
Sovereign Debt: Managing the Risks

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Many developing countries that have borrowed heavily in foreign currencies are now faced with an important policy challenge: how to manage the currency, interest rate, and maturity risks associated with these debts.

GREATER ACCESS to the international financial markets has bestowed many benefits on developing countries, but it has also exposed them to the vicissitudes of these markets. In addition to the macroeconomic challenges posed by large, potentially volatile flows, the sizable external foreign

currency debt of many developing countries makes them vulnerable to swings in international exchange rates and interest rates and, often, to speculative currency attacks (see “Capital Flow Sustainability and Speculative Currency Attacks” in this issue). Indeed, prudent macroeconomic policies have at times been compromised by the fiscal consequences of losses associated with these exposures. What is needed is a debt-management strategy and the establishment of appropriate institutions to implement such a strategy.

Risk exposure

The exposure of developing countries to currency risk can be broadly gauged by the amount of external public debt they have incurred. In 1996, the outstanding stock of sovereign debt issued or guaranteed by developing countries amounted to \$1.5 trillion, or 25 percent of their total GNP, and to 300 percent of their foreign

currency reserves. Roughly one-half of their external debt was exposed to foreign interest rate risk: one-fifth of this was short term (maturities of less than one year), and two-fifths of the remaining long-term debt was at variable rates.

During the past two decades, a number of emerging markets have been hurt by adverse movements in exchange rates and international interest rates. In the early 1980s, the debt-servicing burdens of some countries in Africa, Southeast Asia, and Latin America were severely affected by the dollar’s appreciation, a worldwide increase in interest rates, and a decline in commodity prices. And several Asian countries saw significant increases in their debt burdens in the early 1990s because of their large, unhedged exposures to Japanese yen. A third of the increase in the dollar value of Indonesia’s external debt between 1993 and 1995, for example, was attributable to cross-currency movements, particularly the

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steep appreciation of the yen. At the time, 37 percent of Indonesia's external debt was denominated in yen, while about 90 percent of its export revenues are denominated in dollars. (The depreciation of the yen in 1996 offset some of the losses incurred by these countries.)

The maturity profile of public debt contributes as much as the total volume of the debt to a country's vulnerability to external shocks, as the Mexican crisis demonstrated. Mexico's public debt was relatively low by Organization for Economic Cooperation and Development (OECD) standards—51 percent of GDP, compared with an average of 71 percent for the OECD countries. The Mexican crisis underscored the difficulty and cost of refinancing a substantial volume of foreign currency debt maturing in turbulent foreign exchange markets. The Mexican economy's vulnerability to a financial crisis was exacerbated by the fact that Mexico's foreign exchange reserves totaled \$6.3 billion at the end of 1994 and that *tesobonos* (short-term securities indexed to the dollar) worth \$29 billion were due to mature in 1995.

Background

The large foreign currency exposure of emerging markets can be explained by a number of factors, including low domestic saving rates; the lack of domestic borrowing instruments; and the high proportion of official financing (multilateral and bilateral), which tends to be denominated in donor countries' currencies. Governments also issue debt in foreign currencies to signal their commitment to a policy of stable exchange rates or prices; the credibility of their policies is enhanced by raising the cost of reneging on their commitments. Alternatively, policymakers may signal a commitment to stable prices by issuing inflation-indexed bonds.

More recently, as emerging markets have regained access to international debt markets, the choice of currencies and maturity structures of their external borrowings have often been driven by a desire to reap the immediate fiscal benefits of borrowing in currencies with low coupon rates.

Such debt strategies underestimate the risks associated with unhedged foreign currency borrowing for several reasons. First, the capacity of governments to generate foreign currency revenues to repay their obligations is generally limited, as government assets consist predominantly of the discounted value of future taxes denomi-

nated in local currency. Second, it is unlikely that the costs—in terms of output, welfare, and reputation—that a developing country may incur in the event of an adverse external shock are fully taken into account in emerging markets' external borrowing strategies. Although the likelihood of crises is small, their potential disruption to an economy is substantial. Indeed, a net foreign exchange exposure exacerbates the economic impact of external shocks and limits the policy options available during a financial crisis. For example, a country with a large net foreign currency exposure

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would have difficulty pursuing an expansionary monetary policy during a financial crisis because it might cause a sharp decline in the domestic currency. A depreciation of the currency would worsen the country's indebtedness and risk profile and magnify the financial crisis. In the event of a real exchange rate shock, a government may be faced simultaneously with the escalation of its external debt-servicing costs and a decline in the foreign currency value of its revenues. In addition to the potential capital losses that a government may incur on its debt portfolio, its ability to access international markets to refinance its maturing debt is likely to be hindered.

Furthermore, the lower cost of foreign currency debt vis-à-vis domestic currency debt reflects not only the creditworthiness of sovereign borrowers but also a presumption on the part of external creditors that their claims have implicit seniority over domestic claims, because of a covenant structure granting external creditors extensive legal recourse. For example, cross-default clauses covering a wide array of lenders and instruments may make it impossible for a sovereign borrower to restructure obligations in the form of a single narrow but particularly pressing instrument—such as short-term notes—that are falling due, without causing the due dates of most other short- and long-term issues to be advanced. Even in the absence of an agreement, creditors have extensive rights under existing statutes to

seek legal recourse in relevant jurisdictions. Such a step could significantly impair trade and financial flows involving debtor countries as well as their external debt.

Risk management

The risks associated with a large net currency exposure and the existence of deep and liquid domestic capital markets are the main reasons why the governments of most industrial countries have limited their issuance of foreign currency debt. Among large advanced economies, Germany, Japan, and the United States do not issue foreign currency debt, while France and the United Kingdom issue only a small fraction of their debt in ecus. In Canada, foreign currency debt represents about 3 percent of total public debt (reflecting debt accumulated in the past and debt issues to finance foreign exchange reserves), and the budget deficit is funded entirely in domestic currency. In recent years, a number of small advanced economies, including Belgium, Denmark, and New Zealand, have stopped issuing foreign currency debt, except to replenish their foreign currency reserves. In Ireland, gross foreign currency borrowing is limited to the level of maturing foreign currency debt. Spain and Sweden issue foreign currency debt but hedge their currency risk through swaps or swap options.

In developing countries, however, governments often need to access international debt markets to offset a shortage of local savings, lengthen the maturity of their debt, diversify their interest rate risk exposure across various asset markets, accumulate foreign exchange reserves, or develop benchmark instruments enabling domestic private entities to issue abroad. When derivative markets in the domestic currency are available, governments can immediately hedge their foreign currency borrowing, thereby limiting their exposure to foreign exchange and interest rate movements. The foreign currency can be swapped into the domestic currency, or, when this is difficult, into a currency that is closely correlated to the domestic currency and for which liquid derivative markets exist. Issuing currency-hedged foreign debt would preclude a borrowing strategy targeted solely at reducing interest rates and softening internal budget constraints.

As the international derivative markets have grown in sophistication, the possibilities of hedging the risks associated with borrowing in foreign currencies have greatly expanded. Borrowers can respond

to opportunities to exploit market niches and expand their investor base without incurring exchange rate risk. Similarly, they can use the interest rate swap market to manage the maturity structure of their external debt. The amount that can be hedged is limited, however, because counterparties are usually subject to a ceiling on total exposure to any individual country.

Institutional framework

Management of the risks associated with external exposures requires significant technical expertise, sophisticated information technology, and strictly controlled internal management procedures, with disciplined enforcement of internal trading and exposure limits. These requirements are difficult to satisfy in the best of circumstances; they are particularly difficult in emerging market countries. Some emerging markets have found it hard to attract qualified and experienced staff, build adequate information and control systems, and develop the administrative controls necessary to manage overall exposures.

In the past few years, there has been a heightened awareness among governments of the importance of sovereign debt management, particularly in an environment of increasingly mobile and volatile capital flows and integrated international capital markets. Several OECD countries and some emerging markets have undertaken ambitious reforms. Three principles emerge from their experiences. First, debt management should be shielded from political interference to ensure transparency and accountability. Second, debt management should be entrusted to portfolio managers with knowledge and experience in risk-management techniques, with the performance of these managers measured against a set of criteria defined by the ministry of finance. Finally, sufficient resources should be allocated to hiring high-quality staff and acquiring sophisticated support systems.

To achieve these objectives, a number of countries, including Austria, Belgium, Ireland, New Zealand, Portugal, and Sweden, have concluded that it is necessary to set up debt agencies with some autonomy from the political sphere and to establish benchmarks for the currency composition and maturity structure of public debt, as well as limits on the amount of debt that can be exposed to market risks. Granting a debt agency a separate structure and autonomous status enables the government to charge it with a clearly

defined objective and to organize it accordingly, without being hampered by either the management structure or the pay scale of the public sector. Typically, debt agencies have been mandated to use modern risk-management techniques, hire experienced portfolio managers, and provide incentives for their staffs to lower borrowing costs.

In 1990, Ireland's government assigned the department of finance's borrowing and debt-management functions and the central bank's domestic government bond market operations to the National Treasury Management Agency. The establishment of

“The most pressing issue confronting governments is the need to reform the institutional arrangements governing debt policy.”

an autonomous debt agency was justified on the grounds that the agency would be given clearly defined performance objectives and a degree of independence from other government objectives, and that the concentration of resources and expertise would result in better risk management and lower debt-servicing costs. The agency's main objective, defined with reference to a low-risk, medium-term benchmark portfolio, is to fund maturing government debt and annual borrowing requirements at a lower cost than that of the benchmark portfolio while containing the volatility of annual fiscal debt-service costs. The currency composition of the Irish foreign currency debt benchmark is not made public, but deviations of the actual portfolio from the benchmark tend to be small.

New Zealand's debt-management strategy has been implemented by the New Zealand Debt Management Office since debt-management policy became disentangled from monetary policy objectives in 1988. Although the debt management office is located within the treasury, it is to some degree independent of the rest of the government and has its own advisory board. Its objective is “to identify a low risk portfolio of net liabilities consistent with the government aversion to risk, having regard for the expected costs of reducing risk, and to transact in an efficient manner to achieve and maintain that portfolio.” To minimize

its net risk exposure, the debt management office has gradually matched the duration and currency profile of the government's liabilities with those of its assets. As most of the government's assets are denominated in New Zealand dollars, this strategy entailed a gradual elimination of net public foreign currency debt, completed in September 1996, and a lengthening of the maturities of domestic public debt.

Sweden's National Debt Office, which was founded in the eighteenth century, was moved from under the authority of the parliament to that of the ministry of finance in 1989. Its primary objective is to minimize the costs of borrowing within the limits imposed by monetary policy and to finance the day-to-day government budget deficit at the minimum possible long-term cost. Its board establishes separate benchmark portfolios for domestic and foreign currency debt and determines permitted deviations from the benchmarks. Within these broad guidelines, the debt office manages the currency allocation, maturity structure, and market risk of the debt portfolio.

Emerging markets

In the past two years, a small number of emerging market countries have also reformed their debt-management practices and introduced benchmarks for their external debt. Colombia's Ministry of Finance and Public Credit recently authorized a substantial increase in the staff responsible for managing and hedging Colombia's external debt portfolio, modernized its data systems, and consolidated the external borrowing strategies of the central government and the parastatals. Particular attention has been paid to attracting staff with the appropriate knowledge and experience in portfolio analysis, and to offering competitive remuneration to retain good staff. Most important, the sovereign liability portfolio is now managed with respect to a set of low-risk benchmark parameters specifying exchange rate, liquidity, and interest rate risks. The benchmarks are based on structural economic factors and the government's risk tolerance. The restructured portfolio will include a higher proportion of dollar-denominated debt (80–85 percent instead of the current 72 percent), in line with the currency exposure of government revenues, and a longer maturity profile of external debt.

In early 1997, Hungary's Ministry of Finance took over the cost of servicing Hungary's net foreign debt. While the

National Bank of Hungary will remain formally responsible for interest payments on, and amortization of, the foreign loans issued under its name, it will receive transfers from the ministry of finance broadly equivalent to the cost of servicing that part of external debt in excess of foreign exchange reserves at the end of 1996. Benchmarks for external debt management have been established, and the currency composition of external debt has been aligned through hedging operations with that of the currency basket to which the national currency is pegged (70 percent deutsche mark, 30 percent US dollars). There is an emphasis on lengthening the maturity of the debt and evenly spreading debt redemptions to avoid a clustering of debt maturities.

While some developing countries—including Argentina, Mexico, South Africa, and Turkey—are currently reviewing their debt-management practices, others lack a separate debt-management office, formulate their debt-management objectives in general terms, and have not established formal guidelines on the currency composition and the maturity structure of public debt.

Need for a strategy

In a world of large and volatile capital flows and integrated international capital markets, the sound management of sovereign liabilities is an important element in safeguarding a country's economic stability. As a first step toward reducing their exposure to external shocks, countries should aim to improve the management of their net foreign exchange exposure. The choice of the currency denomination of external debt should not be driven by the level of nominal interest rates—instead, borrowing costs should be calculated on a hedged or risk-adjusted basis. Lowering currency risk does not preclude sovereigns from tapping international markets to broaden their investor bases, lengthen their maturity profiles, or develop benchmark debt instruments. Rather, it implies that unless governments have access to foreign currency revenues, sovereign foreign currency borrowing should, as far as possible, be hedged against currency risks.

Limiting the currency risk exposure of emerging markets' sovereign debt and lengthening the maturity profile should be viewed as a medium-term strategy and a gradual process. The most pressing issue

confronting governments is the need to reform the institutional arrangements governing debt policy, so that the technical expertise and experience required to manage the risks of external debt competently and transparently can be applied. Professionalism and accountability can best be achieved when debt management is assigned to an agency that is separate and autonomous from the political process. Within this framework, the ministry of finance formulates and makes public the strategy for debt management while the debt office implements the strategy and manages the daily risk exposure of the sovereign portfolio. This type of arrangement signals to the financial markets and the general public a country's commitment to a transparent and accountable debt-management policy. [F&D]

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