the first factor, low- and middle-income countries characterized by limited diversification, high dependence on a few commodities, and high levels of income inequality tend to have a small and volatile tax base, which weakens their credit quality (IDB, 1995). With respect to the second factor, countries with unstable political systems tend to be characterized by policies with low levels of credibility (IDB, 2005b) and hence will not be trusted by either domestic or foreign investors, who will demand a substantial risk premium as a result. Finally, governments that have a risky debt structure—which depends on the country's economic structure but essentially means a high incidence of short-term and foreign currency debt—face situations where the level of debt suddenly jumps in response to a depreciation of the exchange rate or a change in investors' perception of country risk.

While this report largely focuses on this last factor, debt quality, it is important to note that the three factors listed above tend to be mutually reinforcing. Countries characterized by high levels of macroeconomic volatility will tend to have weaker political coalitions, which,

in turn, will often be reflected in suboptimal policies that will further increase macroeconomic volatility. Furthermore, as high economic and political instability increases country risk, investors will provide intermittent lending, be reluctant to engage in long-term nominal contracts, prefer to lend either short term or in foreign currency, and thus further increase the risk generated by the debt, which, in turn, will increase economic and thus political instability.

This report attempts to take a broad view of the risks associated with sovereign debt. From the point of view of the creditor, sovereign debt risk (or country risk) refers narrowly to the risk that a sovereign will fail to honor the terms of its debt contract (for a discussion of risks from the creditor's point of view, see de la Torre and Schmukler, 2004b). The risk faced by the sovereign borrower, which this report labels the *risk of sovereign finance*, spans a broader set of concerns. The risk of sovereign finance comprises two distinct hazards: (1) the risk of a costly financial crisis resulting at least in part from turbulence in sovereign debt markets¹⁰ and (2) the degree to which debt amplifies the consequences of an adverse shock and constrains domestic policies.

This suggests that debt quality is a major determinant of the risks of sovereign finance, with low-quality debt being associated with higher risk for any given debt level. But why do countries have different debt structures, and what can they do about it?

There are essentially two explanations for the poor quality of the debt structure of many countries (Borensztein et al., 2004). The first view postulates that countries' poor reputations and institutions (a bad credit record, poor institutional quality and contract enforcement, and a history of high deficits and inflation) account for prohibitively expensive currency and maturity premiums and motivate the use of short-term and foreign-currency-denominated debt. The second explanation stresses the lack of significant deep markets for better-quality instruments. For example, the ability to issue debt in domestic currency at a fair price may depend critically on the existence of a well-developed domestic bond market and a stable domestic investor base, which in turn becomes a strong constituency for fiscal prudence. The creation and growth of any financial market is fraught with externalities, and thus the absence of markets for high-quality instruments may be the result of historical accident and insufficient policy initiative.

Although sometimes one of these explanations is emphasized at the expense of the other, the two are not mutually exclusive. Overcoming institutional and credibility gaps and developing sound, deep markets should be the twin objectives of proactive debt management policies. These policies and these markets, perhaps aided by substantive reforms to the international financial architecture, can set Latin American countries free from the high-cost, high-risk trap and ensure a safer debt structure and more macroeconomic stability. This is the view subscribed to by the present report.¹¹

¹⁰ This often, but not always, involves a sovereign default. For instance, a debt problem was at the root of Mexico's 1995 financial crisis, although debt contracts were fully honored.

¹¹ This report focuses on the risks of sovereign finance and on mechanisms aimed at avoiding crises, rather than on crisis resolution and debt restructuring. Some excellent references on the latter topic are Eichengreen and Portes (1995), Roubini and Setser (2004), and Sturzenegger and Zettelmeyer (2006).

STRUCTURE OF THE REPORT AND MAIN FINDINGS

The report comprises five sections and an appendix. In addition to this introductory chapter, the first section describes *recent developments in debt and deficits in Latin America and the Caribbean and around the world*. Chapter 2 describes the evolution of public debt in Latin America and the Caribbean, focusing on both debt levels and debt composition. The chapter shows that public debt in Latin America and the Caribbean decreased in the early 1990s, increased in the second half of the 1990s, and decreased moderately over the last two years. All things considered, the average level of public debt in the region is now similar to that prevailing in the early 1990s. Changes in debt composition have been more substantial. In 1994, about 60 percent of the public debt of the largest countries in the region was external, and an even larger share was denominated in foreign currency. By 2004, the share of external debt had dropped to 40 percent, and that of foreign currency debt had declined to 45 percent. This is critically important, because until recently the focus of most analyses of public debt in developing and emerging market countries was on external debt, and statistics on domestic debt were—and in many cases still are—difficult to come by. One of the objectives of this report is to highlight and correct this bias. In fact, one of the contributions of this report is a new data set that describes debt levels and composition (including that of domestic debt) for several Latin American and Caribbean countries. The excessive focus on external debt has led some observers to conclude that all is well in Latin America and the Caribbean because public debt is decreasing. The complete story, however, is that the ongoing decline in external debt ratios is compensated for by an increase in domestic debt. In other words, the real change concerns debt composition, not debt levels. Does this change improve debt quality? While the shift towards domestically issued, domestic-currency-denominated debt should make the region more resilient in the face of balance sheet effects brought about by currency devaluation, it may do so at a cost if it leads to large currency premiums and a generally shorter debt tenor, factors that may resurrect the ghosts of high inflation and currency crises.

Chapter 3, which focuses on the main determinants of debt growth, documents a striking finding: recorded budget deficits play only a secondary role in explaining debt growth in developing countries. In Latin America and the Caribbean, in particular, recorded deficits account for only 5 percent of the variance in debt growth. The remaining 95 percent is explained largely by balance sheet effects due to real exchange rate adjustments and contingent liabilities. For example, in January 1999, Brazil's net debt-to-GDP ratio jumped to over 51 percent of GDP from only 42 percent one month earlier, the equivalent of an annualized deficit of 120 percent of GDP. The reason was the currency depreciation that followed the abandonment of the Real Plan. The Dominican Republic's debt ratio, which stood at about 25 percent of GDP at the end of 2002, more than doubled to 55 percent of GDP by the end of 2003, the equivalent of a 30 percent fiscal deficit for the year, as a result of an extremely costly banking crisis. This is not to say that deficits are not important (in fact, contingent liabilities are often the manifestation of poorly recorded past deficits), but it points out that while most of the discussion on the appropriateness of fiscal policy focuses on some deficit indicators, debt explosions are often due to something else, and this "something else" should be central in the policy debate.

The second section focuses on *external debt*. External debt has long been a prime source of financing for Latin American and Caribbean sovereigns. Chapter 4 reviews the history of sovereign lending to Latin America and the Caribbean over the past 200 years and shows that the region has been characterized by waves of capital flows, which are then followed by sometimes extended periods of default and limited or no access to foreign financing. Despite recurrent crises, poor institutions, and often explosive political environments, Latin America and the Caribbean kept promising—and occasionally delivering—high returns that attracted international investors again and again. The parallel with the modern Latin American and Caribbean sovereign bond market is striking.

Chapter 5 looks at the workings of the international debt market today and analyzes a number of its imperfections: sudden stops in capital inflows triggered by events sometimes far removed from Latin American and Caribbean economies but with strong bearing on global financial markets; contagion effects that spread a market panic to a whole group of countries in the same “asset class”; the volatility of emerging market premiums, which show a strong tendency to experience large spikes and subsequent reversals or “mean reversions”; the predominance of external factors as determinants of emerging market spreads; the risk of (and evidence for) self-fulfilling crises, in which a market panic causes a deterioration in economic conditions in the country that validates the run; and the role of sovereign credit ratings, which seem to follow market developments rather than lead them and spill over into private borrowers’ credit standing. In addition, the chapter reviews recent developments that have resulted in global conditions very favorable to emerging market borrowers and discusses reasons to be optimistic—but cautious—about the durability of these conditions.

Chapter 6 analyzes the effects of official lending and describes the behavior of the multilateral development banks, a key component of sovereign finance in Latin America and the Caribbean, both for low-income economies with no market access and for middle-income emerging economies.¹² The chapter finds evidence that, unlike private flows to emerging economies, multilateral lending tends to be countercyclical and finds no evidence that non-concessional lending of multilateral development banks is politically influenced. The chapter presents evidence of a catalytic role of multilateral lending, as greater multilateral lending today tends to result in greater private lending tomorrow. The chapter also finds that, as bilateral lenders are subject to coordination problems which lead to inefficiencies in planning and monitoring projects, multilateral lending may play a coordinating role for individual bilateral lenders.

The third section focuses on *domestic debt markets*. Chapter 7 looks at the development of domestic bond markets. It shows that the region has relatively well-developed markets for government bonds, but extremely small private bond markets, and discusses different views on the nature of spillovers from public to private debt markets. The chapter suggests that, while a well-functioning market for government debt is probably a necessary condition for the development of a private bond market, there is a fine line between market

¹² In fact, the share of official lending in total public debt in the region was higher in 2004 than in the early 1990s, a trend that was partly reversed in 2005–2006 after Brazil and Argentina repaid their debt to the IMF and may be further undone by Mexico’s planned repayment of its debt to the multilateral development banks.

development and crowding out. Hence, public issuers need to be careful to avoid saturating domestic demand for bonded debt.

Chapter 8 focuses on the role of institutional investors (pension funds, mutual funds, and insurance companies) in the development of local bond markets. It argues that a group of large and well-managed institutional investors plays a key role in the workings of domestic securities markets and discusses policies aimed at making government bonds attractive to institutional investors. However, the chapter also points out that institutional investors can become victims of their own success, as financially constrained governments may attempt to capture the resources of such investors through regulation and persuasion. Therefore, it is essential to have in place good institutional and regulatory frameworks aimed at reducing the risk that a government will pressure institutional investors to buy government bonds when it faces financial strains.

The fourth section deals with some of the *causes and consequences of debt*. Chapter 9 focuses on the political economy of debt, recognizing that political developments and institutions can cause government borrowing to deviate from its legitimate purposes. The chapter shows how self-interested politicians can transform public borrowing from a useful development tool into a mechanism that wastes public resources and generates vulnerabilities. The chapter also discusses possible institutional reforms aimed at limiting these problems.

Chapter 10 studies the complex relationship between debt and economic development. It shows that, while it is extremely hard to find, in empirical research, a clear relationship between public borrowing and economic growth, there is some evidence that limited levels of external debt are good for growth but high levels of debt can severely stunt economic development. The chapter also shows that public borrowing seems to be useful for increasing a country's investment in infrastructure but that excessive debt levels tend to have a negative effect on poverty-reducing social expenditure. As this last finding provides some evidence in support of the current debt relief initiative aimed at helping low-income countries reach the Millennium Development Goals, the chapter also surveys the existing literature on debt relief and finds that the evaluation of the effects of past debt relief initiatives is mixed.

Chapter 11 discusses debt sustainability using both standard methodologies and more recent approaches that explicitly take into account the structure of debt, macroeconomic volatility, and the full balance sheet of the public sector. In this light, the chapter shows that Latin America and the Caribbean made important progress in terms of debt sustainability coming out of the debt crisis of the 1980s. A comparison of several indicators of debt sustainability suggests that, on average, the current fiscal position in the region is better than that prevailing in the early 1990s. In line with one of the main messages of this report, the chapter points out that debt structure is often more important than debt levels and, although some progress has been made in reducing liability dollarization and in lengthening the maturity of domestic debt, vulnerability to balance sheet effects and rollover risk has not disappeared.

Chapter 12 focuses on the cost of sovereign default. The chapter argues that there is a disconnect between the theoretical literature and the empirical evidence on sovereign defaults and renegotiations. According to the theoretical literature, default events should occur in good times, when countries enjoy a strong financial position and do not anticipate the need of market financing in the near future. Defaults in such cases are strategic rather than bankruptcies of the kind that occur in the business world. There is little evidence, however,

of strategic sovereign defaults' ever occurring, and time after time default events occur in situations in which a country has reached a condition that can be described as sovereign bankruptcy. In fact, the evidence suggests that policymakers tend to postpone the moment of reckoning and, as a consequence, the costs of debt crises are often incurred before, and not after, the moment of default. This does not imply per se that strategic, opportunistic defaults would go unpunished. On the contrary, the fact that strategic defaults are never observed probably reflects the recognition that they would be extremely costly.

The fifth section discusses the *risks of sovereign debt and policies aimed at reducing these risks*. Chapter 13 specifically delves into the risks of sovereign finance, focusing on the two main sources of vulnerabilities: debt denomination (foreign currency debt) and debt maturity (short-term debt). After discussing the possible risks arising from these characteristics of debt, the chapter analyzes whether there is a trade-off between foreign currency and short-term debt. Finally, the last chapter closes the circle by addressing the question that guides the present report: how can countries limit the risks of sovereign finance? The report emphasizes the benefits of prudent fiscal policy, sophisticated debt management, and large and sound domestic bond markets and elaborates on the benefits of innovative debt instrument design. However, these domestic efforts may not be sufficient to build a crisis-proof debt structure at a reasonable cost given the high exposure to external factors (real and financial) that characterizes the economies in the region. With this in mind, the chapter closes with a discussion of ongoing and proposed international initiatives aimed at limiting the negative influence of international financial volatility, an area where international financial institutions like the IDB have an essential role to play.