INTERNATIONAL MONETARY FUND
AND
THE WORLD BANK

Strengthening Debt Management Practices—Lessons from Country Experiences and Issues Going Forward: Background Paper

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March 27, 2007

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A. Introduction

1. The financial crises of the 1990s in developing countries drew attention to the quality of public debt management (PDM) in developing countries, and to the role that deeper and more efficient domestic debt markets can play in reducing financial vulnerability. In 2001, the World Bank and the IMF developed and disseminated sound practices in the areas of PDM and developing the government domestic debt markets, particularly through the *Guidelines for Public Debt Management* (Guidelines) and the *Handbook on Developing Government Bond Markets* (Handbook).[1]

2. **The process of moving from a set of general principles to a program of concrete reforms and capacity building in a particular country is not straightforward.** Recognizing this, a joint World Bank and IMF pilot program including 12 countries was initiated in 2002, with the objective of assisting countries in designing and implementing reforms with corresponding capacity building of the areas of PDM and domestic government debt market development.[2] Assessment reports in Bulgaria, Colombia, Costa Rica were completed in 2003, Croatia, Indonesia, Kenya, Lebanon, Nicaragua, Sri Lanka, Tunisia, and Zambia in 2004, and Pakistan in 2005. This chapter summarizes the main insights drawn from this pilot program.

B. From Country Diagnostics to Designing and Implementing Reforms: An Overview

3. **The pilot program adopted a comprehensive diagnostic approach to assessing country needs**. The approach focused on both PDM and domestic government debt market development and covered all areas that had potentially important policy implications. Moreover, it was designed to include two more stages—formulating, and implementing a reform plan—in addition to the initial diagnostic stage.

4. **The outcome of the diagnostic reports in the 12 countries supported the premise that a comprehensive diagnostic is useful and necessary.** Several reasons were identified.

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[1] The Guidelines, published in March 2001, and subsequently revised in December 2003,and the Handbook, published in July 2001, were followed by the *Accompanying Document to Guidelines for Public Debt Management* (2003), which contained 18 case studies written by country authorities on how they implemented public debt management based on sound principles.

[2] The World Bank led this work. The 12 countries in the pilot program were Bulgaria, Colombia, Costa Rica, Croatia, Indonesia, Kenya, Lebanon, Nicaragua, Pakistan, Sri Lanka, Tunisia, and Zambia. Insights from the pilot program are published as *Managing Public Debt: From Diagnostics to Reform Implementation* and *Developing the Domestic Government Debt Market: From Diagnostics to Reform Implementation,* World Bank, 2007. Follow-up has been undertaken in some countries, financed by project loans as outlined in Table 5.

- A thorough understanding of the macroeconomic situation and the relationship with debt management is crucial to ensure that a credible macroeconomic framework exists. Debt management reforms have tended to be more effective where macroeconomic stability had been achieved or was seen as progressing.
- The nature of the overall governance environment is critically important. The chances of reforming PDM on its own are slim if there is significant high level corruption.
- The constraints imposed by the level of development of the domestic debt market have a crucial impact on the debt management strategy, including particularly the risk management framework.
- There is a need to sequence steps in the right manner and bottlenecks to the process of implementing reform may escape a narrow approach. It is important to capture the interaction between the building blocks of sound PDM, namely debt strategy development, governance and institutional framework, and capacity issues.

5. **Most of the countries in the pilot program have developed reform plans of some type.** There are elements in designing reforms that seem to deliver success in terms of moving from the diagnostic stage to implementing reform. These include:

- Proper sequencing of reforms which reflect the realities on the ground. While some reforms may be second best solutions, they may be preferable to first best solutions that are impractical to implement.
- Giving a clear project management focus to embedding medium-term institutional development and capacity building. This provides a medium-term vision of the overall reform agenda, while taking into account immediate constraints, helping to keep in sight the bigger picture and assisting governments in identifying opportunities for implementing more ambitious reforms.

6. **The pilot experience suggests few generalizations can be made about the sequencing of PDM reforms.** The basic building blocks, which necessarily have to come first, are building capacity in the back office and establishing reliable debt recording systems. These are required in order to ensure timely servicing of the debt, without having to rely on lenders' notifications, and to produce accurate and frequent reporting. They are also at the core of any development of a debt strategy. While most countries already had this in place, Kenya and Zambia did not.

7. **Beyond these steps, sequencing has been varied, reflecting different priorities, the political climate of the time, technical difficulty and capacity constraints.** Therefore, an approach of "good fit," rather than "best practice" characterizes the reform experience to date. For example, in Indonesia, Lebanon, and Tunisia, the judgment was that reforming the legal framework was difficult at an early stage; however, in Bulgaria, Croatia, and Nicaragua, legal reform was the first area where reform was implemented. Similarly, while Indonesia and Zambia initially decided to delay organizational reform, Colombia, Costa

Rica, Croatia, and Kenya viewed it as a necessary and feasible first step. Comprehensive institutional and legal reforms have not been a prerequisite for developing an overall debt management strategy across organizational boundaries. Indeed, as several pilot countries have demonstrated, significant progress can be made without this by forming working groups or coordination committees (e.g., Costa Rica and Indonesia) and establishing islands of excellence with special budget and technical support to conduct analysis (e.g., Indonesia and Lebanon).

8. **However, experience also suggests that a piecemeal approach has its risks and that the longer term consequences should be carefully considered.** For example, coordination committees can stop meeting with the departure of key persons (e.g., Colombia), capacity built can be lost as staff leave for the private sector (e.g., Kenya), secondary laws can add to already complicated and fragmented legal frameworks (e.g., Colombia and Indonesia), and the establishment of a new debt management coordination unit adds to the scattered organizational arrangements (e.g., Pakistan).

9. **Notwithstanding the need for tailoring reform to individual country circumstances, poor design in reform programs can be costly.** For example, a public financial management system with a debt management module was implemented in Croatia without prior study of the users' functional requirements. Neither the vendor, nor the government at the time, knew what a debt management system should look like, and had different expectations from each other. The result was long delays, budgetary overruns, and increasing operational risk arising from the aging of the old debt management system (which did not meet the evolving needs of the debt manager) and lack of system support.

10. **Elements that bring about sustained reform included:**

- Ensuring ownership by the government and establishing an institutional environment that can make change happen. When local ownership and commitment to reform diminished, progress soon stopped. In most of the pilot countries an identifiable leader was key for reform to make progress. At the same time, the key leader was frequently seen as being at risk of overloaded with competing reform priorities or day-to-day responsibilities.
- Integrating the debt management reform process into broader programs, such as public sector or public financial management reforms. One benefit to this approach is that it helps ensure project sustainability and continuity through financing, support by experts, and project supervision. Another benefit is that these broader programs address fundamental problems such as civil service or public financial management weaknesses that impact not just PDM but also other core government functions.

C. Debt Management Strategy and Risk Management

11. **The composition of public debt, and therefore, the risks to which the government was exposed, varied considerably across the 12 countries in the pilot**

program. While some caution needs to be applied when interpreting the data, on average, the countries had significant exposure to currency risk. The exposure represented a significant risk to the governments' finances, particularly for those that also had high public debt levels, such as Lebanon and Zambia, where foreign-currency debt amounted to 80 percent and 160 percent of GDP, in 2004 and 2003, respectively. However, in countries where the domestic government debt market was underdeveloped, external debt provided an opportunity to reduce rollover and interest-rate risks as it tended to be long-term and contracted with fixed interest rates.[3] A further consideration when interpreting currency risk is the source of external debt. Kenya, Nicaragua, Pakistan, Sri Lanka, and Zambia mainly obtained funding from multilateral and bilateral concessional sources at very low cost and stable access compared to market sources. Croatia sourced mainly from the international capital markets, while Bulgaria, Colombia, Costa Rica, Indonesia, Lebanon, and Tunisia combined market and multilateral sources.

12. **The composition of the domestic debt portfolio varied, reflecting the varying degrees of development of the domestic government debt market,** with Costa Rica, Kenya, Lebanon, Sri Lanka, Tunisia, and Zambia having a high concentration of short-term debt, and Bulgaria, Colombia, Croatia, Indonesia, Nicaragua, and Pakistan achieving some lengthening of the maturity profile. As for the sources of domestic debt, Bulgaria and Croatia borrowed exclusively through competitive auction systems, while Colombia, Costa Rica, Kenya, and Pakistan relied to varying extents on a combination of forced placements with public sector enterprises and banks, and market placements.[4]

13. **Public debt managers in most pilot countries had a good understanding of the main risks of their debt portfolios and this shaped the management of government borrowing.** While implicit strategies based on a general understanding of cost-risk tradeoffs have been largely reasonable, moving from a series of informal decisions to a formal strategy—agreed at the ministerial level—was seen as important for several reasons. First, the lack of a formal debt management strategy increased the risk of resorting to expedient decisions to cut costs over the short run, at the expense of greater long run risks (e.g., Costa Rica and Sri Lanka). Second, the lack of a thorough analysis has meant that there was only a partial understanding of the trade-offs being made in terms of cost and risk, such as between foreign-currency debt (with very low interest rates and long maturities but containing currency risk), and local currency debt (which typically had shorter maturities and higher real interest rates), e.g., Nicaragua, Sri Lanka, and Zambia. Third, the absence of an overall

[3] For the purposes of this discussion, external debt is used to refer to debt contracted externally, i.e., in the international capital markets or from multilateral and bilateral creditors, rather than the residency of the creditor.

[4] Forced placements typically help governments to reduce cost and to extend the average maturity of the domestic debt in the short run, but are not conducive to a medium-term objective of developing the domestic government debt market.

strategy led to inconsistencies in the management of different parts of the debt portfolio. For example, the strategy to reduce interest rate risk in the market-sourced sub-portfolio by reducing floating rate debt conflicted with the strategy to increase floating rate debt in the official-source sub-portfolio in Indonesia. Similar inconsistencies were observed in Colombia, Costa Rica, and Pakistan.[5]

14. **Development of a formal debt management strategy is perhaps best viewed as an iterative process.** As capacity is strengthened through time, and more analysis is undertaken, the quality of the debt strategy will improve:

- As a first step in improving the analysis of cost and risk, pilot countries have identified and described existing risks in the total debt portfolio in public reports (e.g., Bulgaria, Colombia, Tunisia, Sri Lanka, and Indonesia). In Costa Rica, this information has been provided for all public debt excluding that issued by the central bank, which will be added as a next step. The authorities in Lebanon plan to produce a full set of risk indicators for its public debt, to supplement reporting on composition by currency.
- The next step is to conduct an analysis of cost and risk, including defining a base case and alternative strategies and comparing these under a variety of market scenarios (exchange rates and interest rates). This has represented a significant challenge for the pilot countries, because of the technical skills required, but Bulgaria, Colombia, and Indonesia have been building capacity in the area, with Indonesia starting to apply this for the total debt portfolio. In Costa Rica, Tunisia, and Sri Lanka, such an analysis has also been planned.

15. **The debt management strategy document will reflect this iterative process.** The content and details in these documents can be improved over time. For example, the first debt management strategy document published in Indonesia codified the existing processes that defined the composition of the debt and documented the rationale behind decisions. This allowed multiple players in the process to see the overall picture. It also clarified the nature of the constraints imposed by access to funding (including domestic government debt market development), and macroeconomic management, and provided a reference point for further analysis. Bulgaria's strategy document includes strategic targets with ranges based on a simple analysis of cost and risk. The ranges allow for some variation in the targets due to interest rate and exchange rate movements.[6]

[5] This should be distinguished from the management of sub-portfolios that is consistent with the cost and risk objectives for the overall debt portfolio. In fact, a target for the sub-portfolio, such as targets for the domestic and foreign currency portfolios, helps better guide the portfolio manager with regard to their actions to manage risks in the respective markets.

[6] Without ranges, debt managers would be forced to rebalance their portfolios very frequently for even the smallest moves in markets. In countries where macroeconomic instability and volatilities in capital flows

(continued…)

16. **When governments do not have sufficient information to establish targets or benchmarks for the portfolio, establishing a general strategy or directives can be a useful first step towards strengthening the debt profile.** Even for countries that face significant constraints on financing choices, these directives provide a framework to ensure borrowing is undertaken in a manner that is consistent with debt sustainability (e.g., setting minimum levels of concessionality, controlling the concentration of maturities).

D. Coordinating PDM with Cash Management and Macroeconomic Policy

17. **Initial diagnostics showed that fiscal and budget planning was frequently undertaken with a one-year time horizon, and which reinforced a short-term approach to PDM.** The absence of an explicit debt management strategy—which takes into account the management of risk—increased the likelihood that the borrowing program would be structured to meet short-term budget needs. A number of pilot program countries had high public debt levels and interest expenses of up to 50 percent of government revenues at the time of the assessment. Debt managers in Costa Rica, Lebanon, Pakistan, and Sri Lanka have experienced pressure to produce cost savings, irrespective of the impact on long-run risk.[7]

18. **Recognizing the risks of setting a short timeframe for the fiscal policy framework in a short timeframe, some pilot countries have resorted to medium-term planning.** The budget projections in Bulgaria, Colombia, Kenya, Nicaragua, and Sri Lanka were on a three-year rolling basis and Tunisia's was determined within the framework of a five-year plan. This has helped debt managers to focus on the medium term when developing their borrowing plans. Pakistan (2005) enacted fiscal responsibility legislation and will begin multi-year budgeting.

19. **Improving the quality of PDM cannot, however, be a substitute for sound fiscal policy.** Fiscal policy is the main determinant of the requirement to borrow, and therefore, the primary influence on the stock over time. It was precisely those countries where governments were not able to control debt dynamics, and where actions toward fiscal consolidation weakened, that progress in debt management reform was slowest. For example, in Sri Lanka, a change in government in 2004 slowed down the momentum for reforms initiated by the previous government. In Lebanon, continued internal tensions and fractious politics prevented much of the Paris II policy agenda from being implemented, so debt levels did not decline. In Nicaragua, debt forgiveness was not followed through with fiscal consolidation, as this was sent off track following a sharp rise in political tensions from early 2004. The

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volatilities are a major factor, or where strategy development is still at its incipient stage, "soft" targets, with broader ranges than the Bulgarian case, may be more appropriate than narrower ranges.

[7] In the absence of well-designed governance arrangements for monetary policy, similar pressure may also be placed on the monetary authorities, to the detriment of their price stability objectives.

decision not to take the fiscal responsibility legislation forward was based on the authorities' assessment that given such a political environment, it would not have achieved the desired result.

20. **Although fiscal sustainability analysis is the responsibility of fiscal policy advisors, debt managers are able to provide a richer understanding of how changes in financial variables could affect government finances.** However, debt manager's input to fiscal sustainability analysis in the pilot countries has been minimal.

21. **The group of pilot countries that have been able to stabilize or reduce their debt levels achieved this through sustained fiscal consolidation and a period of strong economic growth.** In order to support these outcomes and to reduce the vulnerability to shocks, actions to strengthen PDM have been a priority in Bulgaria, Indonesia, and Tunisia. These countries illustrate how positive debt dynamics can be generated by a well coordinated implementation of sound fiscal, monetary and debt management policies.

22. **Coordination between PDM and monetary policy is particularly important in countries with less developed domestic government debt markets.** In Costa Rica, Kenya, Lebanon, Indonesia, and Nicaragua, the main instrument of monetary policy to mop up excess liquidity was issuing debt in the primary market; that is, using the same instrument as the public debt manager. The scale of these operations was large in Costa Rica and Nicaragua where the governments had not fully financed their past deficits, forcing central banks to issue considerable volumes of their own debt and weakening their capital structure. While both the ministry of finance and the central bank in these countries agree on the need for a long-term resolution of the recapitalization of the central bank, such an action was not politically feasible in the short run. In the interim, improved coordination in developing and implementing the debt management strategy, combined with building capacity at the ministry of finance are being implemented.

23. **Policy conflict between debt management and monetary policy, or the potential for such conflict, was seen to occur when the central bank takes a leading role in managing domestic debt** (e.g., Lebanon, Kenya, Pakistan, Sri Lanka, and Zambia). In these circumstances there may be pressure on the central bank to reduce debt servicing costs for the government by providing direct financing, or by maintaining interest rates at levels lower than desirable for price stability. Often, the central banks performed this role through necessity, as capacity was limited in finance ministries and efforts to change this could happen only slowly, and over a period of time. Short-term measures include agency agreements between central banks and ministries of finance that clarify decision-making rules with regard to domestic debt management and greater transparency around the implementation of monetary policy.

24. **In most pilot counties, monetary financing of the government deficit was prohibited.** Some leeway for central bank financing was allowed in Kenya and Zambia, and,

in Pakistan, there was no legal restriction against this. The scope for monetary financing allows the ministry of finance to withdraw from the market completely, or to reject low bids in auctions. It also has implications for the credibility of monetary policy, as market participants may perceive a conflict of interest in the central bank's actions, and a desire to limit public debt servicing costs. It may also hinder the development of the money and bond markets.

25. **Poor credibility of monetary policy is a contributing factor to a high degree of dollarization**, as seen in Costa Rica, Nicaragua, and Lebanon, where citizens prefer to hold much of their savings in foreign currency. This in turn has implications for PDM and domestic government debt market development, as the authorities may not be able to issue debt in domestic currency and extend the yield curve beyond shorter maturities.

26. **Poor coordination with cash management hinders effective domestic debt management.** In Pakistan, Sri Lanka, Tunisia, and Zambia, the timing of domestic borrowing was determined by the government's cash flow needs, as there was no active cash management or instruments to smooth the short-run peaks and troughs in the government's cash flows. This has meant that the size and composition of government bonds auctions varied greatly from month to month. This unpredictability undermined efforts to develop the domestic government debt market and raised the cost of financing. Passive cash management also results in large cash cushions to ensure that money was available to service the debt, but which also increases the overall cost of financing.

27. **To ease the constraints imposed on the timing of bond sales caused by the timing of receipts and payments, reforms in cash management** are being considered in several pilot countries.[8] As a first step, Bulgaria and Croatia have moved cash management functions out of the Budget department to the debt management unit, while Colombia has merged the unit that managed cash in the Treasury with the debt management unit in the ministry of finance. Such a consolidation has the benefit not only of higher operational efficiency, but also improves the gathering market intelligence. In Indonesia and Tunisia, use of short dated cash management bills to smooth the volume of bond issuance is being considered. This would also require the adoption of a net borrowing limit instead of gross limits in the Budget Law of Indonesia.

28. **In order to reduce the incidence of idle balances and attain reduction in debt and debt servicing, the ministries of finance in Indonesia and Lebanon are upgrading their cash flow forecasting capabilities, plan to establish a single treasury account, and streamline payments and receipts processes.** Tunisia is also working to improve its

[8] The impact of passive cash management on monetary policy implementation and money market development is discussed in World Bank (2007) *Developing the Domestic Government Debt Market: From Diagnostics to Reform Implementation*.

forecasting capacity by extending the capabilities of the government financial management system and enhancing information provision from the tax collection office.

29. **Lack of progress in coordinating debt management, fiscal and monetary management, as well as cash management in several pilot countries have highlighted that reforming debt management in isolation can achieve limited results** and that a more comprehensive set of reforms can be mutually reinforcing.

E. Governance

30. **Most pilot-program countries met the minimum requirement of having legislation that clarified the authority to borrow in the name of the government.**[9] This authority, however, was typically found in a number of separate laws introduced for borrowing from different sources at different points in time. This accretion of legislation, often over many decades, mandated responsibilities for debt management to a number of different entities. It also specified different processes and levels of authority for borrowing (e.g., some borrowing requires parliamentary approval while other borrowing can be approved at the level of officials—see Table 1 in Annex). While most countries get by, these arrangements are frequently inefficient and have led to inventive maneuvering for the system to function.

31. **The pilot program countries also set borrowing limits, including limits on guarantees, in most cases in the budget system laws**. As discussed in section D, the budget systems laws in Bulgaria, Nicaragua, and Tunisia formulated the budget within a multi-year framework, and Colombia, Croatia, Pakistan, and Sri Lanka have recently begun multi-year budgeting. In Pakistan, the annual limit was set in the Fiscal Responsibility and Debt Limitation Act, in the form of a debt reduction path. In addition, the laws, in all but Lebanon and Tunisia, establish ceilings on the overall borrowing.

32. **In addition, borrowing limits for different types of loans and instruments**—e.g., domestic bank financing, issuance of securities, and borrowing through loans—were also defined in the annual budget laws in Indonesia, Lebanon, and Sri Lanka. These limits were focused on financing the government from year to year and ensuring that such borrowing was duly authorized, which does not support managing debt in a medium-term framework. In addition, limits for different types of borrowing constrain the debt manager's ability to execute an agreed debt management strategy based on the most cost-effective instruments at particular points in time.

[9] Description of legal and institutional arrangements in this section is based on the assessment reports for 12 pilot countries prepared by Bank staff in 2002-2006 and endorsed by the authorities of the participating countries.

33. **The institutional and political difficulties associated with legislative change frequently hampered the formulation of new laws and amendments.** In some cases an amendment to the constitution was required to develop a consistent approach to borrowing. Nevertheless, Bulgaria, Croatia, and Nicaragua have succeeded in consolidating legislation in budget system laws or in separate public debt laws (see Box 1), while Colombia, and Lebanon have drafted debt management laws but these have not been passed by Parliament. These laws support debt management in a medium-term framework by requiring that a three-year strategy paper be prepared and presented to parliament, and that the minister should report on the results of the previous year. Other pilot countries, including Costa Rica, Croatia, Indonesia, and Lebanon developed reform programs that divided legislative change in the early stages, using secondary regulations instead (e.g., decrees, regulations, and ministerial authority), to implement more urgent initiatives.

Box 1. Public Debt Legal Reform in Bulgaria and Nicaragua

Bulgaria

The Law on Government Debt (2002) establishes that the Minister of Finance has the sole right to contract debt on behalf of the state and to issue guarantees on behalf of the state. It establishes the need for annual ceilings on debt and guarantees and obligates the MoF to develop a three-year government debt management strategy, for approval by the Council of Ministers, to be updated annually. It states that the MoF may effect financial transactions to reduce risks associated with the debt portfolio. The Law determines that the MoF must maintain an official register of debt and guarantees, publish monthly and annual reports, to be placed on the Internet. It also lays out the main elements of a Fiscal Agency Agreement with the central bank. The Law includes a chapter on guarantees, which obligates beneficiaries to regularly report to the MoF, and in the event of default, to repay the MoF for payments made in its role as guarantor. Finally, the Law also outlines conditionality attached to on-lending arrangements.

Nicaragua

The Public Debt Law of 2003 includes debt management objectives and a requirement for the Ministry of Finance and Public Debt to submit an annual debt policy to the President. This annual debt policy would include an evaluation of debt sustainability and limits on overall indebtedness. The Law also clarified that the Ministry of Finance and Public Debt should be the single responsible entity for central government borrowing.

Source: World Bank staff.

34. **Management of public debt in the 12 pilot program countries was split across a number of different departments, typically spanning finance ministries, central banks, and economic and planning ministries.** This dispersion of responsibility tended to reflect the source of the borrowing (see Table 2 in Annex). Changes in institutional responsibilities were frequently recommended to bring debt management closer to sound practices. However, this has been a difficult reform to implement for many pilot program countries. Bulgaria, Colombia, Croatia, and Indonesia have taken actions to consolidate debt management functions within the finance ministry. However, in pilot-program countries where the central bank was responsible for managing domestic debt, attempts to transfer debt management responsibilities from the central bank to the ministry of finance have proven difficult to implement, given the lack of capacity to manage the new responsibilities in the ministry

(e.g., Costa Rica, Kenya, Nicaragua, and Zambia) and the political difficulty in resolving larger issues such as recapitalizing the central bank balance sheet (e.g., Costa Rica and Nicaragua).

35. **Reform and capacity-building programs for PDM need to incorporate the sound management of operational risk in a more systematic manner.** The level of awareness and measures adopted in the 12 pilot countries, however, displays only a partial approach to the management of these risks. Most of the pilot countries clearly distinguished the transaction execution responsibilities of the front office and deal confirmations (or verifications) and settlements responsibilities of the back offices. However, in several pilot countries (e.g., Croatia, Kenya, and Pakistan), debt transactions were entered into and verified by the same unit and this separation was not achieved.

36. **In response to the difficulties of organizational change, one approach has been to create a new entity to provide the missing functionality**—usually a new group to develop a debt management strategy—and to coordinate the work of other debt management entities. Experience with this approach, implemented in Pakistan, has not been encouraging, as it adds a further layer to an already complex set of arrangements.

37. **Another approach is to seek greater cooperation among the different debt managers to make existing institutional arrangements work better.** This can range from the creation of formal coordinating committees (e.g., Costa Rica and Nicaragua), to more task-oriented groups (e.g., Indonesia), comprising staff drawn from different departments. Such an approach may work well as long as the will is there, or until a particular task is completed, but it is unlikely to be a lasting solution. Indeed, Colombia had remnants of coordinating committees that had not met for years, legacies of previous reform efforts.

38. **The disclosure requirements imposed by legislation varied a great deal across the pilot countries.** These included requirements to table policy statements in parliament (e.g., Bulgaria, Nicaragua, and Pakistan), annual debt reports (e.g., Indonesia and Nicaragua), and debt statistics (e.g., Bulgaria, Kenya, Pakistan, and Zambia)—see Table 3 in Annex. In some countries, financial statements include budget flows only, not stocks of debt (Indonesia and Lebanon), and are produced with delays of up to several years (e.g., Zambia). Improving reporting standards and ensuring they are applied is an issue larger than PDM, so reforms in this area must be closely coordinated with broader efforts.

39. **A major challenge for achieving accountability has been to obtain adequate independent assurance about reporting and about the processes used by public debt managers.** In some countries (e.g., Bulgaria, Croatia, and Sri Lanka), the external auditor (usually the "supreme auditor"), has publicly called for improvements to the management of public debt, including institutional arrangements, the need for a strategy, and better accounting. This has helped support the reform program. In others, such as Indonesia and Lebanon, external audits were confined to financial statements, which had no information

about the debt stock. In all countries, the specialized nature of transactions in financial markets called for an external auditor competent in treasury accounting and able to provide assurances about the risk and control environment in the debt management unit. The supreme audit institution may, however, find it hard to cover this specialty as its operations are more oriented toward the general functions of government. In developing reform programs for PDM, it is important to consider how external assurance would be provided. This could include hiring external audit firms with the requisite experience to perform periodic reviews.

40. **While public financial reporting rules and laws can help institutionalize the accountability and transparency framework, the experiences of several pilot-program countries have demonstrated that the laws were not necessarily followed**. For example, Nicaragua had not produced the documents required by the debt law. Similarly, having adequate processes and procedures are insufficient where they are not followed at a higher level, as illustrated by a scandal in Kenya in 2003. In that case, reporting requirements to Parliament were not adhered to, and contributed to fraud.[10]

41. **On the other hand, some countries have shown that changes to laws and regulations were not necessarily prerequisites for increasing transparency and improving the quality of disclosure**. In these cases the authorities voluntarily produced information on the public debt to supplement data appearing in financial statements (e.g., Colombia, Indonesia, Lebanon, Tunisia, and Sri Lanka). There are several reasons for this including: (i) increased internal needs for better information flows; (ii) the need to manage the risks of the debt portfolio (e.g., Bulgaria, Colombia, Lebanon, and Tunisia); (iii) new bond issuance requiring a credit rating and information to be submitted to rating agencies; and (iv) increased demand coming from investors (e.g., Bulgaria, Colombia, Indonesia, and Lebanon);[11] international and domestic creditors, as well as governments' subscription to the IMF's Code of Good Practices on Fiscal Transparency (Bulgaria, Colombia, Croatia, Lebanon, Nicaragua, Pakistan, Sri Lanka, and Tunisia). Moreover, much of the information is now available on finance ministry web sites.

42. **Turning to forward-looking information, Bulgaria is most advanced, having developed and published a comprehensive PDM strategy.** Colombia has had a strategy for its external debt portfolio for several years, and the details are publicly available. More recently, in 2005, Colombia published a strategy for its public debt. Croatia, Indonesia, and

[10] See World Bank (2007), *Managing Public Debt: From Diagnostics to Reform Implementation*.

[11] Because bond issuance tended to be sporadic, this source of information was not regular and the information could become quickly outdated. In addition to credit rating agencies, the disclosure requirements for borrowing in some jurisdictions (such as New York) are greater and have resulted in some uniformity of disclosure across countries.

Nicaragua have adopted a new legislative framework that requires them to produce a debt management strategy as well as an annual debt report, but they do not require the authorities to publish the debt management strategy. While Croatia and Nicaragua have not yet formulated a debt management strategy, Indonesia has taken a first step, making the strategy document publicly available in the form of a ministerial decree. Sri Lanka published a debt management report for the first time in 2004, containing information on institutional arrangements, the debt profile, risk indicators, and debt market developments.

F. Capacity

43. **The recruitment and retention of skilled and experienced staff is one of the greatest challenges for improving the quality of PDM in most pilot-program countries.** Unless this is addressed, significant efforts by governments and donors will have, at best, only a transitory impact. The nature and combination of the problems vary across countries, but they include insufficient staff numbers (e.g., Lebanon), staff with the wrong skills mix caused by excessive rotation of staff in the finance ministry (e.g., Croatia, Nicaragua, and Indonesia), high turnover (e.g., Colombia, Croatia, and Kenya), inadequate training budgets and a lack of training opportunities (e.g., Costa Rica, Kenya, Nicaragua, and Zambia). While budgetary issues within finance ministries underlie a number of these problems, poor management of staff and the low priority given to the function within the ministry are also factors. These problems, of course, are not unique to PDM. They affect many other core functions within finance ministries and other parts of government. First-best solutions must therefore focus on improving the quality of government services in general. But this will likely be a long-term endeavor for countries afflicted with corruption, poor governance, and little tradition of quality in government.

44. **In these circumstances, some countries, including Indonesia and Lebanon, have opted for variations of the "islands of excellence" model, insulating the debt management function from the resource constraints faced elsewhere in government**. Pilot program countries have also explored the possibility of establishing PDM offices separate from finance ministries. This approach has not been adopted in any of the pilot countries as they were concerned about a number of disadvantages, particularly the need to coordinate PDM with other core policy functions.

45. **To address staff capacity issues, pilot program countries are using a variety of measures permitted by their institutional frameworks**. In the area of staff development, these include individual plans for each staff member and access to local and world-class training opportunities with the help of donors (academic and vocational courses, and on-the-job placements). Retention may be improved by making full use of the existing flexibility for remuneration policy—including accelerated promotion, bonuses, or separate occupational pay scales, as well as exempting staff from ministry rotation policies. The skill base of debt management units may be supplemented by hiring staff on fixed-term assignments, particularly when a new organization is being established or a significant expansion of

capacity is implemented.[12] While well-qualified graduates with the core skills for higher-level analysis may be available for recruitment, countries also need a core of more experienced personnel to train and mentor them. Other measures to build staff capacity may be more subtle, such as improving the physical and IT environment, and creating a strong sense of mission and identity for the department.

46. **A common challenge related to IT capacity is the integration of data from separate systems, as domestic debt is usually recorded in another system, reflecting separate institutional arrangements** (all but Bulgaria and Colombia—see Table 4 in Annex). While this is not insurmountable, the workarounds required can be slow and entail double entry of data, which increases operational risk. As a result, a complete picture of a country's debt has been difficult to obtain and the ability to extract data for analysis may be impeded. Finally, as countries gain market access and use a broader array of instruments (e.g., such as swaps), their needs frequently exceed the capability of their systems.

47. **Ideally, the development of IT systems should be adapted to reforms of institutional arrangements and the functions of debt management units**. The user requirements following such reforms may differ substantively from before, and indeed, the reform process itself provides the opportunity to improve the efficiency of business processes. Locking into particular IT systems before completing these institutional reforms raises the risk that the systems will not deliver what the organization needs. A reform program that is centered only on a major IT acquisition and that does not give sufficient attention to having proper and robust business processes is unlikely to succeed, as the objective becomes getting the system in place, rather than improving all PDM outputs. For example, such a mistake has cost the Croatian debt office substantial delays and budget overruns.

48. **Rather than embark on major systems projects, a number of countries in the pilot program decided to improve IT systems by taking smaller steps.** These include making better use of existing systems, for example, recording domestic debt and external debt in the same system (e.g., Kenya and Sri Lanka) and developing better interfacing to produce more easily consolidated debt reporting outputs (e.g., Costa Rica, Croatia, Indonesia, and Lebanon). This approach has the advantage of producing faster results and allowing time to better assess longer-term needs, which may be contingent upon other development efforts yet to be specified.

[12] Specific measures include temporary placements of central bank or private sector personnel in the debt management unit, or the use of longer-term advisors with specialist skills in public debt management.

Annex I. Governance and Other Institutional Factors

Table 1. Authorizations Required by Parliament and Other Institutions for Government Borrowing in the Pilot Countries

Country	Requirements
Bulgaria	The National Assembly approves and ratifies individual borrowing transaction in foreign markets.
Colombia	In addition to the approval required by the legislative committee, the central bank is also involved in authorizing individual funding transactions.1/ The authorization process for individual capital market transactions involves a number of government entities and committees. These include not only the Debt Directorate, but also the central bank, the national Planning Department and the National Council of Economic and Social Policy, in addition to the Inter-parliamentary Commission.
Costa Rica	The general debt law requires explicit congressional approval for each external debt issuance. However, in December 1999, the Legislative Assembly approved Law 7970, a five year public debt law authorizing US$1.45 billion in foreign debt issuance over five years.
Croatia	The cabinet approves the proposals of new borrowing and refinancing of domestic and external debt coming from the finance ministry at its weekly meeting.
Kenya	Parliamentary control is carried out ex-post, and the finance minister is required to inform the National Assembly of every loan transaction as soon as practicable after the loan has been arranged.
Lebanon	The Council of Ministers approves the issuance of Eurobonds by resolution (either loan by loan or a series of loans), up to the ceiling set in the budget law for that year. These approvals specify the volume of bonds to be issued, but not the tenor or rate, which are decided by the finance minister. In the case of a foreign-currency loan relating to reconstruction and development projects from multilateral and bilateral donors contracted by the Council for Reconstruction and Development, each must be ratified by parliament.
Nicaragua	The constitution requires that the national assembly explicitly approve each external debt operation.
Sri Lanka	The cabinet's economic policy committee must give approval before any ministry or agency enters into discussions or negotiations with any foreign donor agencies.
Tunisia	The constitution establishes that decisions related to government borrowing and financial commitments shall be adopted as a law. The Judicial Council interprets this article as requiring prior approval of the assembly for every external debt contract of the government, including the precise financial terms and conditions. Hence, the authorization process for external borrowing (where every transaction must have prior approval of the assembly) is significantly different from that for domestic borrowing. For domestic borrowing, the borrowing instrument is designed by presidential decree and individual transactions are undertaken by the finance ministry at its own discretion, within the envelope of the annual finance law.

Source: World Bank Staff.

1/ In Colombia, public sector external and domestic bond issues require prior approval from the central bank board. The Central Bank Law of 1992 gives the bank the authority to regulate capital markets and public debt issues, by establishing that the bank is responsible for "…. determining the financial conditions under which public entities shall issue or buy securities… with the aim of ensuring that these operations take place at market prices. If those conditions are not met, the corresponding securities cannot be issued or placed." In practice, central bank intervention in public debt policy has only not approved the issuance of T-bills, although more recently it did authorize the finance ministry (treasury) to begin issuing a small annual volume of T-bills.

Table 2. Distribution of Debt Management Functions in the Pilot Countries

	Location of the Front Office Functions				Location of the Back-Office Functions		
Country	**Unit 1**	**Unit 2**	**Unit 3**	**Unit 4**	**Unit 1**	**Unit 2**	**Unit 3**
Bulgaria	State debt directorate in ministry of finance responsible for domestic and foreign debt	Budget execution office responsible for cash management bills			State debt directorate in ministry of finance responsible for all government debt	Budget execution office responsible for cash management bills	
Colombia	Directorate of Public Credit responsible for external and domestic debt	Treasury responsible for shorter-dated debt			Directorate of Public Credit responsible for all debt		
Costa Rica	Treasury responsible for domestic and external debt issued by the government	Central bank responsible for domestic and external debt issued by the central bank			Treasury responsible for domestic and external debt issued by the government	Central bank responsible for domestic and external debt issued by the central bank	
Croatia	Debt Management Sector responsible for domestic and external marketable debt	International Financial Institutions Department responsible for multilateral loans	Budget Execution Sector responsible for cash management bills 1/		Debt Management Sector responsible for domestic and external marketable debt	International Financial Institutions Department responsible for multilateral loans	Budget Execution Sector responsible for cash management bills
Indonesia	DPSUN in Treasury responsible for marketable domestic and foreign debt	External Funds Department in Treasury responsible for bilateral and multilateral loans			DPSUN in Treasury responsible for domestic and foreign securities debt	External Fund in Treasury responsible for external loans	Unit in central bank responsible for external loans (duplicate of Unit 2)
Kenya	Ministry of finance responsible for foreign debt	Central bank responsible for domestic debt			Ministry of finance responsible foreign debt	Central bank responsible for domestic debt	
Lebanon	Public debt department	Council for Reconstruction and Development responsible for multilateral and bilateral loans			Ministry of finance responsible for external debt	Central bank responsible for domestic and external debt	
Nicaragua	Treasury	Ministry of finance	Central bank		Treasury	Ministry of finance	Central bank

	Location of the Front Office Functions				Location of the Back-Office Functions		
Country	**Unit 1**	**Unit 2**	**Unit 3**	**Unit 4**	**Unit 1**	**Unit 2**	**Unit 3**
	responsible for restructured debt	responsible for domestic debt	responsible for domestic and external debt		responsible for restructured debt	responsible for domestic debt	responsible for domestic and external debt
Pakistan	Unit 1 in ministry of finance responsible for foreign debt contracted from official creditors	Unit 2 in ministry of finance responsible for foreign debt raised in the international capital markets	Central bank responsible for marketable domestic debt	Central Directorate of National Savings responsible for domestic retail borrowing	Unit in ministry of finance responsible for foreign debt	Unit in central bank responsible for domestic debt	Central Directorate of National Savings responsible for retail borrowing
Sri Lanka	Ministry of Policy Development and Implementation responsible for official borrowing and grants	Central bank responsible for domestic debt	General Treasury responsible for loans from state banks and foreign commercial borrowings		Central bank responsible for domestic and external debt		
Tunisia	Ministry of finance responsible for domestic debt	Ministry of Development and International Cooperation responsible multilateral debt	Ministry of Foreign Affairs responsible for bilateral financing of projects	Central bank responsible for foreign marketable debt	Ministry of finance responsible for domestic and external debt		
Zambia	Ministry of finance responsible for foreign debt	Central bank responsible for domestic debt			Ministry of finance responsible for external debt	Central bank responsible for domestic debt	

Source: World Bank Staff.

1/ Following recommendation in the Assessment Report, this function has now been moved to the Debt Management Sector.

Table 3. Reporting Requirements Specified in the Legal Framework in the Pilot Countries

Country	Law	Reporting requirements specified in the legal framework
Bulgaria	Law on Government Debt	The finance minister is required to prepare an annual report on the state of the government debt. The annual report is then reviewed by the Council of Ministers and submitted to the National Assembly as an integral part of the government budget performance report for the respective year. The Minister of Finance is also required to develop a three-year government debt management strategy, which should be approved by the Council of Ministers. In addition, the official information on the consolidated government and government guaranteed debt should be published on a monthly basis by the Ministry of Finance in an official bulletin and Internet.
Croatia	Budget Act	The finance minister is required to prepare both annual and semiannual statements on the status of government debt, including information on any prepayments and the use of any financial derivatives. These reports must be delivered to the Croatian parliament as part of the government's report on the budget execution.
Indonesia	Government Securities Law	The finance minister is required to prepare an "accountability report" on the management of government securities and to publish periodically information on the composition of securities and debt management policies.
Kenya	Internal Loans Act, and the External Loans and Credit Act	The finance minister is required to report to the National Assembly on outstanding public indebtedness at the end of each fiscal year, broken down by the type of borrowing. The minister is also required to report outstanding foreign borrowings at the end of the fiscal year. The minister was also required to inform the assembly of every single loan transaction as soon as practicable after the loan has been arranged.
Nicaragua	Public Debt Law	The minister of finance is required to submit an Annual Debt Policy statement to the president. In addition, the ministry of finance must produce policy guidelines for the indebtedness of the rest of the public sector (other than the central government) and present them to the national assembly as an integral part of the General Budget Law.1/
Pakistan	Fiscal Responsibility and Debt Limitation Act	The government is required to present an annual debt policy statement to the national assembly. The statement must include an assessment of the government's success or failure in meeting public debt targets. It must also include an evaluation of external and domestic borrowing strategies, an assessment of the nominal and real cost of external and domestic debt, an analysis of foreign currency exposure, an analysis of public debt trends, and information on guarantees and budgetary out-turns of guarantees as well as of all loans contracted.
Sri Lanka	Fiscal Management (Responsibility) Act	The following reports must be presented to Parliament and to the general public by the Finance Minister within a given time frame: fiscal strategy statement; budget economic and fiscal position report; mid year fiscal position report
Zambia	Loans and Guarantees Act	The government is required to include information on the debt payments in the relevant year in the financial report.

Source: World Bank Staff.

1/ While reporting and accountability facilitates delegation of authority, one of the main issues in Nicaragua was that the reporting structure foreseen in the law did not match the actual structure for delegation. While the national assembly delegated to the finance ministry responsibility for debt management, the corresponding strategy designed by the finance ministry was presented for approval to the president. The finance minister was not obligated to report to the assembly on whether or how debt management was meeting the country's debt management objectives.

Table 4. Debt-Recording Systems in the Pilot Countries

Country	External Debt	Domestic Debt
Bulgaria	In-house system (including guarantees)	
Colombia	Off-the shelf system (including guarantees)	
Costa Rica	DMFAS 1/	SATV
Croatia	Off-the shelf system (including guarantees) 2/	
Indonesia	- Ministry of Finance in-house system based on Access for external and domestic securities	
	Duplicate recording in DMFAS (in Ministry of Finance) and an in-house system (in central bank) for other external debt 3/	In-house system for the domestic securities in the central bank
Kenya	CS-DRMS (including guarantees and on-lending)4/	In-house system
Lebanon	DMFAS	In-house system
Nicaragua	DMFAS (including guarantees)	- Stand-alone system for central bank debt - Stand-alone system for treasury debt - A different DMFAS for other domestic debt
Pakistan	DMFAS	- Excel based system for government securities. - Manual system for retail instruments.
Sri Lanka	CS-DRMS	Access
Tunisia	In house system (including guarantees)	Excel
Zambia	DMFAS (including guarantees)	Access

Source: World Bank Staff.
1/ Debt Management Financial and Analysis System (DMFAS) is run by the United Nations Conference on Trade and Development (UNCTAD). UNCTAD activities cover the installation of DMFAS, as well as training and assistance in its use – in particular to enable debt officers to establish a complete and up-to-date debt database and to provide timely and accurate debt statistics. Activities also include maintenance and system support, advice on institutional and procedural issues. For more information, see http://r0.unctad.org/dmfas/
2/ A permanent software program (Trema) has subsequently been installed.
3/ Central bank in-house system has subsequently been migrated to their own installation of DMFAS.
4/ Commonwealth Secretariat Debt Recording and Management System (CS-DRMS) is run by the Commonwealth Secretariat, who assists countries in recording, analyzing and managing the debt. For more information, see http://www.csdrms.org/

Table 5. Recent Examples of World Bank Project Loans with a Debt Management Component

Country	Document Source	Project	Description of the Overall Project	Debt Management Component
Brazil		Fiscal Technical Assistance Loan		Governance of the debt management process, Capacity Building and Portfolio Benchmark
Brazil		Programmatic Fiscal Adjustment Loan (PFRSAL)		Debt management governance reform. the objective is to establish clear assignments of roles and accountability among those involved in setting and executing the Government's debt management policies. At the operational level, this was expected to be aided by the issuance of operational and procedural guidelines that defined functions and responsibilities of relevant units within the STN.
Indonesia	P085133	Government Financial Management and Revenue Administration Project (GFMRAP 2004)	The aim is strengthen efficiency and integrity in public financial management and resource mobilization in Indonesia, principally through strengthening governance, accountability and transparency.	To support the Government to restore fiscal sustainability through strengthened budget, treasury and debt management and clearer intergovernmental finance arrangements.
Kenya	P083250	Financial and Legal Sector Technical Assistance Project (FLSTAP 2004)	The objective is to create a sound financial system, and a strengthened legal framework and judicial capacity that will ensure broad access to financial, and related legal services.	Strengthening debt management. The updating of Government debt databases is handled by individual entities in the Ministry of Finance and CBK responsible for parts of debt management and there is no coordination or consolidation of data. The Project will provide technical support for setting up a unified and sustainable Debt Management Office, including review of relevant legislation. The Project will also support a number of technical improvements with a view to enhancing the operation of the primary and secondary debt markets. These include: (i)designing a benchmark issuance strategy; (ii)taking measures to improve transparency in funding operations; (iii)facilitating over-the-counter (OTC) trading in Government securities; and (iv) establishing a Repurchase Market in Government securities.
Lao	P077620	Public Expenditure Management Strengthening Program	The objective of PEMSP is to strengthen fiscal management, improve the allocation of resources	Debt management needs assessment including the legal and institutional framework, debt recording and reporting, staff capacity and risk management

Country	Document Source	Project	Description of the Overall Project	Debt Management Component
		(PEMSP 2005) Financial Management Capacity Building Credit (FMCBC 2002) Financial Management Adjustment Credit (FMAC 2002)	and enhance reporting of public finances. The objective of FMCBC is to support PEMSP by technical assistance and training programs to support the development of institutional capacity to assist in the successful implementation of the Government's macro-economic structural reform program. FMAC support the design and early implementation of reforms in respect of public expenditure management, state-owned enterprises, and banking.	practices, was conducted in the context of supporting the FMCBC and providing input to the PEMSP.
Mongolia	P098426	Governance Assistance Project (GAP 2006)	The project aims to assist the government in (1) improving the efficiency and effectiveness of governance processes in the management of public finances, (2) promoting transparency and accountability in the performance of public sector functions, and (3) fostering the investment climate in Mongolia.	Management of Public Finance**:** Over the last 15 years, the Government has put in place the foundation for a robust public financial management framework. The elements of this foundation include: (i) a fully functional Treasury Single Account system; (ii) a government-wide Financial Management Information System with full financial commitment controls; (iii) a chart of accounts that fully comply with the International Public Sector Accounting Standards; (iv) a debt management unit within the Treasury Department, and an effective debt recording and monitoring system; and (v) an internally consistent and ambitious Management of public finance Law.
Serbia		First public sector development policy loan (PSDPL 1)		Focused on program of reforms in the debt, guarantee and cash management areas.
Slovak Republic	P069864	Public Finance Management Project (2003)	The Project will assist the Government in improving budgetary and financial management of Government operations, in particular in: (1) improving the budget process by supporting the effective implementation of program	The third component, support for debt management and treasury, would assist the Government in the development of an institutional structure in which accountability is clearly defined, distinguishing between debt formulation and management strategy; ensure a transparent management of public debt, and financial assets, appropriately balancing risks

Country	Document Source	Project	Description of the Overall Project	Debt Management Component
			budgeting within an overall medium-term framework and eventually fully fledged multi-annual budgeting; (2) strengthening the macroeconomic analysis and forecasting capacity of the Ministry and tightening its link to other elements o f the public finance system; (3) supporting the establishment of a professional debt management capacity and completing the institutional set up of the new Treasury System together with provision of training in both these areas; and (4) supporting technical expertise to ensure the effective coordination of the overall reform effort.	and costs. Moreover, the development of a domestic debt market and legal framework will be pursued, identifying implicit and explicit contingent liabilities, establishing a monitoring system that provide a quality assessment of public accounting, facilitating a new treasury system.
Tunisia	P075893	Fourth Economic Competitiveness Adjustment Loan (ECAL IV 2005).	within the objective of maintaining a sound and reactive macroeconomic framework, in particular by promoting fiscal consolidation and strengthening the medium-term fiscal framework, a strategy for improving PDM was elaborated, and a grant covering, among others, support for institutional reform for PDM would help build capacity for the implementation of the plan.	Strengthening PDM. Strengthening PDM will be necessary to reduce debt service over the medium-term. PDM is currently scattered across three different administrative units, making it difficult to develop a more integrated view of the public debt portfolio and implement a more active risk management strategy. The policy measures supported by the program include: (a) the setting up of a middle office in the Ministry of Finances specialized in the formulation of PDM strategy; and (b) presentation of an action plan to consolidate debt management functions into a single entity. These measures aim to ensure a better coordination among the different administrative units currently responsible for PDM: the Ministry of Finance, the Central Bank of Tunisia and the Ministry of Development and International Cooperation.
Turkey		IDF grant supporting capacity building in the front office for foreign debt (2006)	The main objective is to support the further development towards sound PDM practices in Turkey by focusing on capacity building in the front office	The activities funded under this grant will be targeted: (i) at building an effective organization of the front office, (ii) addressing training needs in the financial and legal area, and (iii) supporting the

Country	Document Source	Project	Description of the Overall Project	Debt Management Component
			function for external borrowing.	development of tools that can help ensure that the most cost-risk effective borrowing alternatives are chosen. A specific area of focus is the preparation of procedures manuals and a Code of Conduct to reduce operational risks. The activities will be complimentary to the activities under the existing IDF Grant for Institution Building for Efficient Public Liability Management that focuses on the middle office function, i.e., strategy development and risk analysis.
Zambia	P082452	Public Sector Management Program Support Project (2005)	The objective is to strengthen and increase efficiencies in the legal, accounting and administrative frameworks for public expenditure management, public service management and decentralization.	Provision of support to the Debt Management Office through the Treasury Department to complement its debt management capacity building activity with the Central Bank - Bank of Zambia. Consultants have worked closely with the department to prepare the activities under this component which include reforms to the back office function of the department and development of a plan to develop a domestic debt market. Among the outcomes of this subcomponent is the finalization and adoption of the draft Domestic Debt Policy and Reduction Strategy reform document. Activities will also be undertaken in the development of centralized database of debt data, revision of the Loans and Guarantees Act and development of a policy on parastatals. A strategy for a Domestic Debt Market will also be prepared and implemented under this subcomponent.

Source: World Bank Staff.

II. Recent Developments in Debt Management Operations in Emerging Markets

49. **This chapter reviews recent trends in external debt management operations undertaken by Emerging Market (EM) sovereigns.** It discusses the motivation for these liability management operations, with emphasis on the impact of such operations on reducing sovereign debt-related vulnerabilities. In particular, the paper covers the main operations (pre-financing, debt buybacks, and debt exchanges), carried out by EMs over the past three years. A summary of the main accomplishments of these operations is provided, stressing that these operations have succeeded in reducing the stock of external debt, reduced the burden of external debt service payments, and extended maturity. These improvements in countries' debt structures have led to the containment of external vulnerabilities and consequently, to a reduction in spreads.

A. Recent Trends

50. **Debt management operations by EMs have increased remarkably over the past three years.** The most common forms of these operations were debt buybacks, debt exchanges, and prefinancing.[13] In particular, sizeable buybacks of expensive, less liquid, and/or shorter maturity external debt were financed by either less expensive, more liquid and longer maturity external debt or domestic-currency bonds issued locally or globally. Aggressive prefinancing activities were undertaken by many EMs during this period amid favorable international liquidity conditions. While these buybacks have created a relative scarcity of EM external bonds, all of these debt management operations have helped further improve fundamentals and contributed to the observed improvement in credit ratings. Meanwhile, domestic debt management operations by EMs also increased.

51. **From a peak of $148 billion in 1996 the outstanding amount of Brady bonds in the market is expected to decline to around $10 billion**. In June 2003, Mexico was among the first countries to start buying back its outstanding Brady bonds.[14] Subsequently, a number of other EMs in Latin America, Europe, and Asia have retired sizeable amounts of their Brady bonds, including Brazil's buyback of its outstanding C-bonds (Capitalization bonds—as they capitalized part of the interest from their 8 percent coupon) in 2005. Following the February 2006 announcements by Brazil to pay off the remainder of its Brady bonds ($6.6 billion), and of Venezuela to buy back another $3.9 billion of its Brady bonds, the outstanding amount of Brady bonds in the market is expected to decline to around $10 billion.

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[13] See UNITAR (2001a) and (2001b) for a broader discussion on the framework for such operations.

[14] Mexico's Brady bonds, with a face value of $35.6 billion, were created following the restructuring of its defaulted bank loans after the debt crisis of the early 1980s.

52. **EMs have also been exchanging foreign- for local-currency denominated debt and have been prepaying foreign currency obligations to International Financial Institutions, the Paris Club and other creditors.** Early in 2006, Brazil, Colombia, Mexico, and Venezuela announced substantial debt buybacks or exchanges of their foreign currency bonds, which could result in up to $25 billion of foreign currency EM bonds being retired from the market. While these operations have been concentrated in Latin America, the trend is taking place in many other EMs. In addition, significant prefinancing activity was observed, in particular EMs prior to entering their election cycles (e.g., Colombia and Mexico in 2005).

53. **There has also been unprecedented access to derivatives markets by EMs in recent years.** While data on derivatives transactions are not readily available, it is safe to say that, over the last 3-5 years, the number of EM governments with swap credit lines with international banks has more than doubled, to well over 20. Many EM sovereigns have now negotiated International Swap and Derivatives Association (ISDA) Agreements with up to 6-10 counterparties. This trend, *inter alia*, is directly related to the improvement in debt management capacity that has facilitated the execution of liability management operations.

B. Factors Influencing the Debt Management Operations

54. **A key factor contributing to the increase in debt exchange activity has been the fall in the spreads of EM external debt during this period.** The fall in spreads have been induced by continuing improvements in EM policy frameworks, along with the search for yield in a low interest rate environment, has led international investors to flock to EM debt. Improvements in credit quality have facilitated investment in EM bonds by an increasingly diverse investor base, including pension funds, central bank/state agency allocations, hedge funds, wealthy individual investors and Asian retail investors. This has motivated many EMs to undertake the retirement of their Brady bonds in an effort to replace relatively expensive Brady debt with cheaper external market debt. In addition to reducing external debt service costs, this debt replacement also intended to eliminate the negative perceptions of restructured debt and to release collateral.[15]

55. **Current account surpluses have been a key factor contributing to EMs ability to retire expensive foreign debt.** Current account surpluses were supported by faster export growth and rising commodity prices. As the rates of remuneration of reserves remain low, when compared to the relatively high cost of servicing of foreign debt, these EM governments have promptly used international reserves to further reduce external debt. This has been especially the case for Brazil, Ecuador, Mexico, and Russia.

[15] However, as many Brady bonds were retired, their status as benchmark bonds (the most liquid and representative bonds), was also lost for some issuing countries.

56. **Increases in the EMs debt operations related to switching from foreign currency financing to domestic currency financing have also been driven by a desire to develop domestic debt markets.** Issuance in domestic currency has been targeted at improving the liquidity of domestic debt markets, extending domestic yield curves and further developing local market infrastructure.[16] While lengthening of domestic-currency maturities is equally motivated by a desire to alleviate the roll-over risk, issuance of longer-maturity local currency bonds is further anticipated to extend the duration of domestic debt and, thus, help reduce its sensitivity to domestic interest rate changes (e.g., see Wheeler (2004)).

C. Implications of Debt Management Operations

57. **EM debt management operations have exercised a considerable favorable impact on the sovereign debt portfolio.** For example, in the recent years, the public foreign-currency debt of Latin American governments fell sharply in relation to GDP, reflecting the effects of this debt strategy as well as the appreciation of many currencies in the region. The debt exchanges, of which many were carried out in the first half of 2006, have helped lower interest costs, extend maturities, and smooth the profile of amortization. At the same time, the increasing reliance on local-currency financing has widened the investor pool in local markets to include international investors (e.g., Brazil, Colombia, Mexico, and Peru), enhancing the liquidity of domestic financial markets and lowering the cost of domestic debt by better matching to investors' needs.

58. **These operations have also transformed the market for EM sovereign debt securities by lifting the status of EM domestic currency debt market to a global marketplace, and facilitating access to finance by EM corporates.** The decline in returns on external debt has increasingly pushed investors into local currency instruments. According to market analysts, 80 cents of every new dollar in strategic inflows to EM debt is going into local-currency instruments, and industry surveys show that about half of the volume of trading in EM debt last year was in local-currency instruments. Moreover, increasing investor demand for higher-yielding credits is allowing EM corporates and LICs easier to access international markets.

59. **Credit rating agencies have rewarded these debt management strategies by accelerating ratings and outlook upgrades.** Brazil recently received a credit rating upgrade by Standard and Poor's to its highest level ever, in part due to the strength of its liability management operations. Similarly, Moody's raised Colombia's rating outlook for foreign currency obligations to positive after the announcement of debt buybacks. In their comments,

[16] See IMF and World Bank (2001a), OECD (2002) or Commonwealth Secretariat (1999) for a broader discussion of these issues.

the rating agencies praised the continued reduction of foreign currency debt and signaled the importance of the development of the domestic debt market.

D. Selected Operations

60. **We proceed by analyzing in some detail the debt management experiences of a few EM countries, with different sizes of financial sector and experience in debt management.** The countries that we discuss are Colombia, Mexico, and Turkey. In addition, we provide a summary table of recent external debt management operations of selected countries in Table 6.

Colombia

61. **Over the last few years Colombian authorities have been engaged in numerous debt management operations.** Colombian debt was exposed to high foreign exchange rate and international interest rate risks, with half of it denominated in foreign currency and increasingly held by foreign investors. The authorities, besides wanting to reduce these portfolio risks, also wished to address the short-term maturity structure, and more generally, to resolve problems with the uneven profile of debt servicing.

62. **To reduce the exposure to exchange rate risk, Colombia engaged in debt buybacks and exchanges, and issued the first Colombian-peso denominated international bond in 2004.** This global peso bond is due in March 2010, with interest and principal calculated in local currency, but paid in U.S. dollars (and converted using the spot exchange rate on the due date). This structure implies that the investors assume the exchange rate risk. The bond was well received by international investors, and the issue was oversubscribed. The bond offered the high yield of the domestic-currency market and was issued at a time when the Colombian peso was expected to appreciate. It protected investors against convertibility risk as it was governed by the New York Law and was Eurocleared. Consequently, the successful issue of this bond reduced the exchange rate risk of Colombia's external debt, reduced currency mismatches in the public sector's balance sheet, and extended the investor base to those who were unable or unwilling to purchase local market instruments. Following the success of this issue, the government reopened this bond in January 2005, and later in 2006, raising funds for debt buy-backs.

63. **To smooth out the profile of external debt repayments, Colombia announced in 2003, a five-year program of external liability transactions (amounting $750 million) to remove debt servicing "humps" in 2005 and 2008.** As a first step, the authorities redeemed the entire principal ($153.3 million) and accrued interest, of an adjustable note due in 2005. To finance this redemption, the authorities reopened a Global bond due in April 2013. Next, the authorities bought back the entire principal ($300 million), and the accrued interest, of a floating rate note also due in 2005. This redemption was financed by reopening a Global bond due in 2033 and an offer of floating rate notes due in 2009. Later, Colombia carried out

a debt exchange in which bonds due in 2009, carrying a put option in 2005, were exchanged for a new bond due in 2009 and a cash payment. The new bond was fully fungible with an already outstanding bond also due in 2009. Colombian authorities continued with their strategy into 2006, offering to buy back global bonds maturing in 2006 and 2010 and euro denominated bonds maturing in 2008 and 2011. These operations were financed through the reopening of the peso global bond.

64. **Colombia also undertook a number of domestic debt management operations to reduce domestic financing costs, lower roll-over risk, and lengthen the maturity of domestic debt.** In addition to efforts to cut the fiscal deficit, the government has actively tried to lengthen the maturity of its domestic debt by issuing nominal government bonds (TES), at 10- and 15-year maturities and inflation-indexed (UVR), debt at 20-year maturity.[17] In addition, the authorities have tried to improve the liquidity of the domestic TES yield curve by conducting regular auctions of 3-, 5-, 10- and 15-year TES.

65. **The authorities have been also engaged in a large plan to buy back domestic government bonds.** Until the end of August 2006, authorities managed to buy back around $415 million of TES bonds. These operations are a part of the program to repurchase the total of $1.04 billion of this type of debt.

Mexico

66. **Mexico is credited with a carefully laid out debt management strategy aimed at reducing debt service costs, decreasing the amount of debt denominated in foreign currency, and improving financial conditions of future borrowing.** In addition to paying off its Brady bonds, which generated significant net present value savings in debt service costs besides releasing around $2.6 billion in collateral, in recent years Mexico was also engaged in a number of debt management and prefinancing activities. As international interest rates and the spreads on EM debt continued to decline and remained low in 2004, 2005, and 2006, the authorities prefinanced its funding needs up to 2007. In this way, Mexico reduced financing risk in 2006, the year of presidential elections, and managed to take advantage of the high demand for EM debt.

67. **Mexico also undertook operations to make the yield curve on its global bonds more efficient.** This entailed a reduction in the amount of older long-term bonds that generated higher yields than prevailing interest rates. To this end, Mexico completed in April 2004, the first ever exchange of one EM Global bond for another Global bond (by reopening recent bond issues). This exchange was met by high investor demand, as it allowed investors to dispose of bonds that were cheap compared to the yield curve. It also boosted Mexico's

[17] Colombia issues both nominal and inflation-linked bonds, with both fixed and floating interest rates.

reputation as an issuer, and improved its future financing conditions, especially at the long end of the yield curve. In addition, this exchange generated net present value savings of $50 million and extended the average maturity of the exchanged debt by around four years.

68. **In November 2005, Mexico further reduced the outstanding amount of long-term external debt, financing this buyback through a purchase of foreign exchange reserves from the central bank.** In this way, the authorities further improved the efficiency of the yield curve, and replaced a part of the external debt with domestic debt. Furthermore, its improved reputation among investors and favorable market conditions in 2004 allowed Mexico to become the first EM issuer of a 15-year euro denominated US$. At the same time, Mexico was able to issue a 30-year Global bond in U.S. dollars at its lowest spread ever. Similarly, in February 2006, Mexico issued a US$ denominated bond maturing in 2017 with a spread of 105 bps over the U.S. Treasury bonds, also the lowest ever for this maturity.

69. **In June 2006, Mexico pre-paid part of its multilateral debt, further reducing its foreign exchange exposure.** By using the reserves purchased from the central bank (the purchase was financed by a domestic issue), the government reduced its foreign debt owed to international financial institutions (World Bank and the Inter-American Development Bank), reduced large international reserves, and boosted domestic issuance.

70. **In a step that further increased the sophistication of Mexican debt management, the authorities sold exchange warrants in November 2005 that gave investors an option to swap in 2006 (an election year) up to 2.5 billion of U.S. dollar-denominated debt for peso-denominated debt (Box 2).** The sale attracted many investors because of expectations of further decreases in the spread of Mexican debt, and a currency risk-free design of the warrant. By November 2006, buyers had exercised all the warrants. The exchange resulted in an increase of in the average duration of Mexican debt and a reduction of exchange rate risk.

Turkey

71. **Turkey has been exposed to high exchange rate risk, as a large portion of its debt portfolio has been denominated in foreign currencies.** To face this challenge, the authorities engaged in several external debt management operations, taking advantage of the prevailing lower interest rates and favorable market conditions during the past three years. As a result, Turkey managed to reduce the share of its foreign exchange and fx-indexed debt from 58 percent of total in 2002 to 37 percent in 2006.

72. **Turkey has also been vulnerable to changes in market confidence, as it has faced a heavy redemption schedule and high roll-over ratios.** To reduce the risk profile of its debt portfolio, the authorities have carried out debt management operations aimed at extending the average maturity of outstanding debt, and at prefinancing future funding needs in order to avoid market access risk. In particular, to lengthen the average maturity of its domestic debt and

reduce the amount of debt maturing in the beginning of 2004, the authorities undertook in 2003, a number of debt exchanges that pushed forward repayments by around 10 months.[18]

Summary and conclusions

73. **EM governments have been reducing their external vulnerability through debt management operations, including prepayments to official and private creditors and market-based debt exchanges.** This has been facilitated by the sizeable international liquidity conditions and deepening local capital markets in many EMs. These operations have contributed to significant reductions in public foreign-currency debt, especially in Latin America, with some offset by increased local-currency financing.

74. **The growing impetus for these operations has also been supported by a marked diversification of the investor base.** The strong interest of international investors in EM sovereign debt has reflected, partly a cyclical search for yield and the recently improved risk-return profile of these assets, and partly also, a shift of the EM investor base from highly active short-term traders to more strategic buy-and-hold investors. The increased presence of such investors has led to the rapid increase in EM local currency debt, which is projected to exceed foreign currency debt in 2006. In particular, hedge fund investment in EM sovereign debt is reportedly directed almost entirely toward local currency instruments.

75. **Continuation of benign global market conditions are likely to be essential in order for EMs to further mitigate remaining debt-related vulnerabilities.** It is noteworthy that the improvements highlighted above were facilitated by the willingness of investors to digest the greater risk in EM debt in return for their higher returns, in a benign global environment. As long as mature market interest rates and global liquidity conditions tighten *gradually*, these positive developments in debt management are likely to persist and provide increasing buffer against a possible moderate deterioration of external financing conditions. Moreover, the current widening of investor base will likely become less reversible if EM issuers face the challenge to stay on track with prudent policies.

76. **While the shift in the currency composition of sovereign debt is a favorable development, EMs need to persevere with fiscal consolidation to reduce total public debt.** This is necessary to secure the contribution of these debt management operations towards reducing country risk for sovereigns, as otherwise they will amount to little more than replacing country risk for the sovereign with greater sovereign and interest rate risk on the holders of domestic-currency instruments. In this connection, Moody's recently expressed concern about the buildup of Colombia's domestic-currency public debt.

[18] Since then, Turkey has undertaken several other liability management operations which have helped reduce re-financing risk and improve the maturity profile further.

77. **Finally, it is important to stress the potential for contagion as international investors increase their exposure to local-currency instruments across several EMs simultaneously.** As the correction in EMs during May–June 2006 has shown, selling in equity markets can spread quickly across currencies, local bond markets, and external bond markets and across a wide range of countries. In this context, it is necessary that EMs continue to widen the local investor base, broaden the set of local market instruments, and further develop local capital markets to make them more resilient to capital flow reversals.

Box 2. Innovation in Mexican Debt Management—Sale of Debt Exchange Warrants

On November 18, 2005, Mexican authorities for the first time successfully sold exchange warrants that gave to investors the right to swap up to US$2.5 billion of bonds for longer maturity, peso denominated bonds (Mbonos). The transaction was a part of the authorities' strategy to shift currency composition of public debt towards the peso and to lengthen its average maturity. By November 2006, buyers had exercised all warrants and exchanged the total of US$2.5 billion of bonds. As a result of the exchange, the average maturity of the public debt was significantly extended (from 6.4 to 7.8 years to maturity), but while the debt service costs increased to a small degree.

In March 2006, the Mexican government issued a second series of warrants allowing the investors to exchange a number of Eurobonds. These were also fully exercised and resulted in an exchange of about €494billion of bonds.

The transaction was designed to bring a number of benefits. The sale of warrants was intended to reduce volatility in local and external debt markets, and reduce the impact of the forthcoming elections on the local debt prices. It was also expected to widen the investor base by attracting investors unwilling to buy local debt ahead of the elections, but who would have exercised their warrants if they were in the money.

The use of warrants, instead of attempting the traditional debt exchange was very innovative. This approach was possible thanks to a proven track record of the Mexican authorities in debt management, and the interest rates expectations of the buyers.

The value of the warrants depended only on the relative price movements of US$- and peso-denominated Mexican debt, and was immune to exchange rate risk. The latter was borne completely by the issuer. On the day the warrants expired, investors were able to exchange US$ debt for peso denominated debt at a predetermined ratio, set on the day the warrants were issued, and equal to the ratio of forward prices of both types of debt on the day of the issue. To obtain the face value of the peso debt, the exchange rate from the day of the exchange was applied. Consequently, warrants had positive value (were in the money), if by the expiration day prices of the peso denominated (domestic) debt had increased more than of the US$ denominated (external) debt, or prices of the US$ denominated debt had fallen more than the prices of the domestic debt.

The entire exchange rate risk was borne by the Mexican authorities. In case the peso had depreciated, investors would have been entitled to exchange their US$ bonds for peso bonds with a higher face value. In case the peso had appreciated, holders of external debt would have received peso debt with lower peso face value, and the issuer—Mexican authorities—would have benefited from a reduction in the domestic debt, while still benefiting from the exchange.

Table 6. Selected External Debt Buy-Back Operations by EM Sovereigns: January-November 2006

Type of operation	Description	Objective	Impact on sovereign debt
Prepayment of nonmarketable debt to multilateral and private creditors			
	Brazil (January) – prepayment of the Paris Club Debt ($2.6 billion) financed by international reserves.	- Improvement of debt profile. - Reduction of US$ debt exposure.	- Reduction of debt level. - Reduction of US$ debt.
	Colombia (February) – announcement of prepayment ($580 mn) of multilateral and syndicated loans during March to May to be financed by issuing peso-denominated bonds.	- Reduction of US$ debt	
	Russia (January) – announcement of prepayment of all remaining non-Aries Paris Club Debt (US$12.5 bn) in 2006 to be financed by international reserves/Oil Stabilization Fund.	- Reduction of debt level - Reduction of US$ debt	
	Venezuela (February) – announcement of a plan to prepay (US$700 mn) bilateral and multilateral loans in 2006, financed by windfall oil revenues and/or domestic issuance.	- Reduction of foreign debt - Reduction of fx public debt exposure - Increase local issuance - Issuance of a benchmark to develop yield curve	
	Mexico (June) – announced a plan to prepay US$7 billion in multilateral debt due to the World Bank and the Inter-American Development Bank. This represents about ½ of Mexico's total outstanding liabilities vis-à-vis IFIs.	- Reduction of foreign debt - Reduction of fx public debt exposure - Increase local issuance -Reduction in foreign reserves and reduction of Central Bank outstanding liabilities issued for OMO purposes.	

Type of operation	Description	Objective	Impact on sovereign debt
	Serbia (October) – prepayment of World Bank debt ($411 million) financed by windfall privatization revenues ($2.7 billion in 2006). This followed the prepayment of Fund debt ($481 million).	– reduction of debt exposure.	– public external debt to GDP ratio fell to 23 percent of GDP at end-2006, down 13 percent points on the year.
	Uruguay (August) –prepaid US$900 million in multilateral debt due to the IMF maturing in 2007, using $500 million in proceeds raised from the re-opening of its global 2022 bond, and $400 million from its stock of international reserves. (This operation follows earlier-in-the year pre-payments for IMF obligations due in 2006, as well as other multilateral obligations due in 2006 and 2007, using proceeds from previous debt placements.)	- Reduction of interest payments - Improvement of country's debt profile, by extending its average maturity	- Improvement of external debt profile
Brady bond exchanges, calls and buy-backs	**Brazil (February)** – announcement of a plan to retire the remaining Brady bonds (pars, discounts, Flirbs, DCBs, and NMBs maturing between 2009 and 2024), starting on April 15; principal value to be exchanged = US$6.64 bn; and to be financed by international reserves.	- Reduction of interest payments - Smoothing of amortizations - Reduction of public debt's fx exposure - Reduction of sovereign's risk premium and spreads - Reduction of cost of funding for companies	- Collateral released = US$1.5 bn - Reduction of interest payments on net present value terms = US$345 mn.
	Venezuela (February) – announcement of a plan to buy-back the remaining Brady bonds (pars and discounts), starting in March; principal value to be exchanged = US$3.9 bn; and to be financed by windfall oil revenues.	- Reduction of foreign debt - Reduction of fx public debt exposure	- Expected reduction of foreign debt by 15.2 percent (to US$26.3 bn) - Expected collateral release
Global bond exchanges,			

Type of operation	Description	Objective	Impact on sovereign debt
calls and buy-backs	**Brazil (January-March)** – buy-backs of globals, US$2.3 bn, maturing between 2006 and 2010 through the secondary market, financed by international reserves and issuance of global 2037 (7.125% coupon) in January (US$1 bn) and its reopening in March (US$500 mn)	- Reduction of fx debt	- Debt reduction = US$2.3 bn
	Brazil (February) – announcement of a plan to buy back external debt up to US$20 bn in 2006, financed by international reserves	- Gaining of an investment-grade sovereign credit rating (from current BB stable S&B rating) by improving the sovereign's debt profile - Reduction of debt maturing through 2010 and restructured bonds (Bradys) - Lengthening the maturity of public debt - Reduction of foreign interest payments - Reduction of public debt's fx exposure - Developing liquid fx benchmark bonds - Deepening of local markets by exchanging external debt into local-currency financing and improving liquidity of yield curve at the long end	
	Brazil (July-August) – announcement of an exchange of global bonds maturing in 2020 (with a coupon of 12.75%), 2024 (Series A and B, 8.875% coupon), 2027 (10.125% coupon) and 2030 (12.25% coupon), with a total outstanding of about US$8.5 bn, and re-opening of the existing global 2037 for US$1.5 bn		
	Colombia (February) – offering to buy back part of	- Increase of average duration of external debt	- Upgrading the outlook of S&P BB rating to

Type of operation	Description	Objective	Impact on sovereign debt
	US$3.27 bn of global bonds maturing during 2006 and 2010, and €841 mn of euro-denominated bonds maturing in 2008 and 2011, financed by international reserves and by reopening the global peso bond.	- Reduction of public debt's fx exposure	positive
	Colombia (September) – buy-back and new issue, with a cash tender for its outstanding 2020, 2027 and 2033 Global bonds in an amount of $700 million combined with an exchange of $1bn benchmark bond maturing in 2037.	– creation of benchmark issues and improvement of liquidity along its curve.	
	Ecuador (May) –exercised the call option on US$740 million of global bonds maturing in 2012, which was financed by the earlier repayment of cheaper global bonds and a disbursement of a credit from the Latin American Reserve Fund.	- Reduction of external public debt - Reduction of foreign interest rate payments and maturity extension	
	Ecuador (July) – announcement of the repurchase of the remaining outstanding $510 mn of the 2012 bond by the November 15 call, according to press reports; government has to issue a notice by end-September.	Reduction of external public debt - Reduction of foreign interest rate payments	
	Mexico (February) – announcement of a US$2.8 bn buy-back of global bonds (various U.S. dollar-, euro-, and British pound-denominated issues) maturing during 2007 and 2031, to be financed by a new US$3 bn global bond maturing in 2017 (with a spread of 105 bps over U.S. treasuries, the lowest spread ever achieved for a similar maturity)	- Creation of few liquid, benchmark bonds on the U.S. dollar curve - Reduction of foreign interest rate payments - Extension of average maturity of public debt - Continuation of the sovereign's presence in international markets to aid corporates to access foreign capital	

Type of operation	Description	Objective	Impact on sovereign debt
	Mexico (October) – announcement of an exchange of U.S. dollar-denominated external debt for local-denominated debt, where investors exercised exchange warrants issued in 2005 to exchange $905 million of U.S. dollar bonds maturing between 2012 and 2016 for local bonds maturing in 2014.	**–** continuation of the process of switching foreign currency debt into local domestic debt.	
	Panama (January) – global bond exchange (buy-back of global bonds, maturing in 2020, 2023, and 2034, of US$1.062 bn and issuance of a new global bond due 2036 of US$1.363 bn)	- Retirement of illiquid bonds - Creation of a benchmark, liquid bond at the long end of the curve - Reduction of future cost of issuance	
	Philippines (September) – an exchange offer, with a buy-back of global U.S. dollar bonds maturing through 2025 in an amount of $1.0 billion and exchanged into $764 million of an amortizing 2024 and a $435 million reopening of the 2031s, the longest dated on-the-run Philippines dollar bond.	– Creation of a new liquid benchmark, and enhance the liquidity of the 2031s. – Increase the average duration of external debt. – Improve the efficiency of the global bond yield curve.	
	Russia (January-February) – intention to retire eurobonds at the long end of the curve ($2.5 bn of 2028 bonds), according to market participants; to be financed by international reserves/Oil Stabilization Fund and/or domestic issuance	- Reduction of expensive foreign public debt - Development of a domestic liquid yield curve at the long end by issuing rouble-denominated 30-year bonds	
	Russia (July) – announcement of the second tranche of exchange of former USSR commercial debt into Russian Eurobonds due 2010 and 2030 ($600 mn, with same terms – a 33% haircut – as the first exchange -- $1.37 bn, concluded in December 2002); will be officially launched in September.		- Enhancement of investor sentiment towards the sovereign

Type of operation	Description	Objective	Impact on sovereign debt
	Turkey (September) – $1.2 billion in eurobonds maturing in 2007–2010 were exchanged for a new USD eurobond maturing in 2016	- Extend the maturity profile - Establish a new 10-year benchmark	
	Uruguay (November) – debt exchange, with a buy-back of 20 international bonds maturing through 2019 in an amount of $1.14 billion in exchange for $300 million in cash payments (funded by reopening an inflation-indexed peso bond maturing in 2018 and a U.S. dollar-denominated bond maturing in 2036) and the remaining amount by issuing bonds maturing in 2022 and 2036. The purpose of the operation was to smooth the amortization profile, to lengthen the maturity profile, and to reduce the share of U.S. dollar debt.	– smoothing of the debt maturity profile.	

Source: IFR.

III. Public Debt Management in Low Income Countries (LICs)

A. Introduction

78. **This chapter surveys the landscape of debt management in LICs.** Section B highlights some important differences between LICs and middle income countries (MICs) that act to constrain debt management in LICs. Sections C and D respectively identify the limited choices and main weaknesses in debt management, and outline the costs associated with poor or deteriorating debt management in LICs. Section E proposes to establish a set of public debt management (PDM) performance indicators with the objective of measuring debt management performance in LICs, while section F provides some conclusions.

B. Is Debt Management in LICs Different?

79. **The objective of PDM**—whether in LICs or middle income countries (MICs)—is to ensure that the government meets its borrowing requirements at the least cost within an acceptable degree of risk, and meets any other pre-set PDM goals, such as developing and maintaining an efficient market for government securities.

80. **Effective debt management requires close coordination with fiscal and monetary policies in both LICs and MICs.** The responsibility for ensuring prudent debt levels is a fiscal responsibility, but a debt managers' analysis must inform the fiscal authorities of the costs and risks of the debt portfolio. Debt managers provide fiscal authorities information on the debt levels, sensitivity of debt portfolio to interest rate movements, and other cost-risk analysis which could materially impact sound fiscal policy. While debt management operations and monetary policy operations should be distinct, inter-policy dependencies, in particular on interest rates, must be understood and shared. The results of close coordination between debt management, fiscal and monetary policies underpins a sound macro framework, resulting in lower risk premia in the economy. However, many characteristics of LIC economies and their debt stocks distinguish debt management in LICs from that in MICs.

Characteristics of LICs and their public debt

81. **Creditor composition and concessionality of debt in LICs differs from that in MICs.** Multilateral and official bilateral creditors make up over 80 percent of the public and publicly guaranteed external debt held by LICs. Over 70 percent of this debt is contracted on concessional terms with below-market interest rates and long maturity periods, including grace periods.[19] By contrast, 55 percent of the external debt stock in MICs is made up of

[19] A loan is considered concessional if its grant element, i.e., the difference between the nominal value of the loan and its NPV, exceeds 35 percent. The concessionality of a loan, i.e., its grant element, increases

(continued…)

credits from the private sector. This debt and the nonconcessional financing provided by bilateral and multilateral institutions implies that almost 80 percent is on nonconcessional terms (Figure 1). The predominance of concessional external debt in LICs on fixed terms limits the scope for managing the maturity structure and currency composition of debt according to cost and risk considerations. Concessional external financing from the major International Financial Institutions (e.g., World Bank, African Development Fund and the IMF) have fixed interest rates, maturity structures and currency compositions, and thus may not exert same 'market discipline' in the form of rising country risk premia that is imposed when contracting market debt.

82. **While such characteristics may give rise to complacency in the area of debt management in LICs, other characteristics of LIC economies and their debt portfolios suggest an important role for a forward looking debt management strategy within a sound macroeconomic framework**. The currency composition of LICs public external debt constitutes a source of external vulnerability. LICs for the most part are unable to issue external debt in local currency and donors provide credit in major currencies (e.g., USD, euro, yen), which most times implies a currency mismatch relative to revenues used to service the stock. While the choice of options to address currency risk may be more limited in LICs relative to MICs who can access international capital markets, options are available. Where the conditions are appropriate, accessing domestic debt may be a viable alternative to reduce further currency risk in the debt portfolio, while current currency risk could be mitigated somewhat by pre-paying loans in specific currencies.[20] Similarly, swapping out of expensive currencies with the use of foreign exchange reserves may also be an option, or borrowing externally from IFIs in currencies that result in a more diversified and balanced portfolio.

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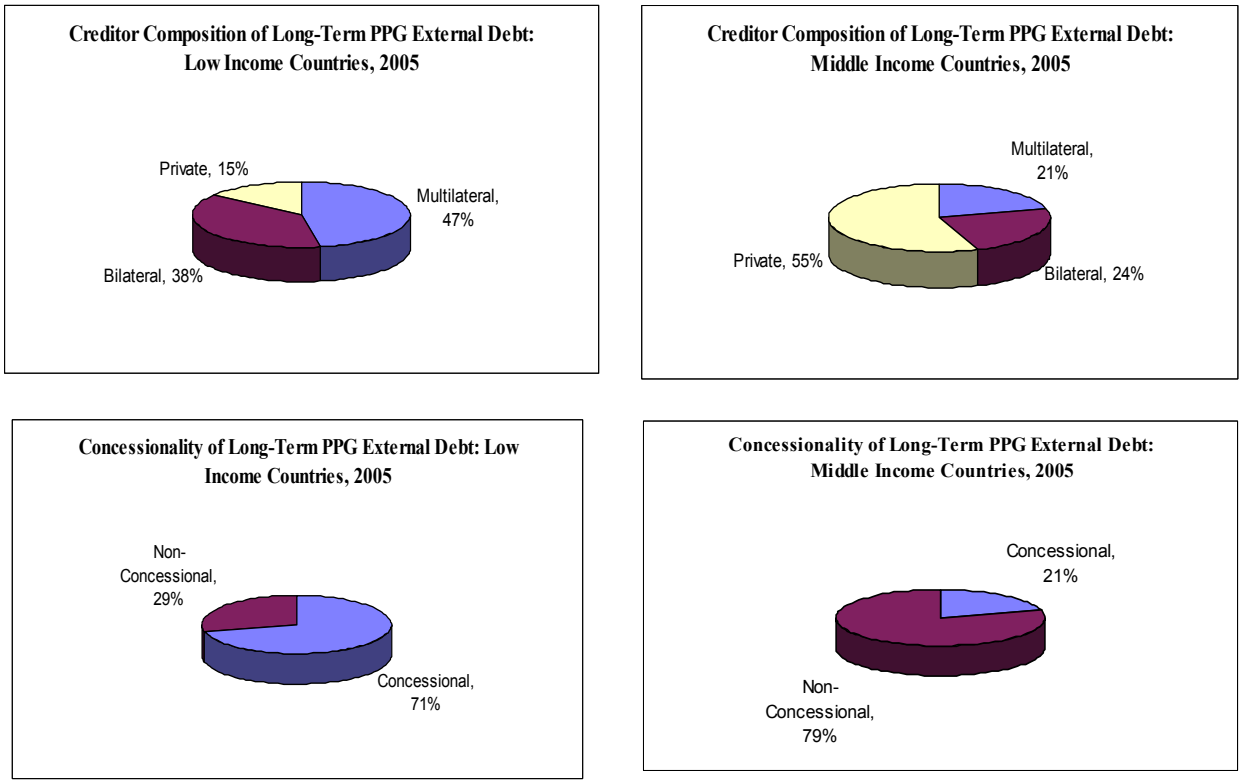
respectively with lower interest rate, longer grace and maturity periods, and a more back-loaded repayment profile.

[20] IDA, for example, allows the pre-payment of loans without a penalty charge.

Figure 1. Characteristics of Long-Term Public and Publicly Guaranteed External Debt in Middle and Low Income Countries

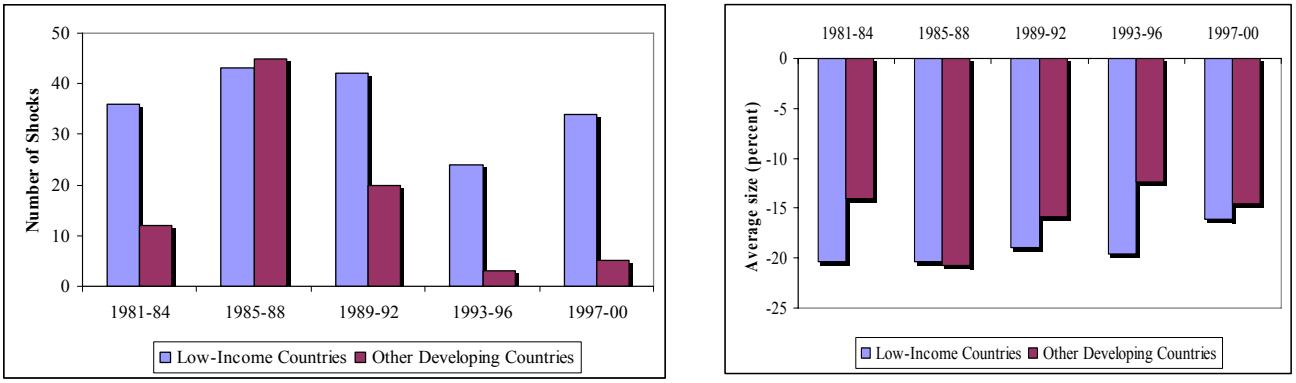


Source: World Development Indicators, World Bank.

83. **LICs are more susceptible to exogenous shocks than MICs.** LICs tend to have narrow and volatile production and export bases which increase their vulnerability to exogenous shocks that can significantly worsen their debt dynamics. LICs are more vulnerable to commodity price shocks than other developing countries (Figure 2), and such shocks occur more frequently.[21] Moreover, LICs tend to experience larger negative shocks in real export prices, than in other developing countries (Figure 2). Adverse import shocks may also imply a higher import bill for the public sector that would need financing. The more prevalent these shocks are in a given country, the larger the risk that debt-service obligations, even on concessional terms, cannot be met.

[21] Please see, "Fund Assistance for Countries Facing Exogenous Shocks," IMF 2003.

Figure 2. Size and Frequency of Negative Shocks in Real Export Prices Across Countries



Source: *Fund Assistance for Countries Facing Exogenous Shocks, IMF 2003*.
Notes: 1/ A shock is defined as at least a 10 percent decline in the real export price from the previous year's level. 2/ The sample consists of 74 developing countries, 42 of which are low-income.

84. **Volatile aid flows also introduce instability in LICs.** Unlike MICs, LICs have few ties with international capital markets and are therefore not subject to changing market sentiments that can cause instability through, for example, volatile interest rates or high rollover risk. However, like private capital flows, fluctuations in aid flows can occur because of external factors (e.g., shifts in donor sentiment) or in response to perceived domestic changes (e.g., in governance and economic management). Indeed, aid tends to be quite volatile (Bulir and Hamann, 2006), this volatility tends to be higher for aid-dependent countries, and program aid tends to be more volatile than project aid (Eifert and Gelb, 2005). Moreover, aid commitments, which governments typically base budget forecasts on, are often statistically unrelated to actual disbursements. Aid volatility implies an important role for prudent debt management that is closely aligned with fiscal policy to cushion aid disbursement shocks.

Mix of external and domestic financing often determined exogenously

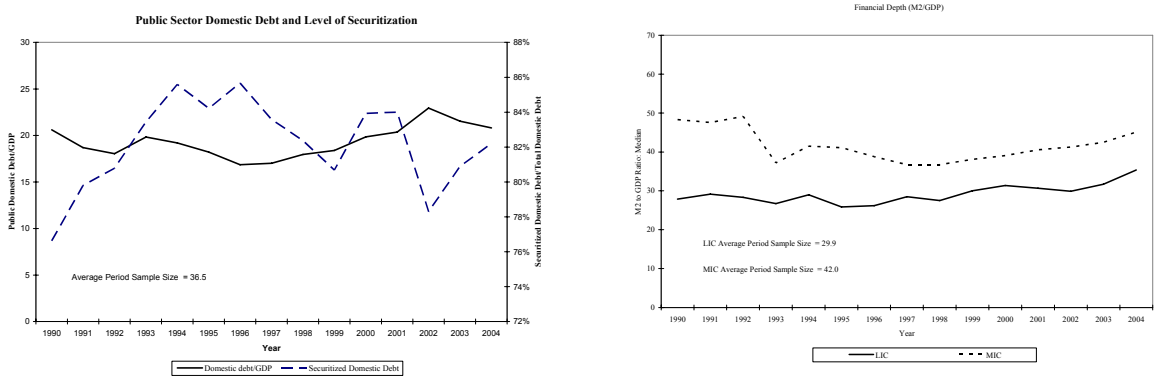
85. **In many LICs, the mix of external and domestic financing is a function of the international donor community's willingness to provide external finance.** In principle, an important policy decision and a key component of a LIC's debt management strategy is the appropriate mix of external and domestic financing. In practice, domestic financing is often used to fill remaining financing gaps after external financing. Alternatively, high external financing through concessional aid flows in LICs with low absorptive capacity may require domestic debt issuances to sterilize foreign exchange flows. When the mix of external and domestic debt financing is not a domestic policy choice, but a function of the international donor community's willingness to provide concessional external financing, an important policy lever of the central government, and thereby an operationally relevant component of debt management, which could imply important cost savings, is lost. The limited choice that

characterizes the issuance of domestic debt in LICs does not imply that domestic debt issuance is unwise in all circumstances. It may well be that domestic debt issuance fills a financing gap created by a key public investment program that would be unfunded otherwise. The cost of an unrealized public investment program, especially one that is a high-return activity, must be measured against the cost-risk of domestic debt issuance. It may also be the case that the issuance of domestic debt for sterilization purposes is preferred to real exchange rate appreciation and a loss of competitiveness that could accompany a surge in external finance.

86. **Domestic debt in LICs is significant and increasing.** Over the period 1990–2004, the average level of domestic debt to GDP for LICs is 15.2 percent, and is on a slight upward trend, averaging 18.0 percent during 2000–2004. The median level over the entire sample is 11 percent indicating that there is considerable cross country variation with some LICs recording domestic debt to GDP ratios that are close to 40 percent. Over 70 percent of domestic debt in LICs is in the form of securities and the trend is increasing (Figure 3).[22] High and rising levels of securities outstanding imply a greater role for sound PDM because of the contractual nature of such obligations and the impact on the sovereign credibility in the market if scheduled payments are not forthcoming. The significant level of domestic debt in LICs coincides with weak financial sector development. Relative to MICs, financial sector depth as measured by M2/GDP is on average 15 percentage points lower in LICs. This situation suggests significant efficiency gains and cost reductions can be achieved by developing a market infrastructure for the government's securities market (see Developing the Domestic Government Debt Market: From Diagnostics to Reform Implementation, 2007).

[22] This domestic debt data is taken from a new database compiled by Bank and Fund staff and is drawn from government publications, unpublished disaggregated IFS money and banking data, and country statistical appendices. Data for the domestic debt stock includes 66 countries for the period 1998-2004, though for most countries, the time series cover the period 1990-2004. Please see Annex I of the Bank and Fund staff document, "Applying the Debt Sustainability Framework for Low-Income Countries Post Debt Relief," October 2006, for more detail.

Figure 3. Domestic Debt in LICs and Financial Market Development

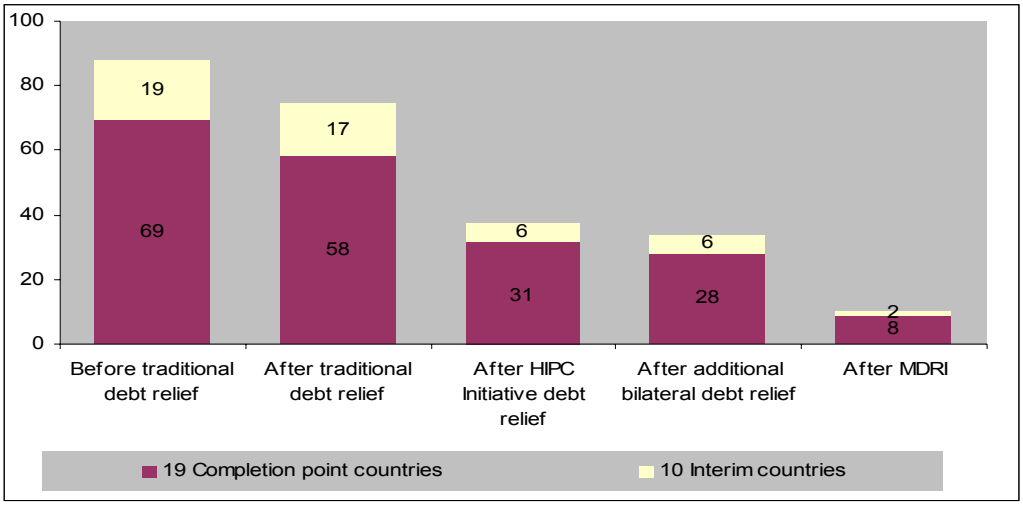


Debt ratio improvements not matched by gains in debt management

87. **Several LICs have had large debt write-offs leaving debt burden indicators at historically low levels.** Forty HIPCs are now potentially eligible to receive MDRI debt relief at the time they reach completion point under the HIPC Initiative. The 29 countries that have reached the decision point under the Initiative are expected to have their debt stocks reduced by 90 percent (Figure 4). Debt stocks in the 19 post-completion-point countries, who are currently receiving MDRI debt relief are expected to decline by an average of 88 percent, from a total of US$69 billion to US$8 billion after HIPC and MDRI debt relief. For many countries, this translates into historically low debt burden indicators. For example, the NPV of external debt- to-GDP ratio in Zambia is expected to be just 4 percent in 2006, after the implementation of MDRI.

Figure 4. NPV of Debt After HIPC Initiative, Additional Bilateral Debt Relief and MDRI

(In billions of U.S. dollars; end-2005 Terms)



Source: HIPC Status of Implementation Report, September 2006.

88. **Making good use of their new borrowing space, along with any scaled up official development assistance, will require sound debt management practices.** HIPC and MDRI debt relief has created significant borrowing space in post-completion point HIPCs. Given the large social and infrastructure needs in many of these countries, using this space for new borrowing is a policy issue confronting many of these countries. At the Gleneagles Summit, it was agreed that the G-8 group of countries and other donors would increase ODA to Africa by US$25 billion per year by 2010, which would represent a doubling of aid to Africa compared to 2004 levels.[23] Strengthened management of both external and domestic debt will be necessary to prevent debt burdens from becoming unsustainable again even if additional aid comes in the form of concessional lending.

89. **Debt management capacity in many HIPCs remains generally weak.** As discussed more fully below, weak governance, lack of transparency, and resource and capacity constraints (e.g., shortages of skilled staff, inadequate and poor training, and lack of IT infrastructure, etc.) constrain debt management in LICs. These constraints are often compounded by lack of effective communication between the various agents involved in debt management, i.e., the Ministry of Finance, the Central Bank, and the budget units. Moreover, the activities of debt management in LICs are rarely governed by an explicit and clear legal mandate. One important consequence of these shortcomings is poor debt data recording, reporting and monitoring.

90. **A survey of 24 recent HIPC completion and decision point documents shows significant gaps in basic debt management capacity in many LICs** (Table 7). Although 14 of the 24 countries examined have governance arrangements in terms of the required legal and institutional framework for facilitating effective debt management, only five have transparent practices and disseminate information publicly. Eleven countries have adequate inter-agency coordination, in terms of either a coordination committee or periodic meeting of all the agencies involved with the process of managing government's debt. Coordination at the policy level is much less developed across the countries, with just seven of the 24 countries integrating their debt policy within the government's macroeconomic framework. Perhaps most worrying is that 18 of the countries have shortages of skilled staff. Lastly, only seven countries are effectively able to record, report and monitor debt data. This evidence echoes the 2002 survey results contained in the joint IDA/IMF paper on external debt management in HIPC countries[24] and underscores the latest Independent Evaluation Groups' review of the HIPC Initiative that the quality of debt management may have deteriorated (World Bank, 2006).

[23] The terms on which these resources will be transferred remains an unresolved question.

[24] See *External Debt Management in Heavily Indebted Poor Countries*, March 2002.

Table 7. Evidence on Debt Management in Select HIPCs

Sub-set of Core Indicators	Governance		Coordination		Data	Skills and resources	
	Legal framework and institutional arrangements	Transparency and public availability of information	Inter-agency level	Policy level - cash, budget and macro policies	Recording, reporting & monitoring of debt data	Human Resources capacity	Computers and debt software
Benin	✓	X	✓	✓	✓	✓	X
Bolivia	✓	✓	✓	✓	✓	✓	✓
Burkina Faso	✓	X	✓	✓	X	X	X
Cameroon	✓	X	✓	P	P	P	✓
Ethiopia	P	X	X	X	X	X	X
Eritrea	X	X	P	X	P	X	✓
Ghana	✓	P	✓	P	P	P	✓
Guyana	✓	P	✓	✓	✓	✓	✓
Honduras	✓	✓	P	✓	✓	✓	✓
Madagascar	P	X	P	P	X	X	X
Mali	✓	P	P	P	X	P	P
Malawi	✓	P	X	X	X	X	X
Mauritania	X	X	X	X	X	X	X
Mozambique	✓	X	✓	P	P	P	P
Nicaragua	✓	✓	✓	✓	✓	✓	✓
Niger	X	X	X	X	X	P	X
Rwanda	X	X	X	X	X	X	X
Haiti	X	P	P	P	X	X	X
Sao Tome & Principe	✓	X	✓	X	X	X	X
CAR	P	X	P	X	X	P	X
Senegal	P	NA	P	P	X	X	X
Tanzania	✓	✓	✓	P	✓	✓	P
Uganda	✓	✓	✓	✓	✓	P	✓
Zambia	X	X	X	X	X	P	P

✓: represents meeting adequate levels for efficient and effective debt management; X: represents otherwise and P is partial, NA: Not available

Source: IMF and World Bank Reports on HIPC completion and decision point documents and staff assessment

C. The Quality of Debt Management in LICs: Evidence on Current State of Play

Quality of debt management improving in only a few LICs

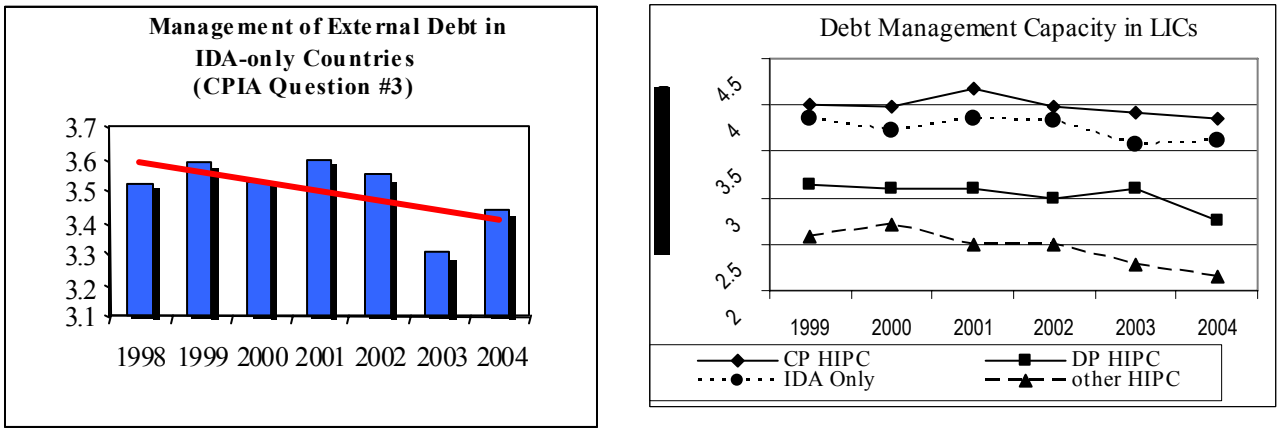
91. **Evidence from various sources points to little or no improvement in debt management in LICs in recent years.** The quality of debt management as measured by the Bank's CPIA[25] ratings shows a declining trend for IDA-only countries (Figure 5). At a more

[25] The CPIA scale is from 1 to 6, with 6 for the best performance and 1for the worst.

disaggregated level, country groups show differential levels of debt management capacity. Capacity is high and remains high for completion-point countries, which indicates progress in containing debt servicing difficulties, in large part due to the debt relief received at completion point (Figure 5). Nevertheless, the declining trend is similar for completion-point countries and other LICs.

92. **There are moderate to major problems in the reporting of external debt data in half the LICs that report to the Bank's Debtor Reporting System (DRS).**[26] Coverage of countries reporting to DRS with minor to nil problems improved from 38 percent in 2002 to 50 percent in 2005 (Table 8). The percentage of countries reporting moderate to major problems has declined to 50 percent in 2005, from 63 percent in 2002. Nevertheless, in 2005 about half of the countries had moderate to major problems, or submitted no reports to the DRS. Moreover, the reporting of data on a timely basis does not imply that quality debt data are being provided to the DRS. Anecdotal evidence from regular HIPC missions indicates that most HIPCs have weak debt management capacity and poor quality debt information.[27]

Figure 5. Debt Management Capacity in LICs



[26] The World Bank's Debtor Reporting System (DRS) is a unique statistical database containing loan level data constructed based on reports received from the borrower countries and reports from major multilateral creditors. Published in *Status of External Public and Publicly Guaranteed and Private Non-guaranteed Debt Information and Tables*, November 2005.

[27] This evidence is supported by almost 10 years of anecdotal evidence by staff in the Bank's HIPC Unit (now PRMED) through its implementation of the HIPC Initiative, which indicates that in many HIPC countries debt data produced by country debt management units are of poor quality.

Table 8. Countries with Problems in Reporting Data

Percent of Countries with:	2002	2003	2004	2005
Negligible to minor problems	38	39	45	50
Moderate to major problems & no reports	63	60	55	50

93. **Survey-based evidence on LICs indicates that there are shortfalls in existing capacity levels**. Although some progress in strengthening debt management capacity has been achieved in the course of implementation of the HIPC Initiative, major shortfalls remain (World Bank-IMF 2002). Similar evidence is echoed in DRI's assessments, which indicates that despite improvements in several areas of debt management, HIPC capacities marginally declined in the areas of new financing policy, debt disbursements and servicing during 2004 in comparison with the previous year. Moreover, Table 7 indicates that from among a sub-set of 24 HIPCs, 17 had deficient performance in data recording, reporting and monitoring, while 18 had shortage of skilled staff and 16 had inadequate computing capabilities.

94. **Some LICs have made progress in several areas of debt management.** The progress of Nicaragua, Honduras, Tanzania and Guyana points to the importance of good governance, debt management strategies, coordination with fiscal and monetary policies, and capacity of staff and debt management IT systems. Reforms that have been designed taking account of country-specific political climate and capacity constraints have been successfully implemented. Likewise, the reform effort has been successfully sustained in countries where there has been 'commitment and ownership' by the government. Nicaragua's debt management reforms point in particular to the importance of giving priority to debt policy and management within the medium-term fiscal policy framework so as to maintain operational relevance of debt policy. Nicaragua enacted the public debt law and frames an annual debt policy that gives the limits on external and domestic debt and new borrowings. A second factor that proved important in sustaining the reform is establishing an institutional environment that can facilitate change.

95. **Results from the joint Bank-Fund 12 country pilot program on PDM suggest that effective debt management reform requires appropriate sequencing and prioritization tailored to country specific circumstances.** There is no 'one size fit all' approach. One of the basic building blocks, however is building capacity in the back office and establishing reliable debt recording systems. This is required to ensure timely servicing of the debt and to produce accurate and regular reports. Beyond this foundation, sequencing has been varied. For example, legal reforms were implemented first in a number of the countries, while others found organizational reforms to be priority. Moreover, comprehensive institutional and legal reforms are not considered a prerequisite for developing an overall debt management strategy across organizational boundaries**.** Good coordination and information sharing has been fruitfully achieved in several countries

through the formation of a working group or coordination committee.[28] Once appropriately sequenced reform program is in place, ownership and commitment to reforms are critical conditions for sustaining reforms.

The provision of debt management technical assistance in LICs

96. **At present, apart from the Bank and the Fund, the other international providers of debt management related capacity building in LICs include the DMFAS Program of the United Nations Conference on Trade and Development (UNCTAD), the Commonwealth Secretariat (COMSEC), through its Debt Management Section, and Debt Relief International (DRI),** which is closely associated with four regional organizations that primarily assist HIPCs in developing analytical capabilities.[29] COMSEC and DMFAS—which, between them, provide services to virtually all LICs—provide debt management software and related training and advisory services, while DRI and the regional agencies provide training in debt sustainability analysis (DSA) and debt renegotiations (see Annex IV of main paper).

97. **The current TA provision of debt management in LICs does not, however, systematically address the gaps and weaknesses pointed out in Chapter I.** Several TA providers carry out detailed assessments of needs, but remain focused on limited aspects of debt management rather than on the entirety of the process of debt management. From an implementation standpoint, current TA provision efforts do not adequately address developing a medium-term debt management strategy. The focus on providing debt management software, while helpful in advancing the work on better data capture and use in policy making and debt management, does not, by itself, guarantee good debt management. Moreover, many TA efforts at staff training in debt management units, often times fall short of sensitizing senior Finance Ministry or Central Bank officials to the importance of debt management. Consequently, TA in the area of debt management may not be linked to either political commitment or broader institutional reform in the participant countries, leaving any gains in capacity vulnerable to staff turnover of one or two key persons in the debt management units (Box 3).

[28] But such partial solutions have risks as evidenced in Kenya, where capacity built in the 1990s was lost as trained staff left in the absence of an institutional framework to maintain capacity (Box 3).

[29] Macroeconomic & Financial Management Institute of Eastern & Southern Africa (MEFMI); Pôle-Dette (Regional Debt Management Training Center of Central and Western Africa); West African Institute for Financial and Economic Management (WAIFEM); and the Center for Latin American Monetary Studies (CEMLA).

Box 3. Debt Management in Kenya: Lessons from SIDA's Technical Assistance Program

Kenya initiated debt management reforms in 1985 to build up capacity and competence in sovereign debt management. The project had three phases of financing and support: (i) the initial build-up period with support from UNDP/World Bank/ComSec/SIDA, (ii) the dynamic stage under sole SIDA management, and (iii) the third stage without any outside support (SIDA 1995). [1]

Under the reforms, the Debt management Division (DMD) was established in the Ministry of Finance (MoF) in the initial phase with strong management support, particularly from the permanent secretary to the MoF. During 1990-94, the DMD functioned effectively and performed skilled functions as refinancing outstanding and high cost old loans, preparation for Paris Club negotiations, and creation of a debt strategy in addition to basic debt recording. It had twelve well-trained officials.

The gains in capacity and improvements in debt management dissipated quickly, however. By 1994, the DMD and debt management *per se* was given increasingly less priority in the MoF. The deterioration in priority continued despite calls to upgrade the DMO status within the MoF hierarchy. An important factor explaining the decline in capacity was the departure of senior management in the MoF that supported the DMD. Consequently, by 1997, the best-trained staff also departed and capacity in DMD regressed. The low civil service salaries and limited career progression path acted as deterrents in attracting and retaining staff, which even weakened DMD's capacity to record and monitor debt data accurately.

SIDA's experience in Kenya raises a number of issues to guide the effective provision of TA:

- TA provision in projects such as debt management reforms and capacity enhancement should be supported by firm commitment from the host country.

- The senior management must be sensitized and made aware of the importance of the debt management function by periodic seminars, conferences, meetings, and country dialogues.

- The abrupt and extensive departure of skilled staff should be counteracted, through: (a) civil service reform by establishing better career progression paths, which may be more longer term or (b) by offering additional fringe benefits for particularly talented staff, on a short-term basis.

- The DMD should have sound institutional framework that establishes clear routines, handbooks for debt recording and debt management, better career planning, continuous staff training and a well entrenched position within the MoF hierarchy.

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1/ Nars, Kari, SIDA, 1995, Swedish Assistance to the Debt Management Division, Ministry of Finance, Kenya.

D. Costs of Deteriorating or Poor Debt Management in LICs

98. **The reasons for weak or deteriorating debt management in LICs are multifaceted.** As documented above, debt management in LICs is characterized by constrained human and institutional capacity. One contributory factor could be the general lack of operational relevance placed on the functions and outputs of debt management agents/units in LICs. This is evidenced by the lack of formal coordination between debt management and fiscal policy in LICs. The human resource component of debt management units also suffers when key policy-makers in government undervalue the need for debt management. The limited options the debt managers have in LICs and the predominance of concessional external debt in their debt portfolios may in part explain the under appreciation of the need for prudent debt management according to cost and risk considerations. This section aims to document some of the costs that are realized when debt management is not strengthened in LICs.

Debt management and debt sustainability

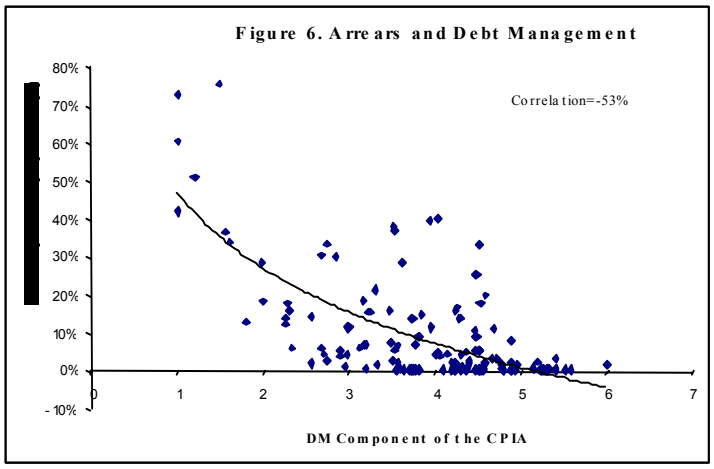
99. **A LIC's debt portfolio is usually the largest financial portfolio in the country and can generate substantial risk to the government's balance sheet.** A well managed debt portfolio can dampen external shocks, while weak debt management can amplify shocks. Poor debt management can lead to higher macroeconomic volatility if debt is characterized by substantial currency and maturity mismatches.[30] More fundamentally, plans for new borrowing must be clearly considered in light of the potential repayment capacity of the economy. This calls for a debt strategy that is closely coordinated with fiscal policy. The lack of coordination could result in excessive borrowing, which in turn can lead to an unsustainable debt burden. An unsustainable debt burden can have important costs for LICs and place a heavy burden on the international aid architecture both in terms of the potential need for debt relief (HIPC, MDRI, and Paris Club relief) and the inefficient allocation of scarce development resources ('defensive lending').

100. **A LIC must fulfill two criteria to become eligible for the HIPC Initiative: it must be poor, defined as a per capita income level below a certain threshold, and it must have the NPV of external debt in excess of pre-defined thresholds** (150 percent of exports and in some cases 250 percent of fiscal revenues), which was deemed to be unsustainable levels of debt. These thresholds were based on work by Underwood (1991) and Cohen (1996) who found that the likelihood of debt default climbed rapidly after a country's NPV of external debt to export ratio climbed above the 200-250 percent range. This range provided the basis for the thresholds of the original HIPC Initiative, but was subsequently

[30] Living with Debt: How to Limit the Risks of Sovereign finance, Inter-American Development Bank, 2007.

lowered to arrive at current thresholds when the Initiative was enhanced in 1999.[31] While the analytic foundation of these thresholds can be debated, it remains that the HIPC thresholds provided the basis from which the international community agreed to provide debt relief to approximately 40 LICs, and by doing so judged these countries to have unsustainable debt burdens. The subsequent analysis examines the factors that may have affected the probability of a LIC becoming a HIPC. The analysis pays special attention to the role that the poor quality of debt management may have played. **Preliminary analysis indicates that the quality of debt management and the probability of having unsustainable debt burdens—i.e., becoming a HIPC—are significantly related in LICs.**

101. **An important constraint on this analysis is a comprehensive measure of the quality of debt management in LICs**. The debt management component of the Bank's CPIA is a candidate, but does not exist prior to 1996—the first year of HIPC implementation—which limits its usefulness in the analysis.[32] We construct a proxy for debt management using a five year average of arrears as a percent of total debt in LICs. Although countries may fall into arrears with creditors due to an exogenous shock that impacts their ability to pay, often times the presence of arrears in LICs is a symptom of poor debt management rather than inability to pay. A persistent level of arrears typically exists in LICs as a result of lack of proper record keeping on debt service and disbursements in the debt management unit, a lack of communication with creditors, or information systems that are deficient and payments are not sent to creditors although funds are available. Arrears may also be a symptom of the lack of technical ability in the area of debt renegotiations, among



[31] Recent work by Kraay and Nehru (2005) provide support that the HIPC thresholds are relevant thresholds above which the risk of debt distress rises sharply. A key conclusion of their work, however, is that relevant thresholds for a country differ according to the quality of a country's policies and institutions. The basic idea is that a country with better institutions and policies can carry a heavier debt burden and thus the risk of debt distress rises sharply at a higher threshold level relative to a country with weaker policies and institutions.

[32] The Bank's Country Policy and Institutional Assessment (CPIA) assesses the quality of a country's present policy and institutional framework. The debt management component of the CPIA assesses whether the debt management strategy is conducive to minimize budgetary risks and ensure long-term debt sustainability. The criterion evaluates the extent to which external and domestic debt is contracted with a view to achieving/maintaining debt sustainability, and the degree of co-ordination between debt management and other macroeconomic policies. Adequate and up-to-date information on debt stock and flows is an important component of the debt management strategy.

others. To provide some comfort that the arrears measure is a good proxy for debt management in LICs, Figure 6 shows the rather strong correlation between the arrears measure and the debt management component of the Bank's CPIA from 1996 to 2005. As the presence of arrears is a key criterion for the evaluation of the debt management component of the CPIA the strong correlation is no surprise.

102. **Three transformations are made to the arrears variable in an effort to ensure that we are better capturing the quality of debt management and not other factors.** First, the arrears measure is truncated at 5 percent of total debt stock since we are concerned primarily with the existence of arrears and not its magnitude. Second, we attempt to purge the proxy of the influence of GDP growth and debt levels. The quality of debt management proxy may be capturing other factors that cause low growth and/or high debt levels in LICs, which in turn could lead to a higher probability that a country is running arrears. To purge the proxy of this potential influence we regress the five-year average of the truncated arrears on previous growth and debt levels. The residuals from this simple regression are our proxy for quality of debt management, which is purged of the influence of previous growth or debt ratios. Lastly, we re-scale the proxy to the CPIA ratings scale so as to facilitate interpretation of the results.

103. **Given the binary nature of our dependent variable—HIPC or non-HIPC—we use probit regression analysis to assess whether the quality of debt management helps predict the probability that a LIC participated in the HIPC Initiative**. The main results are in Table 9. The results in Column 1 set out the basics of the analysis, namely that per capita income and the level of debt burden, as measured by the ratio of the net present value of external debt to GDP have a statistically significant influence on the probability of a LIC becoming eligible for the HIPC Initiative.[33] Column 2 adds our quality of debt management proxy, which is also a statistically significant predictor of a LIC becoming a HIPC. Moreover, the overall explanatory power of the model increases. Column 3 replaces our debt management proxy with the countries' overall CPIA score. It could be that our proxy is simply picking up a country's overall quality of policies (e.g., fiscal policy) and institutions. The correlation coefficient between the overall CPIA score and our proxy is 0.25, while the correlation between the debt management component of the CPIA and the overall CPIA score are highly correlated within a given country. Nevertheless, the overall CPIA score does not appear to be a relevant predictor of a LIC becoming a HIPC.

104. **Column 4 introduces real GDP growth into the specification. Low real GDP growth, in addition to low per capita GDP, high debt levels and weak debt management, is cited as a key reason for the build-up of unsustainable debt burdens of the HIPCs (Easterly 2001).** Inclusion of the average rate of real GDP growth over the

[33] Using either the NPV of debt to exports or the debt service to exports ratio does not alter this conclusion.

1985–95 period is also a strong predictor of the probability of a LIC becoming a HIPC. The quality of debt management proxy remains significant and the overall explanatory power of the model increases. In this preferred specification, the significant coefficient on the debt management proxy implies a reduction in the probability of participation in the HIPC Initiative and indicates that an improvement in the quality of debt management is likely to be economically (as well as statistically) significant.[34] The last columns of the table show that as far back as 1985, the quality of debt management was a significant predictor of participation in the HIPC Initiative.[35] The influence of debt management in earlier years (Column 6 as well) is greater than it is closer to the distress episode, with the magnitude of the coefficient on the debt management proxy increasing substantially.

105. **Results hold up to a series of robustness checks.** Alternative measures of debt ratios are used in the specification to determine if the quality of debt management proxy is sensitive to debt burden indicators. The proxy remains strongly statistically significant in all specifications using alternative debt burden indicators in all years, expect when using the NPV of debt to exports ratios in 1995. As an additional robustness check, we created a variable that indicated whether a LIC had received Paris Club debt relief from 1990 to 1995 and asked whether the same determinants of HIPC eligibility also predicted the receipt of Paris Club debt relief. Debt levels and the debt management proxy (and growth, though not shown in the specification below) were also good predictors of Paris Club relief, whether in 1990 or 1985. A key difference in the results using Paris Club debt relief as our dependent variable is that per capita income was not a relevant predictor for Paris Club relief. Lastly, we include the actual debt management component of the CPIA in place of our proxy for the year 1996. It too is a significant predictor of HIPC participation when using debt service as the debt burden indicator.[36]

[34] The inclusion of GDP growth volatility in the specification (Column 5) does not alter our conclusion regarding debt management and is not a statistically significant predictor of participation in the HIPC Initiative.

[35] Including GDP growth over the previous 10 years in both regressions (not shown) does not alter the conclusion that the debt management proxy is a significant predictor of HIPC participation.

[36] The debt management component of the CPIA is strongly correlated with the debt stock burden indicators, which may explain the lack of explanatory power of the quality of debt management.

Table 9. Results of Probit Regression Analysis: Quality of Debt Management and HIPC Eligibility

	I	II	III	IV	V	VI	VII
NPV debt / GDP	0.23***	0.19***	0.28***	0.12**	0.19***	0.11***	0.61***
	2.56	*2.85*	*2.64*	*2.09*	*2.89*	*2.83*	*3.03*
Income	-0.28***	-0.24***	-0.30***	-0.22***	-0.24***	-0.25***	-0.43***
	5.74	*5.51*	*5.73*	*5.80*	*5.41*	*4.59*	*5.25*
CPIADM		-0.32***		-0.25**	-0.32**	-0.48***	-0.71***
		2.65		*2.51*	*2.54*	*3.60*	*3.41*
CPIA			0.04				
			0.72				
Growth 85-95				-0.38***			
				2.89			
Growth vol 85-95					-0.12		
					0.08		
Obs	102	102	100	102	102	101	82
Pseudo-R2	0.56	0.60	0.57	0.66	0.60	0.56	0.60
Wald	38.12	36.38	40.28	36.51	36.80	21.92	37.94
Year	1995	1995	1995	1995	1995	1990	1985

Marginal effects dF/dx reported. Absolute value of t-statistics in italics.
Dependent variable: binary variable =1 if the country is eligible for HIPC relief and =0 if not. (48 eligible countries)
Income is the log of real per-capita income denominated in US dollars.
All errors are robust standard errors correcting for heteroskedasticity.
* Significant at the 10% level; **Significant at the 5% level; ***Significant at the 1% level.

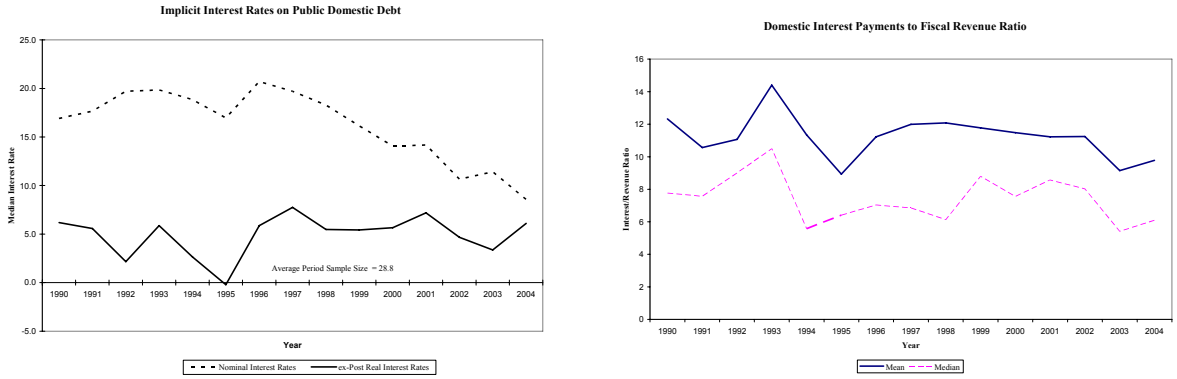
106. **An important implication of this analysis and that of the previous sections is that while the HIPC Initiative and the MDRI have acted to reduce the debt burden indicators of HIPCs, perhaps one of the root causes of the build up in the debt levels that lead LICs to become HIPCs has not substantially changed for the better**. It suggests an unfinished agenda for HIPCs, LICs more broadly and the international community. The analysis also underscores the need for better indicators on the quality of debt management in LICs so that richer analysis can be undertaken and that progress in the area of debt management can be transparently measured over time.

Costs of weak debt management

107. **The lack of well developed and efficient financial markets in LICs hampers the price discovery process, leading to government borrowing at higher cost and for shorter duration.** Although declining since 1990, the median nominal and ex-post real interest rates on public sector domestic debt averaged 16 percent and 5 percent, respectively from 1990–2004 (Figure 7). These rates translate into interest payments on domestic debt in the sample averaged about 11 percent of government revenues, with a median of about 7 percent. Moreover, 70 percent of domestic debt in the sample had an average maturity of less than one year; for many countries, the entire domestic debt had a maturity of less than one year,

pointing to significant rollover risk. While concessional external debt is typically much lower cost and of longer maturity than domestic debt, it carries with it exchange rate risk that can imply important costs. An analysis of the key factors that lead to the increase in debt burden indicators in a sample of completion point HIPCs from the time of their completion point to end 2003 found that exchange rate movements accounted for almost 15 percentage points of the 30 percentage point increase in the debt ratios (HIPC Status of Implementation Report 2004).[37]

Figure 7. Price and Cost of Public Domestic Debt in LICs



108. **Management of the mix between domestic and external financing could result in substantial cost savings.** Sound debt management could include the retirement of high cost domestic debt or exchanging high cost debt with low-cost financing. Countries with access to external concessional loans may benefit by exchanging high-cost domestic debt with external financing. Key considerations in this operation would be the potential impact on the exchange rate and that the risk of a local currency devaluation that could undermine interest cost savings. Table 10 presents the type of **ex-post illustrative calculations** for Kenya, Malawi and Tanzania that a debt manager must undertake when considering either retirement of domestic debt or exchanging domestic debt into external concessional financing. The average annual real interest rate differential on Malawi's external and domestic debt has been close to 50 percentage points, which far exceeds the Kwacha depreciation over the period. Provided that macroeconomic fundamentals prevent a sharp depreciation of the Kwacha, it appears that Malawi could have reduced debt service costs significantly by substituting domestic debt with external concessional debt. The calculations for Kenya and Tanzania show that it is not always automatic that concessional external financing is preferable. Given the recent history of movements in the Tanzanian Shilling and the relatively small interest

[37] See footnote 21 for source of data contained in this paragraph.

rate differential on domestic and external debt it appears that there would be little cost savings in switching out of domestic debt.[38]

Table 10. Indicative Costs of Passive Debt Management

Averages (2000-05)	Kenya	Malawi	Tanzania[1]
Exchange rate (National currency to USD)	77.36	89.26	982.79
Annual average depreciation	*1.30*	*18.72*	*7.93*
Interest rates on[2]:			
domestic debt	5.84	29.25	3.85
external debt[3]	-1.77	-1.54	-0.58
Annual average interest differentials	*7.61*	*30.79*	*4.44*
Indicative exchange rate-interest rate differential (%)	*6.31*	*12.07*	*-3.50*

1. Latest available interest rate data is 2004
2. Interest rates are the implicit real rates derived from the interest payments on forex and domestic debt, respectively
3. Interest rates on external debt include concessional lending

Costs of nonconcessional external financing

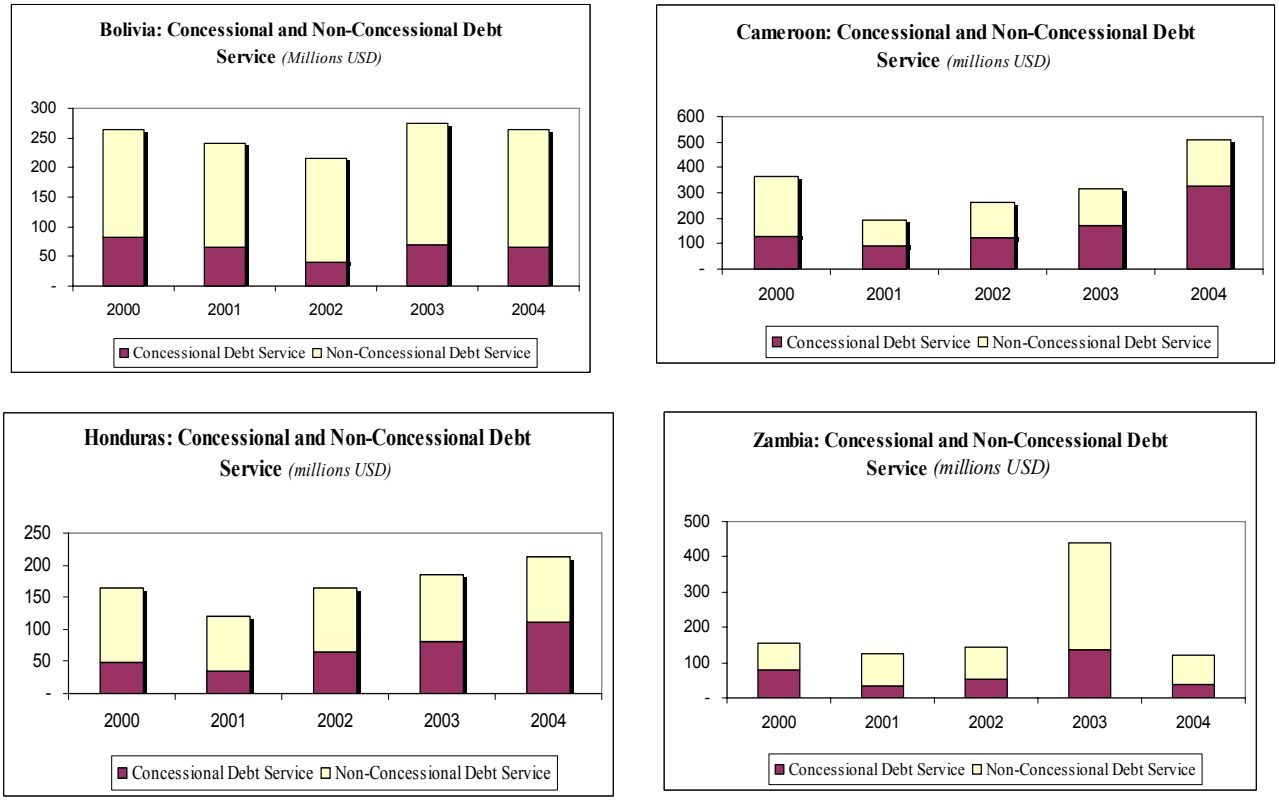
109. **The build-up of nonconcessional external debt can place a heavy debt-servicing burden on LICs.** If debt management units or Ministries of Finance lack the capacity to undertake a credible forward-looking debt sustainability analysis then borrowing strategies may not be aligned with long-term debt servicing capacity and imprudent borrowing may result. This is especially true in the case of contracting nonconcessional external debt where, for a given borrowing path of nonconcessional borrowing, will yield lower net transfers to the LIC and worsen debt dynamics (IDA 2006). However, nonconcessional borrowing that is used for high-return investment purposes within prudent risk levels may not only be warranted, but necessary in some LICs. Non-cost considerations may also drive the contracting of nonconcessional debt, such as lack of availability of concessional finance, the desire to develop international capital market credibility, or to avoid conditionality that may be attached to concessional finance. Whatever the motivation of contracting nonconcessional borrowing, given the increased rollover risks associated with this higher cost financing a sound debt management framework that is integrated with the government's liquidity forecasting function is advisable.

110. **While the current stock of nonconcessional credits is largely concentrated in a few resource rich LICs (e.g., Angola and Republic of Congo), even a modest amount of nonconcessional borrowing can significantly impact debt service costs.** Figure 8 presents debt service amounts for four HIPCs that have roughly 20 percent of their stock of outstanding PPG external debt in the form of nonconcessional credits. Despite the relatively

[38] This illustrative example does not account for the costs of possible crowding out of private sector investment that public domestic debt may induce.

modest amount of nonconcessional debt stock in 2004, debt service on nonconcessional debt in Bolivia was almost 75 percent of total debt service that year. Cameroon's debt service on nonconcessional debt in 2004 is roughly proportional to its stock. Similar data for Honduras and Zambia in 2004 indicate that debt service on nonconcessional debt was 48 and 69 percent, respectively.

Figure 8. Concessional and Nonconcessional Debt Service In Four HIPCs



111. **IDA's Board has recently approved a two-pronged package of measures addressing the issue of non-concessional borrowing by IDA-only countries**.[39] On the creditor side, the package proposes enhancing creditor coordination around a mechanism to be developed and agreed—possibly based on the Debt Sustainability Framework. On the borrower side, it provides disincentives on unwarranted new nonconcessional borrowing by reducing volumes and/or hardening the terms of assistance, on a case-by-case basis. Moreover, LICs themselves must improve debt management capacity before taking on significant increases in nonconcessional debt, especially in the area of debt monitoring capacity.

[39] International Development Association, "IDA Countries and nonconcessional Debt: Dealing with the Free-Rider Problem in IDA14 Grant-recipient and post-MDRI countries," June 2006.

E. Development of a Debt Management Performance Indicators

112. **In view of the noted gaps in TA provision and the significant costs of weak or deteriorating debt management, the Bank in collaboration with other partners, and the Fund, is developing a standardized set of indicators (PI) for periodically measuring PDM performance.** The PI will represent an internationally recognized and comprehensive methodology for measuring debt management performance. It would help (i) in developing reform programs; (ii) monitor debt management performance over time; and (iii) embed in country work, CASs and policy discussions.

113. **The PI assessment and reporting framework will** assist in **highlighting the specific gaps and deficiencies in the debt management functions in LICs.** This assessment would facilitate the design of plans to build and augment capacity, tailored to the specific needs of the country. The PIs would be based on a methodology that will transparently evaluate performance, and monitor progress over time in achieving the objectives of debt management.

114. **The PI will be based on established "sound practice."** They would enable an assessment of debt management units/agents ability to, inter *alia*: (i) mobilize financial resources to meet the government's financing needs, negotiate loans, issue (contract debt) and restructure debt; (ii) undertake analysis, review the debt portfolio and provide advice on the debt management strategy to manage risk prudently; and (iii) manage all operations of public debt related to the registration, monitoring and control of disbursements, execution and management of debt service operations, production of high-quality debt information,[40] and validation and audit of records.[41]

115. **Based on a universally applicable methodology each indicator will be quantified.** It would adapt the methodology, on the lines of the Public Expenditure and Financial Accountability (PEFA) Performance Measurement Framework, to address performance. The indicators will initially be tested in six LICs.

116. **To ensure proper links with the broader provision of TA and capacity building, the indicators would be widely disseminated through regional seminars and workshops; training courses, and web-based information.**[42] The target audience for dissemination includes the Bank and Fund staff, donors, clients and TA providers. Government counterparts in debt offices, ministries of finance, central banks, audit committees and

[40] To ensure transparency, debt information should be produced in a timely manner for public dissemination.

[41] This is necessary to mitigate operational risks (e.g., fraud, errors, data loss, etc.)

[42] Government consent may be required for the Fund to share with third parties information obtained in the course of providing TA.

parliaments, and the private sector, as applicable, will be targeted to ensure that the indicators are understood and used by debt managers and those responsible for oversight of debt management. By providing a transparent and common reference point, such a tool will greatly enhance dialogue between donors, TA providers and client countries in assessing gaps and designing technical assistance and capacity building.

117. **The application of the PI and reporting framework will subsequently be rolled out to up to 60 LICs.** The program would monitor the results and report periodically on debt management performance in LICs. **The implementation of the PI would be firmly embedded in country programs to ensure client ownership, donor coordination, and ongoing monitoring.** The approach envisages a global partnership and a harmonized approach due to the broad scope of the challenge and gaps in debt management TA.

F. Conclusions

118. **Debt management choices in LICs are limited, but options for more effective debt management are available.** The creditor composition and degree of concessionality of public external debt is different in LICs than it is in MICs, but these features of public external debt in LICs do not imply that debt portfolios can not be managed according to standard cost and risk objectives. Key in this respect is developing capacity in debt management units to allow active negotiation with bilateral and multilateral creditors on, for example, the currency composition of disbursements and debt renegotiations. LICs have received a significant amount of debt relief that has left debt burden indicators at historically low levels. But exogenous shocks, the potential for scaled-up aid inflows, and the observed weakness in debt management calls for stronger and sustained efforts to build capacity in LICs to allow debt managers to effectively manage what is in many cases the largest financial portfolio in the country.

119. **Systematic evidence on the quality of debt management in LICs is lacking.** Anecdotal and survey-based evidence suggests that debt management in LICs is characterized by significant gaps in basic capacity and is typically not managing the sovereign debt portfolio according to good practice cost and risk considerations. Weak governance, lack of transparency, and resource and capacity constraints (e.g., skilled staff shortages, inadequate and poor training, and lack of IT infrastructure, etc.) constrain debt management in LICs. These constraints are often compounded by lack of effective communication between the various agents involved in debt management, i.e., the Ministry of Finance, the Central Bank, and the budget units. Consequently, many LIC debt management units do not adequately record, report or monitor debt data.

120. **The costs of weak or deteriorating quality of debt management can be significant**, as a LIC government's debt portfolio is usually the largest financial portfolio in the country and can generate substantial risk to the government's balance sheet. Preliminary results from a simple regression analysis suggest that the quality of debt management, in

addition to per capita income and debt levels, and real GDP growth influenced the probability of a LIC becoming a HIPC. An important implication of this apparent link between debt sustainability and the quality of debt management is that debt reduction alone is not sufficient to ensure long-term debt sustainability. A targeted effort to improve the quality of debt management in LICs must complement debt relief. Moreover, cost considerations motivate the need for the development of domestic debt markets to foster financial sector development in LICs.

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