

THE WORLD BANK
AND INTERNATIONAL MONETARY FUND

**Strengthening Debt Management Practices: Lessons from Country Experiences
and Issues Going Forward**

Prepared by the Staff of the World Bank and the IMF

Approved by Kenneth Lay, Danny Leipziger and Jaime Caruana

March 27, 2007

Contents	Page
Executive Summary	i
I. Background.....	1
II. Emerging Trends	2
III. Debt Management: Key Policy, Institutional and Operational Challenges	4
A. Developing a Medium-Term Debt Management Strategy.....	5
B. Governance Arrangements and Capacity	9
C. Debt Management, Market Development and Financial Stability	13
IV. The Special Case of Debt Management in the Low-Income Countries (LICs).....	16
V. Bank and Fund Support for Public Debt Management	20
A. Current Capacity Building Activities.....	20
B. Insights from the Pilot Program and Other Country Work	23
C. Going Forward—Strengthening the Process.....	24
VI. Conclusions and Issues for Discussion.....	29
Tables	
1. Level and Structure of Public Debt in Selected Countries	3
Figures	
1. Proportion of Emerging Market Domestic Public Debt Securities Maturing in Less than a Year.....	3
2. Stylized Representation of PDM Decision-Making Process	9
3. Characteristics of Long-Term Public and Publicly Guaranteed External Debt in MICs and LICs.....	17
4. Domestic Debt in LICs and Indicators of Financial Market Depth.....	18
5. Schematic Representation of a MTDS.....	35

Boxes

1. Six Principles of Sound Practice in Public Debt Management.....	1
2. Inter-Relationship Between Debt Sustainability Analysis (DSA) and Debt Strategy Analysis	7
3. Current Multilateral Initiatives for Improving Availability and Quality of Debt Statistics	12
4. Impediments to Improving the Functioning of Domestic Public Debt Markets in Developing Countries	15
5. Bank and Fund Capacity Building Activities in PDM	21

Annexes

I. Multilateral Initiatives to Improve Debt Statistics	31
II. Medium-Term Debt Strategy in Low Income Countries	33
III. Resource Costs for the Bank-Fund Capacity Building Proposal for the Low Income Countries	38
IV. Description of Debt Management Technical Assistance Agencies.....	40

ACRONYMS

AAA	Analytical and Advisory Activities
ALM	Asset and Liability Management
CAS	Country Assistance Strategy
CB	Central Bank
DSA	Debt Sustainability Analysis
DSF	Debt Sustainability Framework
ECCB	Eastern Caribbean Central Bank
EM	Emerging Market
FSAP	Financial Sector Assessment Program
GDSD	General Data Dissemination System
HIPC	Highly Indebted Poor Country
IDA	International Development Association
IFIs	International Financial Institutions
LIC	Low Income Country
MDRI	Multilateral Debt Relief Initiative
MIC	Middle Income Country
MoF	Ministry of Finance
MTDS	Medium-term Debt Management Strategy
MTEF	Medium-term Fiscal Framework
ODA	Official development assistance
OECD	Organisation for Economic Cooperation and Development
PDM	Public Debt Management
PEFA	Public Expenditure and Financial Accountability
PMU	Program Management Unit
PPIAF	Public-Private Infrastructure Advisory Facility
PPP	Public-Private Partnership
PRGF	Poverty Reduction and Growth Facility
ROSC	Report on the Observance of Standards and Codes
SDDS	Special Data Dissemination Standard
TA	Technical Assistance
TAC	Technical Assistance Center
TSA	Treasury Single Account

EXECUTIVE SUMMARY

This paper reviews Bank-Fund staff experience with strengthening Public Debt Management (PDM) frameworks and capacity in developing countries. In 2001, the World Bank and the IMF developed sound practice guidelines in this area, followed by a pilot program to assist 12 countries develop and implement reforms. In addition, an assessment of PDM has been incorporated into surveillance work, where relevant, and included in other Bank and Fund advisory and technical assistance work. Based on these, the paper draws key lessons, identifies the continuing challenges facing debt managers, and proposes further capacity building and advisory work in PDM.

Financial crises of the 1990's highlighted the need for effective PDM, including well functioning domestic public debt markets, to help reduce financial vulnerabilities. Experience suggests that many countries, particularly the middle-income countries (MICs), have made progress in strengthening their PDM frameworks and reducing debt-related vulnerabilities. In parallel, some MICs have made impressive progress in deepening domestic public debt markets, which is contributing to strengthening monetary and financial stability more generally.

Nevertheless, many countries continue to face a range of policy, institutional and operational challenges. Several MICs, and most low-income countries (LICs), remain at an early stage in defining comprehensive medium-term debt management strategies (MTDS). Experience also highlights the challenges in establishing an effective governance framework and in building capacity. In many LICs, such challenges are acute. As recognized in the November 2006 review of the debt sustainability framework (DSF), LICs—especially those that received significant HIPC and MDRI debt relief—face a further challenge in managing their increased borrowing space and maintaining debt sustainability.¹ Finally, many MICs and LICs require substantial public debt market reforms.

The Bank and Fund staff will continue their support for programs to strengthen PDM in developing countries, and efforts will be intensified in the case of LICs. Guided by the experience of work to date, the Bank and Fund will continue to respond to demand by individual countries, undertake capacity building and knowledge dissemination, and monitor and analyze financial risks in debt structures. A special effort will be made to support development and implementation of effective MTDS in LICs. This will comprise joint Bank-Fund capacity building work, over an initial 4-year period (2008–2011). Consultation on the methodology will be carried out as needed with other institutions, including the private sector. To track progress, this joint work will be complemented by periodic measurement of debt management performance. These initiatives will be tailored for individual countries, complement existing programs, and be undertaken in close consultation with country authorities, other providers of technical cooperation, and bilateral donors.

¹ See “Applying the Debt Sustainability Framework for Low-Income Countries Post Debt Relief”, November 2006, IDA/SecM2006/564 and SM/06/364.

I. BACKGROUND

1. **In 2001, the World Bank and the IMF developed and disseminated sound practices in the areas of public debt management (PDM) (Box 1).**² PDM is the framework, system or process, within which the required amount of government funding is raised, in a manner that is consistent with the authorities' risk and cost objectives, and which meets any other debt management goals set by the government. This is usually supported by a formal debt management strategy. But the process of moving from a set of general principles, to concrete programs and capacity building, is not straightforward. Recognizing this, a joint Bank-Fund pilot program covering 12 countries was initiated in 2002, with the objective of assisting authorities design and implement a reform program in PDM.³

Box 1. Six Principles of Sound Practice in Public Debt Management

- 1 **Debt management objectives and coordination**
 - ensure that the government's financing needs and payment obligations are met at the lowest possible cost consistent with a prudent degree of risk.
 - develop a common understanding of debt management, monetary and fiscal policy objectives.
- 2 **Transparency and accountability**
 - publicly disclose the objectives of PDM, the relevant measures of cost and risk, and the allocation of responsibilities.
- 3 **Institutional framework**
 - clarify the legal authority to borrow and issue new debt, invest, and undertake other transactions on the government's behalf.
 - ensure clear roles and responsibilities.
 - develop accurate and comprehensive debt data.
- 4 **Debt management strategy**
 - monitor, evaluate, and manage the risk structure of public debt.
 - implement cost effective cash management policies that minimize government liquidity and repayment risk.
- 5 **Risk management framework**
 - manage the tradeoffs between cost and risk of government debt.
 - consider the impact of contingent liabilities on the government's financial position.
- 6 **Development and Maintenance of an Efficient Market for Government Securities**
 - ensure that policies and operations are consistent with the development of an efficient government securities market.

² The *Guidelines for Public Debt Management* (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.

³ The 12 countries in the pilot program were Bulgaria, Colombia, Costa Rica, Croatia, Indonesia, Kenya, Lebanon, Nicaragua, Pakistan, Sri Lanka, Tunisia, and Zambia. The Bank led this work and 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.

2. **Both institutions have also provided technical support to countries outside that pilot program.** The Bank has helped several countries complete diagnostics and implement reforms. Similarly, the Fund has provided technical assistance (TA), arising out of surveillance, where relevant, or other direct requests from member countries. In addition, the PDM framework has been explicitly reviewed in several Financial Sector Assessment Programs (FSAP).⁴

3. **The objectives of this paper are to review country experience in strengthening PDM practices, identify continuing challenges, and discuss how the Bank and Fund should continue to support reform in this area.** It draws specifically on the experiences of developing countries reviewed in the joint Bank-Fund pilot program, and the FSAP. It is also informed by staff experiences from other capacity building work, surveillance, TA and outreach.⁵ The paper identifies the key policy, operational and institutional challenges countries continue to face; discusses the specific challenges faced by LICs, specifically in countries post the Multilateral Debt Relief Initiative (MDRI); and outlines how the Bank and the Fund plan to work with developing countries going forward, providing advisory services and other capacity building support, collaborating where relevant with other providers of capacity building support, donors, and the private sector. The paper concludes with a number of specific issues for discussion.

II. EMERGING TRENDS⁶

4. **In recent years, the structure of debt has significantly improved in several developing countries.**^{7,8} The maturity profile has lengthened, both in the case of domestic debt (Colombia, Costa Rica, Czech Republic, and Peru) and of international bond issues.⁹ Also, several countries have reduced their reliance on foreign currency debt (e.g., Brazil, Colombia, Mexico, Peru, and Thailand), and countries are issuing more fixed rate debt (e.g., Brazil, Indonesia, Peru, and Mexico). Countries such as Colombia, Mexico, Tunisia, and Uruguay have also made use of debt exchanges or swap transactions to transform the profile of their debt portfolio. As a result, vulnerabilities to sharp changes in the exchange rate, interest rates, or market access appear to have been reduced relative to the situation of the mid-1990s (Table 1 and Figure 1). However, in general, levels of debt remain high (see Table 1) and continue to represent a significant risk to sovereign balance sheets. Consequently, a strong focus on maintaining debt at sustainable levels remains necessary.

⁴ The FSAP assessments of the PDM framework and practices based on the Bank-Fund *Guidelines* have included Albania, Cote d'Ivoire, Ecuador, Jamaica, Mozambique, Peru, and Turkey.

⁵ Such as the occasional World Bank Sovereign Debt Management Forum and the semi-annual IMF Debt Managers' Forum.

⁶ For the purposes of this chapter, the country references are only illustrative, and not exhaustive.

⁷ For fuller details see Chapter III of the April 2006 *Global Financial Stability Report*.

⁸ It is likely that countries would not have been able to achieve the same degree of improvement if global liquidity conditions had been different.

⁹ For example, over 2001-05, the average maturity of international issues for a sample of 18 important emerging market countries increased from 8 to 13 years. Note that this sample excludes Argentina.

Table 1. Level and Structure of Public Debt in Selected Countries

	General Govt.					
	Debt / GDP ¹		FX Debt Share ²		ST Debt Share ³	
	1996	2005	1996	2005	1996	2005
Brazil	33	71	48	14	57	22
Colombia	28	46	30	25	0	6
Czech Republic	n.a.	26	13	13	56	16
Hungary	72	61	30	26	15	22
India	69	83	0	0	19	3
Indonesia	n.a.	47	n.a.	6	0	0
Malaysia	36	44	5	7	5	2
Mexico	56	44	67	29	29	23
Philippines	n.a.	63	16	34	55	29
Poland	42	48	27	22	42	8
South Africa	44	34	3	10	6	6
Thailand	14	46	49	7	0	24
Turkey	n.a.	72	31	27	60	7

Sources: BIS; Jeanne and Guscina (2006), "Government Debt in Emerging Market Countries: A New Data Set", IMF Working Paper WP/06/98, April 2006; IMF staff estimates; IMF World Economic Outlook; and South African Reserve Bank.

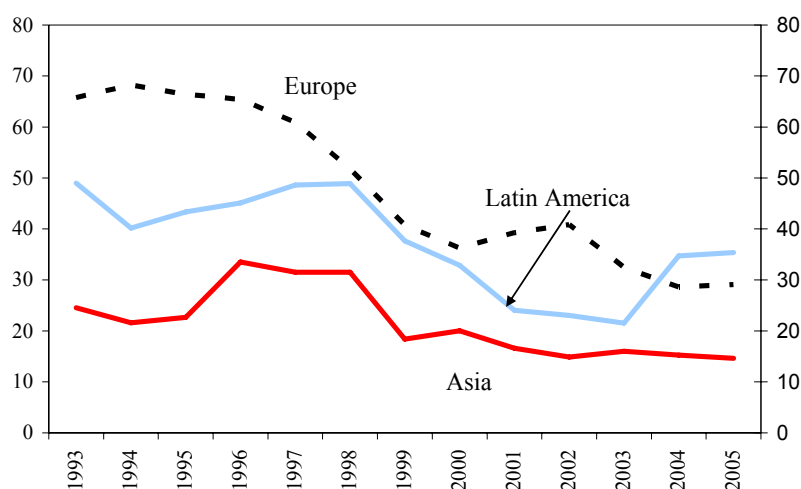
¹ Gross general government debt, except for Hungary which is net. See IMF (2001), "Government Finance Statistics Manual", for definition.

² Foreign-currency-denominated debt (issued both domestically and abroad) in percent of total marketable debt

³ Short-term domestic debt in percent of total domestic marketable debt.

Figure 1. Proportion of Emerging Market Domestic Public Debt Maturing in Less than a Year

(in percent of total sovereign debt)



Source: Global Financial Stability Report, IMF, April 2006

5. **Several MICs have made progress in developing and publishing a debt management strategy** (e.g., Brazil, Bulgaria, Colombia, Costa Rica, Czech Republic,

Hungary, Indonesia, Peru, Poland, and Mexico). Few LICs, however, publish such a strategy. Those that do (e.g., Tanzania and Papua New Guinea) often lack a systematic analysis of the cost and risk of the debt portfolio, and the strategies are limited to external debt.

6. **Some countries have strengthened the governance framework supporting PDM** (e.g., Bulgaria, Croatia, and Nicaragua).¹⁰ Colombia, Indonesia, and Uruguay consolidated PDM responsibilities in one unit, while Nigeria and Hungary have formed semi-autonomous debt management agencies. Turkey and Costa Rica have formed coordination committees.

7. **However, fragmentation of debt management responsibilities remains a problem.** Some countries with centralized debt management responsibilities continue to manage domestic and foreign debt separately. Quasi-fiscal debt is often managed separately by central banks (e.g., Chile, Costa Rica, Guatemala, and Nicaragua). But even with fragmentation, close coordination can still permit the production of a consolidated public debt database (e.g., Nicaragua).

8. **Some countries have made considerable progress in improving transparency and strengthening communication with market participants.** This can include disseminating information on the composition and risk profile of the public debt portfolio to supplement data appearing in financial statements (e.g., Colombia, Indonesia, Jamaica, Lebanon, Tunisia, Turkey, Sri Lanka, and Zambia).

9. **Debt managers have also become more active in developing their domestic public debt markets.** Brazil, Chile, Colombia, Mexico, and Turkey, have increased liquidity, and reduced interest rate volatility, by introducing benchmark bonds and improving the transparency and predictability of debt operations, for example, by publishing annual or monthly auction schedules (e.g., Brazil and Turkey). Some have introduced primary dealer systems (e.g., Colombia and Turkey) to support the functioning of their primary and secondary markets. Efforts to strengthen regulatory and legal environments have also helped (e.g., Kenya and Nicaragua).

III. DEBT MANAGEMENT: KEY POLICY, INSTITUTIONAL AND OPERATIONAL CHALLENGES

10. **Notwithstanding recent progress in PDM, the reform agenda remains significant.** This is particularly true for the LICs as a group, where the quality of debt management may have deteriorated as indicated in the latest Bank Independent Evaluation Groups' review of the HIPC Initiative.¹¹ In particular, in the absence of a strong debt management framework, the new borrowing space created by HIPC and MDRI debt relief

¹⁰ See Chapter I of the accompanying background volume for more detail.

¹¹ World Bank Independent Evaluation Group, 2006, "*Debt Relief for the Poorest: An Evaluation Update of the HIPC Initiative*", <http://www.worldbank.org/ieg>.

aggravates the risk that imprudent borrowing will lead to a re-accumulation of unsustainable debt.¹²

11. **The remainder of this section points to three priority areas for strengthening developing countries' PDM practices:** (i) developing a comprehensive and effective debt management strategy; (ii) improving governance and capacity; and (iii) strengthening the relationship between debt management operations and financial market development.

A. Developing a Medium-Term Debt Management Strategy

12. **A debt management strategy offers a framework to guide new financing decisions, in terms of the preferred choice of instrument, and other portfolio operations, so that the debt management objective is met.** It should identify the authorities' desired debt portfolio composition, taking account of the cost-risk trade-off and other policy settings, such as exchange rate or monetary policy. Almost all OECD countries have a published debt management strategy. But only half the sample developing countries have a debt management strategy and even fewer publish it.¹³

13. **Most developing countries follow implicit or *de facto* strategies** (e.g., Colombia, Kenya, Lebanon, and Nicaragua, and Tunisia). In addition, fragmentation of responsibilities, and the lack of adequate information and analytical capacity in debt units has hindered the progress from *de facto* to formal debt strategies.

14. **Where *de facto* strategies have been followed, there were some shortcomings.** For example, in countries with access to concessional loans, such as Kenya, Pakistan, Sri Lanka and Zambia, the trade-off between foreign currency debt (with very low interest rates and long maturities) and domestic debt (typically with shorter maturities and higher interest rates) were often not adequately taken into account. Second, actions to reduce risk or cost in one sub-portfolio have conflicted with another (e.g., Pakistan).¹⁴ Third, short-term expediency (to reduce budgetary costs) has sometimes outweighed prudent risk management (e.g., Sri Lanka).¹⁵

¹² See “*Applying the Debt Sustainability Framework for Low-Income Countries Post Debt Relief*”, November 2006, IDA/SecM2006/564 and SM/06/364 which highlights how new lending opportunities, if taken in excessive volumes or on unfavorable terms could contribute to the re-emergence of debt vulnerabilities.

¹³ According to a survey conducted in 2006 by the Banking and Debt Management Department (BDM) of the World Bank. The sample of 71 countries consisted of 30 OECD countries, the 12 countries of the pilot program, 10 countries where the Bank is conducting follow-up work and other IBRD countries that responded to a questionnaire. Moreover, 61 percent of OECD countries express their strategies as targets or benchmarks compared to 38 percent in the case of the non OECD countries surveyed.

¹⁴ For fuller details, see Chapter I of the accompanying background volume.

¹⁵ For example, this could lead to an excessive use of short-term financing instruments, that are cheaper given the existence of a term premium, but which carry more rollover and interest rate risk than longer-dated debt. See Annex II for a fuller discussion of the key elements of a MTDS.

15. **Developing a medium-term debt management strategy (MTDS) is a significant analytical exercise that requires incorporation of a number of key elements.** A natural first step is to formalize existing practices, which often highlights specific constraints such as the lack of monetary or fiscal policy credibility, market development, or institutional shortcomings.¹⁶ The strategy should identify any plans to relax these constraints, such as regular issuance of benchmark securities, or formalizing information sharing procedures.

16. **Evaluating the relevant costs and risks is not straightforward.** While some countries have developed sophisticated financial models for this, many countries lack a systematic framework, including a clear definition of cost and risk. In LICs, an explicit recognition of key exogenous risks such as terms of trade shocks and aid volatility must support the development of a MTDS.

17. **Developing MTDS that effectively balance cost against *fiscal* risk can prove challenging.** This should be accomplished within a rigorous and fully operational medium-term fiscal framework (MTFF). But many countries have not linked a theoretical MTFF with the annual budget process.¹⁷ Integrating the debt strategy analysis within a debt sustainability framework (DSF) can provide a suitable alternative.¹⁸ This will enable the impact of variations in key variables on long-term macro-fiscal projections, and their corresponding consequences for debt, to be modeled (Box 2). More generally, a framework that captures the evolution of the government's revenues and expenditures, under different scenarios, can offer valuable insights into how the budgetary impact of volatility in debt servicing might be reduced.

18. **Fiscal policy, however, remains the principal tool for achieving and maintaining debt sustainability.** Although, poor debt management can add to the debt burden, fiscal policy is the main determinant of the debt level. Effective debt management can, however, help mitigate the likelihood of a liquidity crisis, and reduce costs and risks; but solvency is not assured without an appropriate fiscal, and broader macroeconomic, policy stance.

¹⁶ In industrialized countries, sound macroeconomic fundamentals and deep, and liquid, domestic public debt markets, allows the debt management strategy to be principally driven by cost-risk analysis.

¹⁷ See for example World Bank (2002), “*Medium-term Expenditure Frameworks: From Concept to Practice. Preliminary Lessons from Africa*”, World Bank Africa Region Working Paper Series No. 28.

¹⁸ See PIN 06/136, December 2006, “*IMF Executive Board Discusses the Application of the Debt Sustainability Framework for Low-Income Countries Post Debt Relief*”.

Box 2. Inter-Relationship Between Debt Sustainability Analysis (DSA) and Debt Strategy Analysis

The Debt Sustainability Framework (DSF) provides an objective assessment of debt sustainability given a macroeconomic framework that outlines a country's fiscal and balance of payments stance under certain assumptions and conditions.^{1/} A Debt Sustainability Analysis (DSA) applies the DSF and considers a number of stress tests to evaluate the robustness of debt burden indicator profiles—usually the ratio of the NPV of debt to GDP, exports or tax revenue—to various macro-economic shocks, such as to GDP, the exchange rate, revenues, etc. Often, simplifying assumptions about the level and shape of the yield curves facing the country are made, i.e., the term structure is not explicitly modeled, either as a function of policies or the debt structure, but rather taken as given; nor is the impact of debt composition on the exchange rate modeled.

Conversely, debt strategy analysis generally evaluates the performance of various financing strategies under a given path for the primary balance and other macro-economic variables. Here, variables that capture market risk, such as the interest rate sensitivity of cash flows, other determinants of the term structure, the exchange rate, etc, may be explicitly modeled. Again, the robustness of the various strategies is evaluated against a variety of outcomes for these variables. Generally, the output is presented in terms of the impact on nominal debt servicing costs, which can be set within the overall context of the budget or presented as an absolute level. Presenting it within the budgetary context, for example, by expressing it as a proportion of tax revenues, allows the real economic burden to be captured.

Clearly, the two approaches share many common assumptions, including the future path of the primary balance. A key element of the debt strategy analysis is its consideration of how the primary balance is financed. The analyses of both approaches are complementary and may suggest efficiency gains if the same agent carries out both sets of analysis, especially in the LIC context. However, it must be recognized that the DSA is focused on evaluating certain fiscal policies and is rightly within the purview of the fiscal policy maker; the debt manager is focused less on whether fiscal policy is sustainable, which is outside their remit, but rather, given a preferred stance for fiscal policy, how that should be financed. There is, however, scope to bridge the gap and develop approaches to debt strategy analysis that are more closely related to a DSA, while also allowing for an analysis of the potential impact of the debt structure on key macroeconomic risks (e.g., assessing the implications of extensive foreign currency financing on the risk of a sharp depreciation of the exchange rate). In particular, debt managers could augment the traditional DSA, both through inclusion of details on the term structure of debt and through the use of more tailored risk assessment techniques to better analyze the portfolio risks, to improve its effectiveness as a tool for debt strategy analysis.

^{1/} See, for example, Abiad and Ostry (2005), "*Primary Surpluses and Sustainable Debt Levels in Emerging Market Countries*", IMF Working Paper WP 05/6, October 2005, or Celasun, Debrun and Ostry, (2006), "*Primary Surplus Behavior and Risks to Fiscal Sustainability in Emerging Market Countries: A 'Fan Chart' Approach*", IMF Working Paper WP 06/67, March 2006, for a broader discussion on debt sustainability issues.

19. **Improving the effectiveness of cash management reduces cost and helps mitigate liquidity and rollover risk.** This helps ensure that financial obligations are met without incurring high costs or compromising the debt issuance program. For example, in Croatia, Indonesia, and Tunisia the timing of bond sales was driven by cash management needs, whereas domestic public debt market development would have benefited from a more regular

and predictable issuance program.¹⁹ The proliferation of government bank accounts in many LICs has been a major factor in the inefficient use of cash across the government. Also, where markets are underdeveloped, a tendency to use large cash balances, cash rationing or resort to borrowing from the central bank not only unduly increases costs, but also hinders liquidity forecasting, and otherwise impedes the effective implementation of monetary policy.²⁰ However, many MICs and LICs struggle to improve the quality of their cash flow forecasting, with LICs facing particular challenges in implementing a treasury single account (TSA).

20. To minimize potential conflicts, it is desirable to set the objectives of debt management and *monetary policy* independently. In several developing countries this independence is often not feasible for two reasons: (i) weak institutional structures and lack of technical capacity in the MoF, and (ii) underdeveloped domestic financial markets. For example, in Kenya, Pakistan, Sri Lanka, and Zambia the lack of technical capacity of the MoF made it difficult to shift responsibility for debt management away from the central bank (CB). Where the CB has issued significant quantities of its own securities to control excess liquidity or to finance quasi-fiscal deficits, the CB's willingness to raise interest rates, and consequently, the credibility of monetary policy (e.g., Costa Rica, Indonesia, and Nicaragua), may be called into question. Independent debt management and monetary policy is very important where fiscal dominance has, in the past, thwarted the achievement of monetary objectives. This is often the case in LICs that have experienced high inflation, resulting from monetization of fiscal deficits.

21. Few countries incorporate *contingent liabilities*—both explicit and implicit—into their debt strategies. Explicit contingent liabilities, such as government guarantees, can represent a significant fiscal risk, and are a particular issue in LICs, where guarantees are often required to finance projects. The increasing reliance on public-private partnerships (PPPs) adds to this risk. Managing these risks effectively requires countries to record and monitor such guarantees on a regular basis, which is increasingly a role for the debt manager. However, evaluation of the fiscal risks involved in guarantee portfolios, and other contingent liabilities, is problematic. While these issues have been widely discussed, and some valuation techniques have been developed, no common methodology is available on how to reflect such risks in a MTDS.²¹ This is equally true for implicit contingent liabilities—for example, those that arise from the vulnerability of the banking system.

¹⁹ Although Indonesia is taking steps to address this.

²⁰ At an operational level it is important for the central bank to be aware of the government's financing plans and cash flows so that they can be properly incorporated into the central bank's liquidity management operations.

²¹ See, for example, OECD (2005), “*Advances in Risk Management of Government Debt*”, OECD, March 2005, IMF (2005), “*Government Guarantees and Fiscal Risk*”, April 2005, (www.imf.org), or World Bank (2002) “*Government at Risk: Contingent Liabilities and Fiscal Risk*” for a discussion of some of these issues.

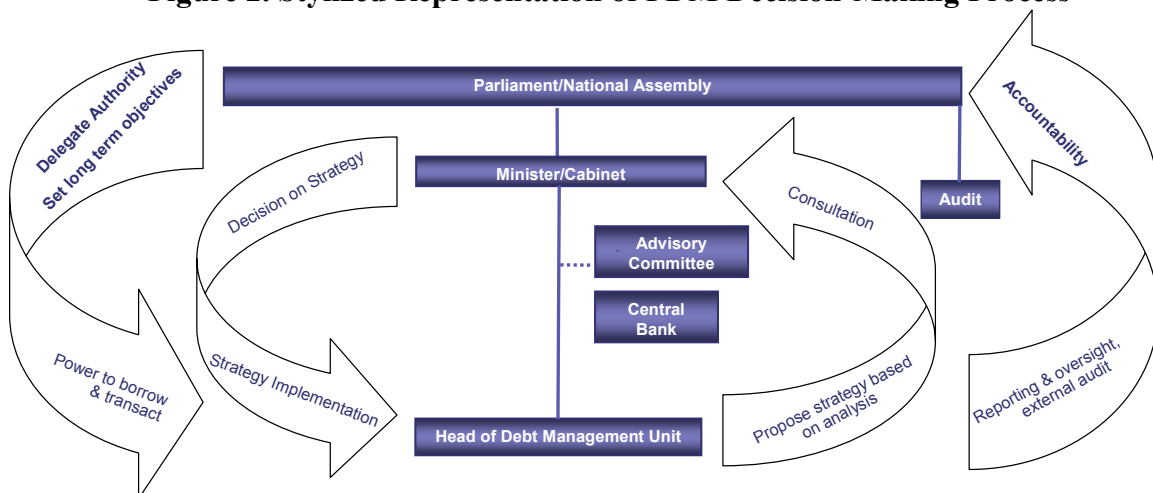
B. Governance Arrangements and Capacity

22. **Impediments to effective PDM also result from poor governance and capacity constraints.** This section focuses on some of these issues, as well as the approaches countries are adopting for reform in this area.²²

Accountability and Legal Framework for Public Debt Management

23. **The governance structure supporting PDM should delineate clear roles and responsibilities for all the relevant institutions.**²³ Appropriate checks and balances should be in place, along with clear reporting lines. Accountability and transparency should be ensured through the disclosure of activities and outcomes (Figure 2).

Figure 2. Stylized Representation of PDM Decision-Making Process



Source: World Bank staff

24. **Very often, this is not fully supported by the underlying public debt legal frameworks, affecting the efficacy of PDM in various ways:**²⁴

- Many laws enacted at different times often specify different levels of oversight for borrowing (e.g., Colombia, Costa Rica, Kenya, Lebanon, Mongolia, Panama, and Tunisia), or multiple authorities to borrow (e.g., Lebanon and Sri Lanka).

²² The section draws on information gathered over the period 2002-2006, based on the assessment reports prepared under the joint Bank-Fund 12-country pilot program and other work, which has been discussed with the relevant country authorities.

²³ In line with similar provisions in the IMF (2001), “*Code of Good Practices on Fiscal Transparency*”, (www.imf.org), and IMF (2000) “*Code of Good Practices in Monetary and Financial Policies*”, (www.imf.org).

²⁴ Other problems include the absence of a clear legal framework governing borrowing at the sub-national level, and its relationship to borrowing at the central level, and insufficient provisions governing the recording of public debt.

- Budget laws generally focus on aggregate borrowing requirements, but often set sub-limits that impede decisions on instrument choice and risk management (e.g., Indonesia, Lebanon, and Sri Lanka).
- Minimal disclosure and reporting requirements affect transparency and market efficiency (e.g., Cote D'Ivoire, Dominican Republic, Indonesia, and Lebanon).

25. **Countries have adopted various approaches toward reforming the legal framework, but the institutional and political realities often impede reform.** In some cases, an amendment to the constitution would be required (e.g., Tunisia). Nevertheless, some countries have succeeded in consolidating legislation in new budget systems laws or debt management laws (e.g., Bulgaria, Nicaragua, and Serbia). A medium-term focus has also been supported by the introduction of legislation requiring the introduction of multi-annual budgeting frameworks (e.g., Colombia, Croatia, and Pakistan). Some countries have side-stepped legislative change in the early stages and have used secondary regulation (decrees, regulations, and ministerial authority) to implement urgent reform. But such partial solutions have their risks, for example, by adding to the already complicated and fragmented legal frameworks in some countries (e.g., Colombia and Indonesia).

26. **Organizational arrangements in countries also hampered effective debt management.** Fragmentation of responsibilities across different ministries and departments increases the coordination and informational requirements and hinders the development of a strategy for the aggregate debt portfolio (e.g., Costa Rica, Croatia, El Salvador, Indonesia, Kenya, Kazakhstan, Lebanon, Pakistan, Romania, and Zambia). Often, the CB's role as an agent in the management of domestic or external public debt is not clearly defined. Where the CB is (*de facto*) involved as the principal, this can contribute to policy conflicts (e.g., Zambia).

27. **Consolidation of debt management responsibilities in one unit has been a difficult reform to implement.** While some countries have taken actions to consolidate within the ministry of finance (e.g., Brazil, Korea, and Uruguay) or established separate public debt management offices (e.g., Hungary and Nigeria), in countries where the CB was responsible for domestic debt, attempts to transfer this from the CB have proven difficult to implement (e.g., Costa Rica, Nicaragua, and Sri Lanka). Others have created a coordination office (e.g., Pakistan), or a coordination committee (e.g., Costa Rica and Turkey). Experience with these approaches has been mixed, as it can add a further layer to an already complex set of arrangements.

28. **The systematic management of operational risk must be improved in most countries,** for example:

- In a few countries, debt transactions were entered into and verified by the same unit and individuals, which can reduce the integrity of the data and, at one extreme, increase the risk of fraud.
- Where debt management involves regular interface with the market, a code of conduct is necessary but rarely implemented.

- Most countries do not have adequate, written, and well understood procedures governing their debt management operations.

29. **In this context, Bank-Fund initiatives on the collection, availability, and quality of debt statistics have played an important role.** The availability of timely and good quality statistics can mitigate some of the impediments to debt strategy formulation that arise from organizational fragmentation. These efforts are being carried out in partnership with other agencies, including those responsible for debt data recording systems, and include the dissemination of methodologies and frameworks corresponding to international accounting standards (see Box 3). Training in debt statistics compilation has also been delivered.

30. **This underscores the long recognized need for sound debt recording systems, which has been the focus of considerable development assistance by many donors.** Despite this, some countries still do not have well functioning debt recording and reporting systems in place (e.g., Kenya and Zambia).

Box 3. Current Multilateral Initiatives for Improving Availability and Quality of Debt Statistics

In response to growing demands for data, an Inter-agency Task Force on Finance Statistics (TFFS) 1/ has undertaken an initiative aimed at improving the availability and quality of debt statistics. Significant advances have been made in recent years in improving availability of external debt statistics and in related capacity building. 2/ These include:

- production of the *External Debt Statistics: Guide for Compilers and Users (External Debt Guide) (2003)*, providing an internationally recognized methodology for compiling and presenting external debt statistics;
- creation of the World Bank Quarterly External Debt Statistics (2004) (QEDS), a joint initiative of the Fund and the Bank to bring together external debt statistics produced by SDDS subscribing countries in one central location, on comparable basis;
- production of the External Debt Statistics Data Quality Assessment Framework (ED DQAF) in June 2005, a tool produced by the Fund for improving and assessing the quality of external debt statistics;
- launch of the Fund public sector debt statistics initiative in 2005, with the aim of assembling existing statistical series on public sector debt (domestic and external) in a single electronic source that could be accessed easily for balance sheet analysis;
- launch of the Joint External Debt Hub (JEDH) website in March 2006, a joint initiative of the BIS, IMF, OECD, and the World Bank aimed at facilitating availability of external debt statistics produced both from creditor/market sources and national sources;
- deepening capacity building in the area of debt statistics through collaborative training activities with the members of the TFFS—since May 2002, over 500 government officials from about 140 emerging markets and the low income countries were trained in external debt statistics compilation methodologies.

1/ The TFFS was established in 1992 under the aegis of the United Nations Statistical Commission and the Administrative Committee on Coordination-Sub-Committee on Statistical Activities. The TFFS is chaired by the IMF and meets annually. It comprises BIS, Commonwealth Secretariat (ComSec), Eurostat, European Central Bank, IMF, OECD, Paris Club Secretariat, World Bank and UNCTAD.

2/ See Annex I for further detail.

Capacity

31. **The ability of countries to manage public debt effectively is often hampered by staff and information technology (IT) systems capacity.** One short-run response to fill skill gaps has been for special advisors and ministers to do the job themselves, but this practice has heightened key person risk, and parallel efforts to build staff capacity are still necessary.

32. **Some countries have opted for “islands of excellence”, insulating the debt management function from the resource constraints faced elsewhere in government.** This approach brings its own disadvantages in that it can impede coordination of debt management with other core policy functions and the challenge of ensuring effective oversight arrangements.

33. **To address staff capacity issues, countries are using a variety of measures to improve skills.**

- providing training opportunities (e.g., Brazil and Colombia);
- providing better incentives, including accelerated promotion, bonuses, occupational pay scales, as well as exempting staff from ministry rotation policies (e.g., Indonesia); and
- hiring staff on fixed-term assignments, particularly when a new organization is being established (e.g., Uruguay).

34. **Ideally, the development of the IT systems infrastructure should be adapted to specific institutional arrangements and functions of debt management units.** Major IT development that does not give sufficient attention to business processes is unlikely to succeed (e.g., Croatia and Lithuania). Some countries have improved IT systems by taking smaller steps, such as recording domestic debt data in the external debt system (e.g., Nicaragua).

C. Debt Management, Market Development and Financial Stability

Developing Domestic Public Debt Markets

35. **Some MICs have included the development of the domestic public debt market as an explicit part of their debt management strategy (e.g., Brazil).** More generally, well-functioning markets help reduce asset-liability mismatches on the country's balance sheet and facilitate the better distribution of risks, increasing the resilience to shocks and enhancing financial stability. However, in many developing countries, a number of broader impediments exist. In particular, a robust and stable macroeconomic framework, with sufficient credibility of fiscal and monetary policy, is often lacking.²⁵ In some countries, weaknesses in the legal framework, the payment and settlement system, and the regulatory framework persist; the investor base remains concentrated; and the authorities' commitment to accept market determined prices is weak. Box 4 highlights other issues. Consequently, a coordinated approach across all relevant agents, including debt managers, central banks, securities market regulators, and private sector participants will increase the likelihood of success in developing the market.

36. **Debt managers can facilitate market development through supply side measures.** Several countries have introduced benchmark bonds (e.g., Brazil, Costa Rica, Mexico, and Tunisia). Such large, standardized issues facilitate the development of the yield curve, bringing wider benefits with respect to the pricing of other securities, and supporting the development of repo and other derivatives markets. Similarly, replacing non-marketable

²⁵ As illustrated by "original sin", where countries have struggled to issue long-term fixed rate bonds in their own currency.

bonds with marketable instruments, has enhanced market functioning (e.g., Brazil, Bulgaria, Croatia, Indonesia, and Tunisia). Following a predictable and regular pattern of issuance also deepens the market, and supports the development of complementary markets. A clear and publicly disseminated financing plan, within the framework of a MTDS, plays an important role in this regard (e.g., Brazil, Bulgaria, Colombia, Mexico, and Turkey). Finally, the introduction of primary dealer systems has been beneficial in several MICs (e.g., Brazil, Mexico, and Turkey).

37. **In LICs, the efficiency of public debt markets can be improved** through steps such as (i) agreeing to market standards, such as codes of conduct or other trading conventions; (ii) improving the issuance mechanisms; and (iii) developing a clear communications strategy (e.g., Kenya, Nicaragua, and Zambia).

38. **On the demand side, steps are needed to diversify the investor base.** For example, demand from foreign institutional investors has facilitated the introduction of longer-term fixed-rate debt in local currency (e.g., Mexico and Turkey). Developing a specific retail debt program might also be beneficial (e.g., Indonesia). Establishing strong relationships with the investor base—built on a foundation of transparency—is an important aspect of investor diversification. This has been achieved in a number of countries through explicit investor relations programs (e.g., Brazil, Mexico, and Turkey).²⁶

²⁶ See, IMF (2004), “*Investor Relations Programs: Recent Developments and Issues*”, October 2004, (www.imf.org) for more details on these programs.

Box 4. Impediments to Improving the Functioning of Domestic Public Debt Markets in Developing Countries

Progress has been made in developing domestic public debt markets; however, some continued shortcomings require further work: 1/

Money markets remain underdeveloped. Many developing countries are now transitioning to inflation targeting, and moving to indirect market-based instruments to implement monetary policy. However, underdeveloped money markets have aggravated volatility at the short end of the yield curve, impeding the policy transmission mechanism, particularly in the context of excess domestic liquidity. Further, the lack of marketable government debt in CB portfolios means many CBs issue their own debt to sterilize structural excess liquidity. This weakens the CB's balance sheet, reducing the credibility of monetary policy. In addition, where marketable government debt exists, the issuance of CB debt contributes to market fragmentation. This can be alleviated once open market operations can be implemented using repos or where an agreement is reached allowing Treasury bills to be used for monetary policy purposes (e.g., Colombia, Croatia, and Macedonia).

Incentives to trade remain poor. Banks and other institutional investors often have limited incentives to trade. This impedes liquidity in the market. While important developments have been made in broadening the investor base, including pension funds, insurance companies, and mutual funds, these investors have largely followed buy-and-hold strategies, using new inflows of funds to rebalance their portfolios. In some instances, although prudential requirements should not be compromised, where institutional investors have developed, investment guidelines have inadvertently hindered secondary market liquidity (e.g., Chile). Similarly, where the banking system has experienced sustained periods of excess liquidity, this has reduced their incentive to trade in the money or public debt markets. In such circumstances, the banks have followed buy-and-hold strategies, often increasing their purchases of longer dated debt. The consequent asset-liability mismatch increases their own vulnerability, aggravating the risks to financial stability.

Asset valuation remains difficult. Illiquid markets have reduced the efficiency of prices and led to difficulties in asset valuation—for the corporate sector to price their securities, for mutual funds to price the net present value of its assets, and for the government to price new issues in the primary market. This has also reduced investors' incentives to trade.

1/ See World Bank (2007), “*Developing the Domestic Government Debt Market: From Diagnostics to Reform Implementation*” for a detailed account of issues in the 12 pilot countries.

Financial stability

39. **Where the domestic financial sector is the dominant holder of sovereign debt—often the case for developing countries—then a well developed PDM framework helps safeguard financial sector stability by assuring the credit quality of those assets.** For example, in 2004, banks constituted the largest group of investors for public debt and provided above one third of domestic financing for a sample of 18 large EM countries.²⁷ As noted above, this is also particularly true for LICs, where the availability of alternative assets is limited. Correspondingly, under-developed public debt markets reduce the ability of banks

²⁷ See Chapter III of the April 2006 Global Financial Stability Report. Also see “*Remarks by IMF Deputy Managing Director, Murilo Portugal At a Debt Managers Conference*”, February 2007, (www.imf.org) for a broader discussion of this topic.

to liquidate their positions if required, reducing the quality of these assets, and accentuating risk to the banking sector. In addition, the lack of well-functioning primary and secondary government debt markets, or the design of specific investment regulations, can also contribute to pricing distortions and misallocation of capital, which are not conducive to financial stability.

IV. THE SPECIAL CASE OF DEBT MANAGEMENT IN THE LOW-INCOME COUNTRIES (LICs)

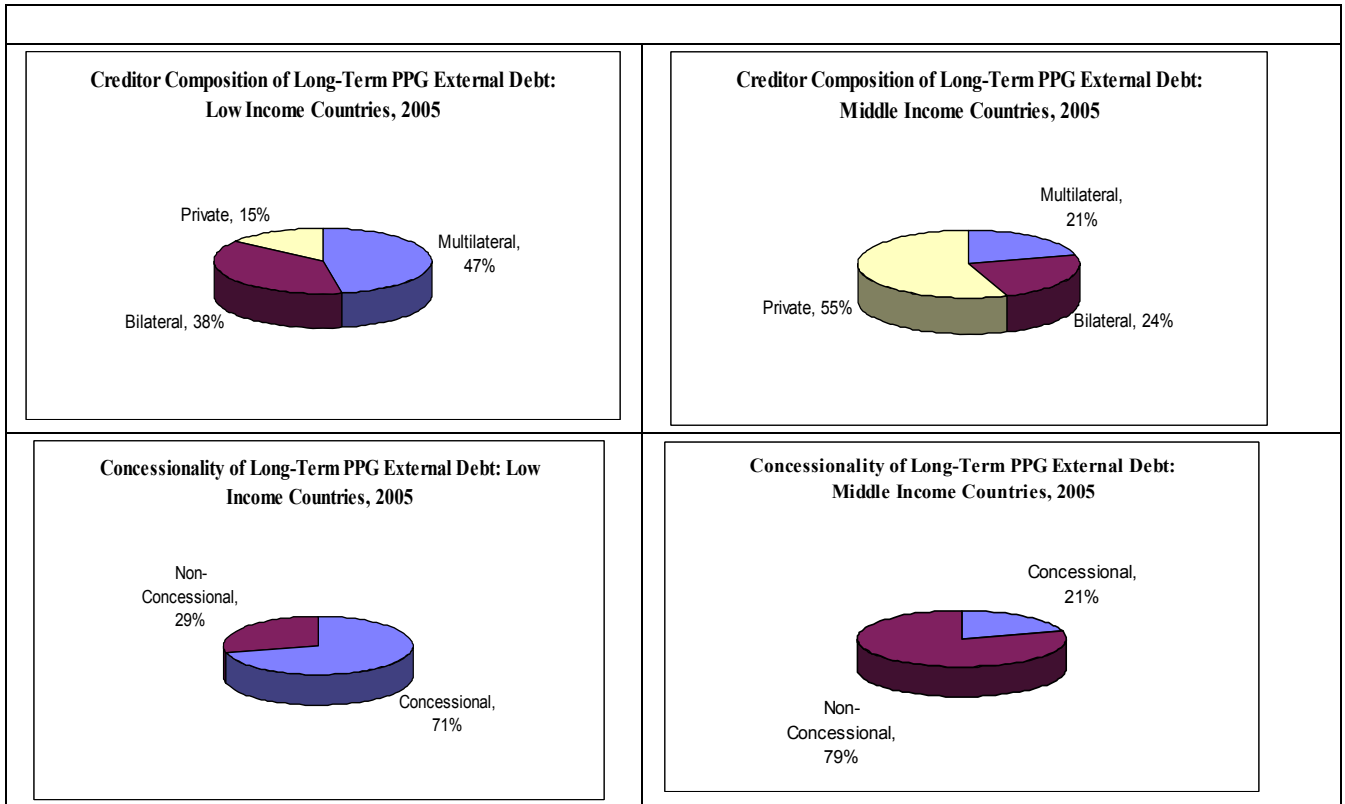
40. **The LICs face all the issues discussed above, but to differing degrees.** From one perspective, their challenges tend to be more acute—capacity, institutional arrangements, governance, all need considerable strengthening—but from another perspective, simpler – their choice set is significantly more limited with respect to the instruments they can use for meeting their financing gap.

41. **The past reliance on concessional flows has added a different dimension to traditional cost and risk considerations in managing the debt portfolio.** As of 2005, multilateral and official bilateral creditors made up over 80 percent of the public and publicly guaranteed external debt of LICs. Over 70 percent of this debt was contracted on concessional terms with below-market interest rates and long maturity periods, including grace periods.²⁸ In contrast, 55 percent of the external debt stock in MICs was made up of credits from the private sector and was predominantly on non-concessional terms (Figure 3). While the past reliance on concessional sources of funding may have limited exposure to interest rate risk, the consequent exposure to currency risk has been significant.²⁹

²⁸ A loan is considered concessional if its grant element, i.e., the difference between the nominal value of the loan and its NPV, is equal to or exceeds 35 percent. Moreover, the concessionality of a loan, i.e., its grant element, increases respectively with lower interest rate, longer grace and maturity periods, and a more back-loaded repayment profile.

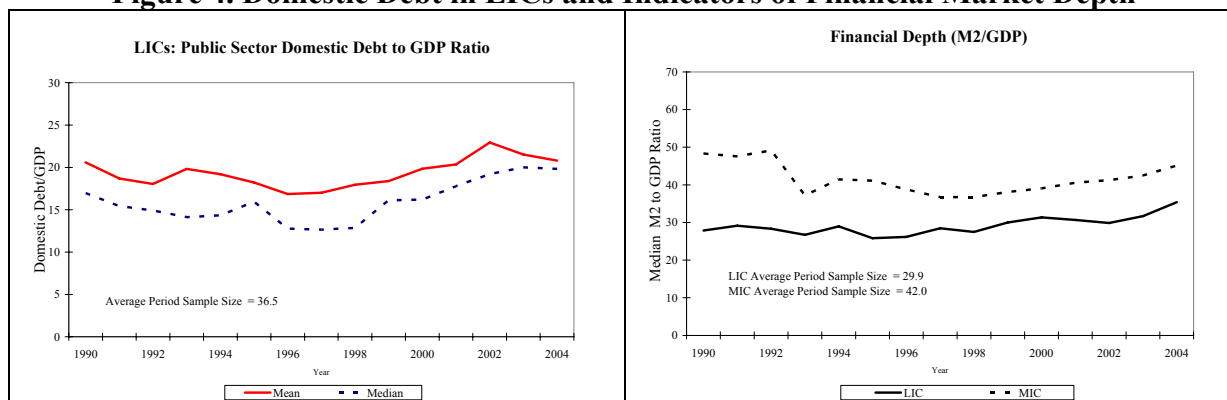
²⁹ While limited, some choices exist for actively managing this currency risk. For example, it may be possible to choose amongst IFIs to achieve a more diversified and balanced currency composition. Risk could also be partially mitigated by taking into account the debt structure when determining the currency composition of the foreign exchange reserves.

Figure 3. Characteristics of Long-Term Public and Publicly Guaranteed External Debt in MICs and LICs



Source: *World Development Indicators, World Bank 2006.*

42. **It will limit the scope to take a systematic approach to public debt market development.** In practice, decisions to access domestic financing have generally been passive—domestic debt is generally the residual once external financing sources have been exhausted. In some instances, high external financing in LICs with low absorptive capacity might also have required additional domestic debt issuance to sterilize the in-flows. In each case, domestic debt might have been accumulated in a manner that is not conducive to domestic market development, and again limiting the scope for mitigating currency risk (Figure 4).

Figure 4. Domestic Debt in LICs and Indicators of Financial Market Depth

Sources: Bank and Fund staff; International Financial Statistics, IMF 2005.

43. **Debt managers in LICs face a number of particular risks, with only limited tools to manage them.** The structure of LIC economies and their public debt portfolios render them particularly vulnerable to exogenous shocks that imply significant risk to the debt portfolio. Along with the issues discussed above, LICs are particularly vulnerable to:

- *Operational risks.* These arise from the typically weak organizational arrangements, systems and procedures, and are compounded by vulnerability to natural disasters, loss of institutional memory or key persons.
- *Terms of trade trends and shocks.* These arise from the typically narrow and volatile production and export bases. LICs are more vulnerable to commodity price shocks than other developing countries, and such shocks occur more frequently and can persist for many years.³⁰
- *Aid volatility.* LICs are significantly exposed to fluctuations in aid flows, due to external factors (e.g., shifts in donor sentiment) or in response to perceived domestic changes (e.g., in governance and economic management). Moreover, aid commitments, which are an important input into most LIC budget forecasts, often vary significantly from the level of actual aid disbursements. This increases the need for effective cash management to cushion the impact of aid disbursement shocks on the implementation of fiscal policy.

44. **Capacity constraints continue to impede the development and implementation of an effective MTDS.** A survey of 24 HIPC decision and completion-point documents shows significant gaps in basic debt management capacity.³¹ For example, debt units in these countries lack adequate capacity to monitor and record debt information and new resource

³⁰ Please see, “Fund Assistance for Countries Facing Exogenous Shocks,” IMF 2003. Also, “IDA Countries and Exogenous Shocks,” October 2006.

³¹ See Chapter III of the background volume.

flows accurately. These constraints have remained during the successive rounds of debt relief under HIPC and MDRI.

45. **The new borrowing space created by HIPC and MDRI debt relief has radically altered the financial landscape facing beneficiaries, creating both opportunities and risks.**³² For some, this provides the opportunity to access non-concessional sources of financing, from new creditors, through new instruments, and is reflected in increased foreign investor interest. For example, recent data from the Emerging Markets Traders Association indicate that the volume of sub-Saharan African debt traded in 2006 more than doubled that in 2005.³³ Given their large social and infrastructure needs in many of these countries, additional inflows can be a welcome development, particularly where domestic resources are insufficient.³⁴ However, the management of non-concessional debt poses new challenges and these developments aggravate the risk that post-MDRI LICs will re-accumulate unsustainable debt. Indeed, the availability of non-concessional financing has increased the urgency of building capacity to develop and implement an MTDS, so that governments can take informed borrowing decisions to manage their debt portfolio.

46. **Access to new sources of non-concessional financing changes the scope for actively managing risk in the public debt portfolio.** New borrowing opportunities may offer greater scope to change the currency exposure of the portfolio, so that, for example, it is more tailored to the country's export revenue streams. However, that is likely to be achieved at the expense of higher debt servicing costs, and potentially increased rollover and interest rate risks. Similarly, greater foreign investor interest increases the scope for domestic debt to play a more active role in the portfolio. This is likely to increase the availability of financing resources in domestic currency, and the scope to extend the tenor of domestic debt.

47. **These new opportunities might also provide the opportunity to refinance some existing debt to secure cost savings or risk reductions.** For example, it may be possible for countries to retire some short-term, high cost domestic debt, and refinance at longer tenors in the international capital markets. However, the scope for actual cost savings must be carefully assessed.³⁵ Again, this calls for an effective MTDS to assess the relevant trade-offs.

48. **Operational risk also becomes more acute as the diversity of instruments and creditors increases.** For example, where LICs are contemplating a move into international capital markets, and consequently obtaining a credit rating, the quality of PDM, and the

³² For example, the median NPV-of-external debt to exports ratio is estimated to have fallen from 153 percent prior to MDRI debt relief to 55 percent post-MDRI.

³³ See www.emta.org for more detail.

³⁴ Note that in many instances IFIs are providing grants in addition to lending.

³⁵ For example, recent movements in the Tanzanian Shilling suggest that there would be little cost savings to be secured by switching from domestic to external debt in this manner.

effectiveness with which the authorities communicate their MTDS, can directly influence debt servicing costs by influencing the credit rating.³⁶

49. **Developing a MTDS, that is consistent with maintaining debt sustainability, will be a challenge.** In addition to strong fiscal control, a comprehensive MTDS, that takes account of both domestic and external debt considerations, will be required to ensure that these new opportunities, and challenges, do not lead to a re-accumulation of unsustainable debt. This adds to the need to provide capacity-building support for these efforts.

V. BANK AND FUND SUPPORT FOR PUBLIC DEBT MANAGEMENT

50. **Recognizing the continued challenges, and the growing demand and need for capacity building, TA and advisory services from developing countries, the Bank and the Fund staff intend to intensify their efforts in a coordinated manner in this area.** Both will build on the insights gained from the pilot program, and other country work, to deepen support for the implementation of debt management reforms in line with their respective focus. Emphasis will be given to help identify and manage sovereign balance sheet risks, improve the functioning of the domestic public debt markets, and develop a diversified investor base, with due consideration for the macroeconomic policy linkages. In particular, staff will help countries develop and strengthen a MTDS that is consistent with the analysis of debt sustainability, integrating it into the policy dialogue with country authorities. In addition, both institutions will continue to attach high priority to making progress in the area of debt statistics and legal and institutional reform.

A. Current Capacity Building Activities

51. **Both the Bank and the Fund have been active in providing capacity building assistance in PDM.**

- The Bank is collaborating extensively with finance ministries and public debt offices to help them build capacity to frame appropriate public debt management and market development strategies, identify and evaluate funding and risk management tools available in the markets and from official institutions, and develop the front-, middle- and back-office staff and infrastructure to execute transactions utilizing those tools. Often, this collaboration is associated with Bank financing delivered through project, development program or TA loans. In other instances it can be incorporated in other vehicles, such as policy notes, public expenditure reviews or delivered in connection with countries' use of Bank hedging products. These activities have been developed in close association with the practical experience of the Bank Treasury as regular issuer and manager of its own ALM strategy.

³⁶ Ratings agencies will often cite improvements in debt management capacity as a factor supporting rating upgrades.

- The Fund’s work with countries emanates from follow-up to its surveillance, where relevant, with a focus on ensuring proper management of sovereign balance sheet risks and vulnerabilities in debt structures, debt restructuring work, and the development and implementation of debt strategies consistent with other macroeconomic and financial sector policies. The Fund’s involvement may also be linked to program design in the context of use of Fund resources, or come through direct advisory and TA activities, with country coverage ranging from LICs to emerging and mature markets.

52. **Both institutions have also been active in knowledge building and dissemination.** This is typically carried out through research and publications, presentations in conferences and seminars, training courses, and collection and dissemination of external debt statistics. Increasingly, PDM issues are being covered through the joint Bank-Fund FSAP program, with specific follow-up exercises often funded out of the FIRST Initiative.³⁷ On the related issue of debt sustainability, there is joint outreach on the development and implementation of the DSF and DSAs being prepared for LICs. More information on the work of the two institutions is summarized in Box 5.

Box 5. Bank and Fund Capacity Building Activities in PDM

World Bank Activities

The World Bank supports developing countries at two levels; first, through collaboration with individual countries on a demand basis and second, through training, research and outreach.

Country work

Advisory work for individual countries is based on a comprehensive needs assessment of the public debt management process, and is typically done in conjunction with domestic public debt market development. This serves as a platform for the authorities to specify a program to improve public debt management. Follow-up is provided, on a demand basis, in the following areas: governance, including the legal framework, institutional arrangements and transparency; debt strategy and risk management; capacity building and management of internal operations; coordination with cash management, macroeconomic policies, and debt market development; and debt strategy implementation, including capital and derivatives markets access. It also provides support in designing and structuring risk management products for IBRD borrowers.¹

Insights from the pilot program have shaped the approach to diagnostics and ensuing reform and capacity-building programs. This has been mainstreamed since early 2005 on the basis of demand from countries, in conjunction with the Regions. In addition to the 12 pilot countries discussed in this report, needs assessments and/or advisory assignments have taken place in sixteen countries including Peru, Philippines, El Salvador, Ukraine, Romania, Guatemala, Panama, Mongolia, Kazakhstan, Serbia, Mauritius, Lao PDR, Ecuador, Morocco, Mexico and Armenia. In recent years, Bank lending operation have supported debt management capacity-building in Brazil, Kenya, Lao Republic, Mongolia, Serbia, Slovak Republic, and Zambia.²

³⁷ The Financial Sector Reform and Strengthening (FIRST) Initiative, a US\$53 million multi-donor program supports capacity building and policy development projects in financial sectors, including debt management, in developing countries.

Box 5. Bank and Fund Capacity Building Activities in PDM (cont'd)

Training, Research, and Outreach

Based on experience gained from the pilot program, an intensive one-week training workshop, “Designing Government Debt Management Strategies” is offered twice per year. Since it was introduced in 2005, 38 countries have participated. The Bank will also offer a workshop on “Implementing a Debt Management Strategy” from May 2007. Research on various themes for effective public debt management, including process for developing a debt management strategy, organizational arrangements, legal framework, and macroeconomic coordination are being conducted and are published as policy working papers, technical notes, articles, as well as books, such as *Sound Practice in Government Debt Management*(2004) and *Managing Public Debt: From Diagnostics to Reform Implementation* (2007). It also periodically organizes the Sovereign Debt Management Forum, which brings together debt managers from around the world to share experiences and new developments in public debt management.

Fund activities in Public Debt Management

The Fund provides support for its members’ reforms on public debt management and debt market development through the following routes:

Surveillance and Use of Fund Resources

Where relevant greater focus is being placed on debt structures, debt strategies and debt market development issues to inform Article IV surveillance. In addition, institutional developments in public debt management are also carefully monitored under Fund programs in some cases. The Fund also encourages members to pursue orderly debt restructurings and has been active in promoting the use of collective action clauses. In terms of multilateral surveillance, public debt management operations and other developments in debt markets are regularly reported on in the *Global Financial Stability Report*. In addition, the semi-annual *Public Debt Managers’ Forum* forms part of ongoing monitoring of developments in public debt management and local market development in emerging markets.

Technical Assistance

The Fund delivers technical assistance both at an individual and a regional level. At the individual level, technical assistance can involve a comprehensive and in-depth assessment of the entire framework for public debt management and debt market development; be incorporated in a broader public financial management reform program; address weaknesses in specific areas (e.g., institutional arrangements for debt management, public debt legislation, investor relations, debt strategy development, etc.); or comprise advice on specific debt portfolio operations. Debt management advisors have also been placed in two regional Technical Assistance Centers (TACs) in Africa.

Training and Outreach

Training and workshops are offered on a select basis covering institutional arrangements for debt management, debt portfolio risk management, debt strategy development and implementation, and debt market development through the IMF Institute, and associated regional training centers, the Center for Excellence in Finance (in Slovenia), and in partnership with regional TACs, and other multilateral agencies. Periodic outreach activities are also undertaken, for example, in partnership with the World Bank and the OECD on a range of debt management issues. Staff research and analysis on topics ranging from debt restructuring, risk measures, contingent claims analysis for sovereign balance sheet risks, and sovereign asset and liability management are disseminated through IMF Working Papers and selected issues in country papers.

1/ Related programs in the WB-Treasury build capacity in the management of foreign exchange reserves, pension funds and other pools of national wealth.

2/ For further details of these loans, see Table 5 in Strengthening Debt Management Practices – Lessons from Country Experiences and Issues Going Forward: Background Paper.

B. Insights from the Pilot Program and Other Country Work

53. **Bank and Fund country work has provided considerable insight into the elements that can help sustain the implementation of reform.** A number of broad observations can be made. First, capacity building is a long-term endeavor requiring sustained technical, financial and political support. Second, programs to improve debt management must be tailored to a country's unique economic and institutional circumstances. Third, identifying a clear project management focus for the reform program, with key responsibilities increases the durability of reform. Such a systematic framework can only be developed with country ownership and political commitment, and also allows for follow-up through regular surveillance and other country work. Finally, the demand, and need for, improving debt management capacity in developing countries requires a multi-agency effort.

54. **The work done in the pilot countries indicates that a comprehensive diagnostic is necessary before a substantive program of reform can be undertaken.** Not only does such a diagnostic capture the main building blocks of debt management, it also identifies the interrelationships with macroeconomic policies, the overall governance environment, and the level of development of the domestic government debt market. An analysis of these interactions helps identify the trade-offs across different policies, and the possible consequences of reform.³⁸

55. **A thorough understanding of the macroeconomic situation and the relationship with PDM remains crucial.** Debt management reforms tend to be more effective where a credible macroeconomic framework is in place. A diagnostic narrowly focused on debt management, which does not take into account or is inconsistent with the overall macroeconomic framework, might lead to unrealistic recommendations. In addition, a broader policy context provides for a realistic assessment of what can be achieved through public debt management reform. Owing to the high degree of complementarity, developing a reform plan that simultaneously addresses weaknesses in public debt management and debt market development will be more effective.

56. **Experiences to date suggest that, in cases where extensive reforms are required, embedding public debt management reform in broader projects, supported by multiple donors, can increase the chances of successful implementation.** For example, in Kenya the work was integrated into the World Bank Financial and Legal Sector Technical Assistance Project; in Zambia, it is part of the (multi-donor) Public Expenditure Management and Financial Accountability (PEMFA) Reform program; in Lebanon, the work is integrated within the UNDP-funded project "Capacity Development for Fiscal Reform and Management"; and in Croatia, implementation is supported by the European Union under its program for accession countries.

³⁸ For example, until the late 1990s, public debt management assistance was often limited to establishing centralized inventories of foreign borrowing agreements, a focus which did not support the development of analytical capacity.

57. **Coordination with other organizations and governments has improved the quality of PDM guidance and technical assistance.** The development of the *Guidelines for Public Debt Management* included extensive consultation with public debt managers, and have provided a framework for debt management that has been universally accepted. Experience in the pilot program also suggests that comprehensive needs assessments can serve to establish a broad understanding of the main issues across donors, and facilitates coordination among them. This allows synergies to be exploited, improves sequencing, precludes any conflicting messages, and reduces any scope for overlap. In addition, there is coordination among the main providers of TA, including the Bank and the Fund, through shared resources or co-hosted conferences, workshops and other outreach events. Some of the main partners are the OECD Working Party on Public Debt Management, DMFAS Program of the United Nations Conference on Trade and Development (UNCTAD), the Commonwealth Secretariat (COMSEC), and Debt Relief International (DRI).³⁹

C. Going Forward—Strengthening the Process

58. Building on the above, and in light of the issues identified in section IV, the Bank and Fund propose to continue to work with developing countries in building their debt management capacity and accelerating the reform process as below:

Support for middle-income countries

59. **Generally, MICs possess greater debt management capacity and stronger institutions than LICs.** Yet, the demand for TA and advisory services continues to rise for three reasons. First, despite improved fiscal performance, many such countries still experience significant debt-related vulnerabilities (see section II). Second, as outlined in section III, many countries have yet to develop explicit debt management strategies, coordinate these effectively with macroeconomic policies, improve their governance arrangements and strengthen their domestic public debt markets. Finally, many have embarked on programs to enhance their analytical capacity or take advantage of current market opportunities to restructure their debt portfolios. As such, they are seeking more customized financial and advisory services.⁴⁰

60. **The Bank and the Fund expect to continue to provide cutting-edge technical support to this group of countries, building on insights gained from the pilot program**

³⁹ In addition a number of regional bodies are active in the area: 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), the Eastern Caribbean Central Bank (ECCB), the Central American Monetary Council (CAMC) and the Technical Assistance Centers (TACs). Details on some of the main providers/regional partners are provided in Annex IV.

⁴⁰ This was discussed in “*Strengthening the World Bank’s Engagement with IBRD Partner Countries*” SecM2006-0354, presented to the Development Committee. In addition to supporting countries through capacity building, the Bank is developing and expanding the range of banking products offered to IBRD countries.

and other country work. The Fund's interest stems from its role in helping countries prevent fiscal and financial crises, and its focus on the macroeconomic links between debt, monetary, fiscal, and capital markets. The Bank's mandate arises from its role as a long-term development partner, with its strengths lying in long-term institutional development, capacity building, and knowledge transfer based on the technical expertise anchored in its own Treasury operations.⁴¹

Support for low-income countries

61. **Building debt management capacity in LICs, however, is more complex, not least because of institutional weaknesses, and scarcity of skills.** But, as discussed in section IV, the urgency for improving debt management capacity in countries that have benefited from debt relief is acute. For LICs that have not benefited from debt relief, the focus remains on managing new borrowing prudently. More broadly, the challenges LICs face in terms of their macroeconomic vulnerability and the limited development of their domestic financial systems, suggests a need for a carefully crafted MTDS, which in turn will require a significant strengthening of capacity.⁴²

MTDS capacity building missions

62. **One focus of the Bank and the Fund, therefore, will be to assist these countries build the capacity to develop and implement an effective MTDS.** The MTDS will identify the authorities' preferred composition of debt and guide new financing decisions, and should lead to borrowing which (i) is consistent with the country's development plans and macroeconomic program; (ii) is sustainable; and (iii) minimizes borrowing costs over the medium to long term, consistent with a prudent degree of risk.⁴³

63. **The proposed capacity building work in LICs will initially cover a four year period (2008-2011).** It will be demand-driven, with preference given to post-MDRI countries. To begin, staff will target 4–6 countries a year. The impact of these efforts will be reviewed every two years before considering scaling up the effort across other LICs or developing countries. The initial group of countries will be chosen carefully, based on

⁴¹ The research and training programs and knowledge of the latest financial products and risk-hedging techniques have proved to be of lasting value to clients.

⁴² For the Bank, this will be consistent with ongoing work in public expenditure management and financial sector development. For the Fund, this will be consistent with its 2006 Medium-Term Strategy (MTS), which calls for a more focused engagement with LICs on macro-critical and financial stability issues, and specifically to help them build capacity to prepare and implement medium-term debt management strategies.

⁴³ See Annex II for a fuller discussion of the key elements of a MTDS. This work does not preclude capacity building work on other elements of PDM reform also being undertaken in these countries.

expressed demand for such support by the authorities as well as an assessment of where the pressures for better debt management are considered most acute.⁴⁴

64. **The first phase of mission work will be to prepare a comprehensive diagnostic of a country's debt management capacity, in collaboration with the authorities, and after consultation with other stakeholders.** This will form the basis of the reform plan for developing and implementing a MTDS that is tailored to the circumstances of a country and supported by the donor community. Where possible, staff will draw on existing assessments to help progress the reform plan more rapidly.

65. **Follow-up work, including missions and HQ-based support, is likely to be required to help countries implement elements of the reform plan.** This is likely to involve other providers.⁴⁵ Training, and other outreach, will also play an important part in helping countries embed reforms;⁴⁶ this is where regional partners can be particularly effective. In addition, in some cases where initial capacity is very weak, countries might benefit from the use of resident or short-term advisors.⁴⁷

66. **In addition, Bank-Fund staff will mount missions periodically to monitor the implementation of the agreed reform plans, and assist the authorities deal with new challenges as they arise.** Also, as countries prepare and implement their initial MTDS, this will highlight any continued weaknesses in the PDM framework and help re-evaluate the priorities for reform.

Performance indicators

67. **To complement this effort, the Bank, in collaboration with other stakeholders (including the Fund), is developing a set of indicators to periodically measure debt management performance.** Like the PEFA indicators for public financial management, these indicators will provide an international standard for evaluating performance, and will enable harmonization of support.⁴⁸ The indicators will, among others, assess (i) governance

⁴⁴ In the Bank, demand will be channeled through country teams and will be an integral part of the Country Assistance Strategy; in the Fund, the determination will normally be made by the Area Departments, based on their regular dialogue with member countries.

⁴⁵ Such as those described in Annex IV.

⁴⁶ This outreach might include the private sector where appropriate.

⁴⁷ For example, Albania and Nicaragua are benefiting from the presence of resident debt management advisors provided by the U.S. Treasury OTA. Similarly, IMF resident debt management advisors have been posted to the Central Asian region and 2 of the AFRITACs.

⁴⁸ The indicators build from, and deepen, the *Public Expenditure and Financial Accountability (PEFA)* indicators for overall public financial management, which already include high-level indicators for debt management. They draw upon existing resources, such as the IMF-World Bank's *Guidelines on Public Debt Management* (2001), the IMF-World Bank's *Developing Government Bond Markets – A Handbook* (2001), the IMF's *Data Quality Assessment Framework for External Debt Statistics* (2003), which covers various quality

(continued...)

(including the legal and institutional framework for debt management); (ii) the internal organization across debt management functions; (iii) staff capacity; (iv) policies and procedures for borrowings and loan guarantees; (v) loan administration and secure payment operations; and (vi) the transparent reporting of accurate and comprehensive debt data. The indicators will be assessed in close consultation with the authorities, but central quality control and a common methodology will be employed to ensure cross-country comparability.⁴⁹ This would help provide an objective measure of debt management capacity in relation to country peers, as well as to monitor country progress over time. Most importantly, the indicators will give the authorities, as well as the international donor and creditor community, a common platform to see which approaches are working and which are not. In addition, donors that are financing capacity building initiatives will be able to use this as a yardstick to determine whether their financial support is yielding results. This initiative could add to the existing store of knowledge on PDM and could also support a debt management practitioner's program that builds communities of practitioners, facilitating the sharing of experiences and other peer learning techniques.

68. The governance and financing arrangements for applying these indicators are still being explored, but initial discussions with a range of stakeholders have helped clarify key issues. First, the effort must be actively supported by a broad range of stakeholders—country authorities, technical assistance providers, donors, debt management specialists. Second, as in the arrangements for implementing the Public-Private Infrastructure Advisory Facility (PPIAF), the initiative could be managed by the Bank, drawing on its convening power and expertise.⁵⁰ Third, given the long-term nature of the work, commitments of financial support from donors will be needed for a long period, subject to periodic impact evaluations.

aspects of data collection, processing and dissemination, and the IMF's *Standards and Codes on Fiscal Transparency*, the PEFA Performance Measurement Framework as well as other relevant sources/material including the capacity building indicators developed by DRI for HIPC.

⁴⁹ The Bank is already in the process of testing a preliminary set of indicators in 6 countries; based on these tests the indicators will be refined and improved. Beginning in FY08, the intention is to assess all low-income countries against these indicators over three years, and subsequently refresh the indicators for a third of the countries each year, synchronized with the CAS or AAA cycle.

⁵⁰ The Public-Private Infrastructure Advisory Facility (PPIAF) provides a useful model for how funding might be structured. The PPIAF is a multi-donor technical assistance facility that is managed by the World Bank on behalf of participating donors. The PPIAF is owned and directed by participating donors, governed by a Program Council comprising representatives of participating donors, and managed by a small Program Management Unit (PMU). Thirty percent of the PPIAF's donor financing is allocated to the operation of the PMU (which is housed in the World Bank and comprises seven full-time professional staff) and the supervision of PPIAF tasks undertaken by Bank teams. PMU staff members are internationally recruited and serve on coterminous appointments.

Consultation and coordination with other agencies

69. **The activities proposed above will require intensive consultation, collaboration and coordination with donors and other TA providers.** In the implementation of reform plans to facilitate the development of a MTDS, the bulk of the coordination will need to be done at the country level. But there are several activities that would need to be coordinated at the international level.

70. **Several bilateral and multilateral agencies, debt management specialists, and technical assistance providers have been consulted on the broad initiatives suggested in this paper.** Staff will continue to promote the flow of information across key partners, prior, during and after any MTDS capacity building mission.⁵¹ Further efforts will be made to strengthen the mechanisms for the ongoing collaboration with bilateral agencies, debt management specialists, and other TA providers. Consultation with the private sector on specific issues, such as the development of the operational framework for MTDS, may also be considered.

Country ownership

71. **Demand from the authorities for this capacity building, ownership of the diagnostics and reform plan, and accountability for the implementation will be key ingredients for the success of the program.** The proposed design has taken this into account by: (a) ensuring that activities supporting the preparation of an MTDS have a strong, upfront country interest and ownership; (b) participation by the country authorities in the diagnostics and preparation of the reform plans; and (c) accountability on the part of country authorities for the implementation of the MTDS and associated reforms. Where progress does not take place, and the performance indicators show no improvement or deterioration, the Bank and Fund would reconsider their continued engagement in that program.

Costing and financing

72. **The program described above will entail significant resource costs** (see Annex III). For the Bank, the assistance to support MICs will continue to operate on a fee basis, but the costs for initiating work in LICs will require incremental Bank budget for staffing. These resources will be used to initiate and support the work on developing capacity for PDM in the selected countries and launching the performance indicator work; all subsequent support will need to be allocated from existing country budgets. Long-term funding from donors will be critical for applying the performance indicators in 60 LICs, while the Bank can be expected to assume the cost of managerial oversight. As far as the Fund is concerned, the support to the MICs will continue to be charged to its current technical assistance budget. However, as in the case of the Bank, the capacity building work on the MTDS, in LICs and

⁵¹ Subject to country consent.

other developing countries, will entail a resource cost. This includes the original resource requirement identified in SM/06/364.⁵² These costs will be borne under the existing budget.

VI. CONCLUSIONS AND ISSUES FOR DISCUSSION

73. This paper has reviewed country experiences with strengthening PDM frameworks, including the functioning of domestic public debt markets. It makes three points:

- Many countries have made some progress in strengthening their PDM frameworks and reducing debt-related vulnerabilities.
- Nevertheless, countries still confront many policy, institutional and operational challenges. In particular, most countries are at an early stage of developing MTDS. Establishing effective governance and organizational arrangements for PDM has proved challenging as has the development of domestic debt markets.
- For LICs, these challenges are even greater, not least because of institutional weaknesses and scarcity of skills. In addition, conditions in global markets, and the new borrowing space created by HIPC and MDRI, have attracted new creditors, who increasingly view these countries as attractive borrowers. This adds new urgency to the need to strengthen PDM frameworks, including debt market development, to ensure debt sustainability.

74. Consequently, the Bank and Fund are proposing to intensify their efforts to support capacity building in these areas across developing countries.

- For MICs, the Bank and the Fund will continue to provide specialized financial and advisory services.
- For LICs, the Bank and the Fund will undertake joint work to help build capacity to develop and implement an effective MTDS. These will be complemented by the development and application of indicators of debt management performance.

75. Staffs would welcome the Boards' views on the following issues:

- Do Boards agree with staffs' assessment of the challenges that developing countries face in improving public debt management?
- Do Boards agree that, when relevant, PDM issues should be incorporated to a greater extent in Fund surveillance, and in Bank country programs (e.g., CASs) when requested by country authorities?

⁵² That paper identified a resource cost of 1–1.5 Fund staff years to cover: (i) the cost of developing the required MTDS templates and capacity building frameworks; (ii) outreach activities and collaboration with other agencies and internal staff dissemination; and (iii) backstopping including review work. However, that estimate excluded costs associated with direct delivery of capacity building activities.

- Do Boards believe that the Bank and Fund are responding adequately to demand from MICs for advice and capacity building in public debt management?
- Do Boards endorse the proposed joint Bank-Fund approach, and resourcing, for building capacity to develop MTDS in LICs, to be rolled out in FY08?
- Do Boards endorse the complementary work to periodically measure debt management performance in LICs, which would help provide a basis to assess progress and a common platform for donor support for PDM?

Annex I. Multilateral Initiatives to Improve Debt Statistics

Quarterly External Debt Statistics (QEDS) and Joint External Debt Hub (JEDH)

76. In parallel with the joint work in promulgating internationally recognized methodologies and standards for compiling and presenting external debt statistics, the TFFS agencies have accorded high priority to the availability of these data to market participants and policy makers. Following the launch of the QEDS in 2004, the TFFS agencies have embarked on joint actions to encourage all SDDS subscribers (64), as well as countries that are not SDDS subscribers but who compile external debt statistics that are compliant with SDDS requirements, to provide these data to the QEDS database. As result of these concerted efforts, the countries reporting to the QEDS continues to increase.

77. The launch of JEDH was a significant milestone not only in bringing together national data published in the QEDS and creditor/market data published in the former Joint BIS-IMF-OECD-WB Statistics on External Debt (JDS), but it also provided a basis for comparison and improvement of these datasets. Recognizing that the success of the JEDH going forward will depend on the coverage, national capacity to produce, and the quality of the data available on the new website, the TFFS is now focusing efforts on finding ways and means of increasing national source debt data, creditor/market source debt data, and improving data quality.

78. In tandem with efforts being made to improve national data sources, the TFFS agencies are working together to improve creditor data series, in particular bilateral loans and export credits, to assist in monitoring the borrowing and lending operations of emerging and low income countries. These data series are critical inputs in revealing possible “free-rider” problems associated with the HIPC debt relief.

Public sector debt statistics

79. The IMF in collaboration with the TFFS is implementing a new initiative to assemble existing statistical series on public sector debt (domestic and external) in a single electronic source that could be accessed easily for balance sheet analysis. More specifically, the initiative aims at (i) developing a uniform presentation of public sector statistics based on recognized methodologies such as the Government Finance Statistics Manual (*GFSM 2001*) and the *External Debt Guide*, and (ii) promoting public debt statistics through international cooperation in debt reporting, technical assistance, and IMF surveillance work.

Data quality

80. In addition to improving the availability of external debt statistics produced by national authorities, the Fund in collaboration with TFFS agencies is addressing debt data quality issues in two fronts—promoting good practices of data quality based on the IMF’s ED DQAF; and confirming the quality of data supplied by national authorities through consistency checks. The ED DQAF has many uses including identifying and promoting “good practices” in compilation and dissemination of external debt statistics; designing and monitoring technical assistance programs; assessing the quality of external debt statistics produced by national authorities; and, importantly, for use by country authorities as a self-

assessment tool in seeking donor support for capacity building. Indeed, the External Debt DQAF has become a useful tool in external debt training activities conducted by the Fund and other agencies, as participants use the ED DQAF in workshops to self assess.

81. In parallel with the work on the ED DQAF the Fund has started a new initiative to assess the consistency of external debt data reported by SDDS countries to the QEDS and corresponding data series produced by countries and reported in the international investment position (IIP). This initiative is geared towards improving countries' external debt and IIP data for effective use in economic surveillance work.

Capacity building

82. The TFFS agencies have made a significant contribution in disseminating international best practices in the compilation of external debt statistics through joint capacity building training activities. Since May 2002, there has been a major effort, with 18 such activities involving over 500 compilers of debt statistics drawn from about 140 countries in various regions. In addition, both COMSEC and UNCTAD have each developed their own capacity building modules on debt statistics and debt data validation, which are currently being implemented in their client countries. The objectives of these modules are to promote continuously validated debt databases and the production of comprehensive debt statistics consistent with the internationally accepted methodologies and standards articulated in the *External Debt Guide*.

Annex II. Medium-Term Debt Strategy in Low Income Countries

83. **The importance of developing a medium-term debt management strategy (MTDS) was discussed in the November 2006 review of the joint Bank-Fund DSF.**⁵³ As outlined in that paper, an MTDS should lead to borrowing which (i) is consistent with the country's development plans and macroeconomic program; (ii) is sustainable; and (iii) minimizes borrowing costs over the medium to long term, consistent with a prudent degree of risk. The MTDS should be linked to the public debt sustainability analysis (DSA) and contribute to mitigating any vulnerabilities identified in the DSA. This annex describes the key elements of a comprehensive MTDS for a low-income country.

84. **Any debt management strategy will describe the authorities' preferences as to their preferred composition of the debt stock.** Consequently, it will indicate how the government will meet its future financing requirements, and will address issues such as the composition of debt in terms of various choices such as: (i) concessional or non-concessional; (ii) external or domestic; (iii) foreign or domestic currency; (iv) fixed or variable rate; (v) marketable or non-marketable securities; and (vi) long- or short-term.

85. **In LICs, an MTDS must be specifically tailored to** the availability of concessional flows, macroeconomic volatility, and institutional weaknesses. These three features distinguish LICs from other countries. First, the availability of aid and low-cost, long-term development assistance lending, renders a different tradeoff between cost and risk that generally underpins the analysis of debt strategy in MICs. Second, LICs are exposed to a greater degree of macroeconomic vulnerability relative to other countries; in particular, the impact of terms of trade shocks and aid volatility are far greater in proportion to the size of their economies. Third, LICs have lower institutional capacity to develop or execute complex debt strategies, including the capacity to use even basic techniques to model cost and risk. LICs sometimes even lack a comprehensive and sound debt database, a prerequisite for any strategic analysis.

86. **A well-formulated MTDS should set clear priorities among competing goals, analyze risks concretely, be flexible in anticipation of economic shocks, and support institutional objectives.** To do this, an MTDS should typically contain the following seven elements, discussed in greater detail below: (i) strategic objectives; (ii) macroeconomic context; (iii) assessment of the current public debt position; (iv) an indication of desired portfolio composition with supporting analysis; (v) the financing plan for the immediate fiscal period under baseline assumptions; (vi) the scope for flexibility in implementation; and (vii) a discussion of institutional and market-development factors conditioning the success of the strategy in the medium term.

⁵³ "Applying the Debt Sustainability Framework for Low-Income Countries Post Debt Relief", November 2006, SM/06/364 and IDA/SecM2006/564.

Objectives

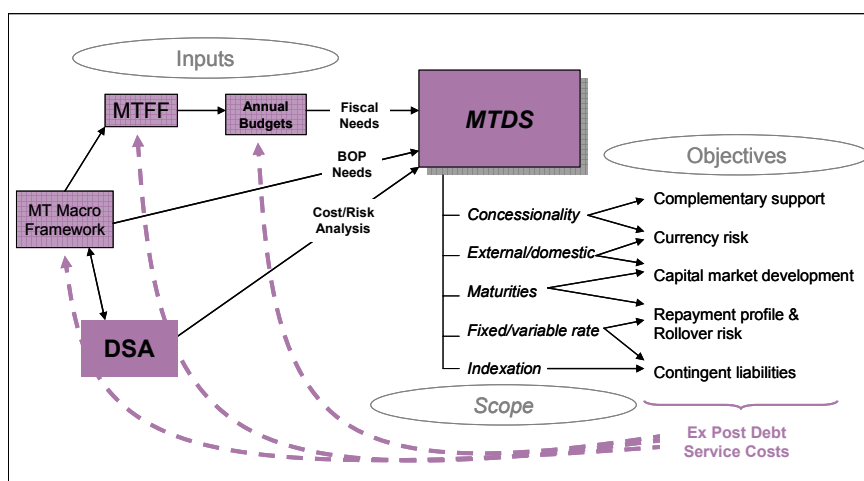
87. **Before any strategy can be developed effectively, its purpose and objectives must be clear.** In particular, priorities between competing strategic objectives need to be addressed and clarified. The strategy will guide decisions about borrowing, the need for which arises through four principal imperatives: (i) to cover a fiscal deficit; (ii) to fill balance of payments needs (i.e., finance reserves accumulation/maintain reserves at a given level or limit depreciation of the domestic currency); (iii) to sterilize foreign currency inflows; and (iv) to develop domestic capital markets. In LICs, several of these objectives may be in play at once and this may create hard choices. For example, the need to sterilize inflows may conflict with the desire to limit the cost of domestic issuance. Or the need to develop the domestic public debt market may suggest issuance of instruments that are more costly, such as long-term instruments, conflicting with purely fiscal considerations. Where such conflicts arise, the strategy ought to recognize them and set clear priorities, stating under which circumstances each objective would dominate.

Macro-economic context

88. **The MTDS is intrinsically linked to the macro-economic framework (see Figure 5).** Coordination of the MTDS with other areas of macroeconomic policy will be particularly important for LICs, given the macro-vulnerabilities they often face. Ideally the MTDS would be formulated within a rigorous and fully operational medium-term fiscal framework (MTFF), as it will require some estimate of the government's financing requirements over the relevant time horizon.⁵⁴ Correspondingly, the chosen strategy will affect the debt servicing costs, and the potential volatility of those costs, and should be reflected in the relevant medium-term fiscal projections. However, the implementation of multi-annual fiscal frameworks remains a challenge for LICs, as well as in many MICs. Grounding the MTDS within the DSA will help achieve the required integration. In addition, the strategy may also have to take account of, and be consistent with, any formal borrowing limits or debt ceilings set out in the legislative framework.

⁵⁴ In particular, macro-economic and fiscal policy indicators used in developing a MTFF should be used as key inputs to the MTDS, providing the medium-term context for the MTDS. The objective of the MTDS is not, however, to shape fiscal policy but to identify how to finance and manage liabilities incurred through implementation of fiscal policy.

Figure 5. Schematic Representation of a MTDS



89. **In addition, close coordination between debt and cash management will be important.** Development of cash management capacity in conjunction with debt management will facilitate avoidance of arrears and effective management of the liquidity risk associated with, for example, volatile aid disbursement. In addition, it will also allow relevant information on the government's impact on domestic liquidity conditions to be shared with the central bank, supporting effective implementation of monetary policy.

Assessment of the current position

90. **A basic requirement for any debt strategy analysis is accurate and comprehensive information on the current composition of the debt portfolio.** This requires the capacity to record and monitor existing debt; track the quantity, currency, maturity, instrument mix, and interest rate profile of all debt in the portfolio; and accurately forecast future debt servicing obligations, also necessary for fiscal planning. It also helps identify the risks that are embedded in the existing portfolio, and suggest the desired directions of change. The joint Bank-Fund *Guidelines* discuss a number of risks relevant to debt management, including exchange rate, interest rate, liquidity or rollover, and refinancing risks.

Indication of the desired composition of the portfolio

91. **Evaluating the costs and risks of alternative debt strategies requires some analysis.** Alternative paths for aid and access to concessional finance, and the consequent impact on access to other financing sources, must be assessed. Similarly, assumptions will be required about the likely evolution of exchange rates, and domestic and foreign interest rates. Given the underlying volatility of revenue flows that LICs face, it is particularly important to consider the affordability of debt strategies by expressing costs as a ratio of GDP and of fiscal revenues, drawing on the baseline assumptions embedded in the DSA. The risk associated with any given strategy may then be assessed using suitably designed stress tests,

incorporating the key macroeconomic shocks the economy is likely to face. In this way, analysis using the debt sustainability framework underlying the LIC DSA would inform the choice of debt portfolio.

92. **In the near term, rather than setting precise quantitative targets, the MTDS can be expressed in terms of directional goals** that express how certain key indicators should move. Where foreign currency risk has been identified as a key risk, for example, the short-term strategy could be to increase the share of local currency debt. Similarly, where the amortization profile indicates a concentration of rollover risk, the immediate strategy could be expressed in terms of smoothing this amortization profile.

The short-term financing plan

93. **Once the desired portfolio composition has been determined, the MTDS should be accompanied by an associated financing plan.** This plan should indicate the debt manager's intentions to meet the financing requirement for the coming fiscal period, consistent with the agreed strategy. An assessment of market constraints and immediate access to grants and concessional debt will be necessary. Publicizing information on the financing plan may also support market development and help strengthen relationships with creditors.

Flexibility in implementation of the MTDS

94. **It will be necessary to allow flexibility in the implementation of the strategy.** Such contingency arrangements allow the debt manager to respond to unexpected developments without requiring a full review of the MTDS. This is particularly pertinent for LICs given their exposure to fiscal shocks, such as volatility in growth or aid flows. Often, strategies are expressed as ranges for risk indicators, giving debt managers discretion to adapt to prevailing conditions within the strategy. A similar approach is the setting of confidence intervals for a small number of macroeconomic variables (e.g., growth, aid, current account deficit, budget deficit, etc.), with an indication of how these variables will affect public borrowing at the margin.

Institutional and market development factors

95. **The MTDS must be consistent with the institutional setting in which it is executed, including plans to strengthen capacity.** There are institutional requirements for an MTDS to be effective. These include record keeping, debt monitoring and reporting, the technical capacity of staff, and the legal framework. While strengthening the institutional framework does not fall directly within the ambit of an MTDS, the strategy must take these capacity constraints into account, and could include a component outlining the authorities' plans to alleviate these constraints. For example, outlining the intention to formalize procedures for sharing information across different units so that debt reporting and analysis can be undertaken on the total public debt portfolio at regular intervals. Similarly, any plans to enter the international capital markets should be accompanied by plans to establish the

necessary analytical and investor-relations functions within the debt management unit, as well as to manage additional operational risk arising from such transactions.

96. **Similarly, the MTDS must reflect market constraints, and other access to financing, including from the international financial institutions (IFIs).** Market demand, and availability of other financing sources, will affect the debt manager's ability to implement the desired strategy, the costs incurred, and the risk assessment. For example the assessment of the intensity of rollover risk will reflect market depth. Correspondingly, the strategy might outline the steps to be taken to relax some of these market constraints. All these factors need to be weighed by the debt manager before the strategy is agreed (see Figure 5).

97. **The debt manager should be active in trying to relax some of the constraints on MTDS implementation.** Debt managers in LICs should take an active role in developing the domestic government securities market, in cooperation with other important agents such as the central bank. Improving cash management and budget planning should also be a priority to mitigate liquidity risk.

98. **The MTDS must be subject to regular review.** It may need to be adjusted according to financing availability, market development, or eligibility for grants and concessional debt. Similarly, evolving macroeconomic conditions will have knock-on effects on risk analysis. A further important feature is the retrospective analysis of successes, failures, and departures from previous strategy and their causes, which should reinforce realism going forward.

Annex III. Resource Costs for the Bank-Fund Capacity Building Proposal for the Low Income Countries

99. This annex provides *preliminary* incremental resource requirements for the proposed intensification of work on debt management by the Bank and Fund. The work will be carried out in two phases: (i) the initial phase of work will develop the methodological framework and operational tools for the MTDS, builds on the existing DSA templates, thereby ensuring consistency with the debt sustainability framework; and (ii) the next phase of MTDS capacity building will be country work, to identify reform plans to develop the MTDS in 4–6 LICs per year, and to assist with its implementation.⁵⁵ This country work will be complemented by the performance indicator program, which will apply to about 20 LICs per year. All of these tasks will be carried out in close collaboration with country authorities, country teams and area departments.

Bank

100. The total cost associated with the Bank’s proposed work on debt management in low income countries will amount to about \$10.8 million over four years, reflecting additional staffing costs of \$0.9 million per year, and other costs (\$1.6 million per year) expected to be financed through donor resources that are yet to be committed. The following activities would be undertaken in close collaboration with regional colleagues: (i) developing methodological and operational tools for an effective MTDS, and country work required to strengthen capacity in 4–6 LICs (est. \$1.2 million/year); (ii) assessing, applying, and disseminating performance indicators for debt management, and providing training on them, as well as reviewing and disseminating lessons learned from the MTDS capacity building program (est. \$1.1 million/year); and (iii) establishing a Debt Management Practitioners Program (\$300,000/year), where practitioners can share and learn from other peer experiences.

Fund

101. At a minimum, up to 5.5 staff years (\$1.25 million) of resources will be required over the 4-year period (See Table below). In FY 2008, 1.2 staff years of resources would be needed for (i) developing the analytical and operational tools needed for the MTDS, (ii) delivery of capacity building missions in 4 select countries; and, (iii) coordination, backstopping, review, and follow-up work. With the planned increase in the MTDS capacity building mission work from FY 2009 onwards (6 countries a year), an additional 1.45 staff years will be required in each year. These costs also cover the resources that will be required for the training, dissemination, and analytical work associated with the MTDS work and

⁵⁵ Preference will be given to the post-MDRI countries, based on expressed demand, for such support by country authorities. This project will initially cover a 4-year period (2008–2011), and its coverage could be expanded, as needed, based on the impact of the capacity building effort and country demands.

possible methodological refinements. In addition to these direct staff costs, mission travel over the four year period is estimated at \$1.2 million, bringing total costs for the capacity building proposal for low-income countries to an estimated \$2.45 million. These costs are provisional and may need an upward revision as the MTDS capacity building work progresses.

Capacity Building Proposal for Low Income Countries
(in staff years, except where indicated)

	FY2008	FY2009	FY2010	FY2011	Total
Development of MTDS framework	0.3				0.3
Field time 1/ number of countries	0.8	1.2	1.2	1.2	4.4
number of missions	4	6	6	6	22
time/mission	8	12	12	12	44
Mission follow up 2/	0.1	0.1	0.1	0.1	
	0.2	0.2	0.2	0.2	0.8
Total resource costs (years)	1.2	1.4	1.4	1.4	5.5
Total resource costs (US\$) 3/	265,605	317,488	328,505	339,092	1,250,690
Mission travel (US\$) 4/	208,000	321,360	331,001	340,931	1,201,292
Total Costs (US\$)	473,605	638,848	659,505	680,023	2,451,982

1/ Two IMF staff will participate per mission (13 day visits, 2 missions/country).

2/ One week per mission.

3/ Based on standard costs for an A9-A15.

4/ Based on two 13 day missions per country and cost inflation of 3 percent per annum.

Annex IV. Description of Debt Management Technical Assistance Agencies

The Commonwealth Secretariat

102. In 1985, the Commonwealth Secretariat (COMSEC) established an integrated program of assistance in various areas of debt management, beginning with the development of debt management software for use by its member states. The Debt Management Section (DMS) is responsible for further developing the system and providing public debt management TA. The system allows countries to record, report, analyze and manage various types of debt flows (external and domestic; medium/long-term and short-term; public and private). The DMS provides a range of TA support, from data recording and reporting with the use of the CS-DRMS, to advising on necessary institutional and administrative arrangements for sound debt management. In 2005, a Regional Adviser's project was launched for the four regions of Western Africa, Eastern and Southern Africa, Caribbean region and Pacific islands in collaboration with WAIFEM, MEFMI, ECCB and the Government of Fiji, respectively. As of January 2006, 53 countries (including non-members) have adopted the CS-DRMS, of which 24 are LICs.

United Nations Conference on Trade and Development (UNCTAD)

103. In 1982, UNCTAD designed a computer-based Debt Management and Financial Analysis System (DMFAS) to help countries manage their external debt. The current version of the software system facilitates the recording and analyzing of various types of debt (external and domestic; medium/long-term and short-term; public and private). Through its Geneva-based DMFAS Program, UNCTAD has established itself as one of the leading providers of debt management TA. It currently works directly with 65 low and middle-income countries, 34 of which are LICs, and typically provides services to governments through technical cooperation projects. The Program provides assistance in the installation or upgrading of the DMFAS software and related software training. Technical assistance also covers maintenance and system support, procurement of appropriate equipment, participation of government officials in DMFAS training seminars, study tours for government officials to other DMFAS user countries, and assistance in debt analysis and development of debt management strategies.

Debt Relief International (DRI)

104. DRI is a London-based non-profit organization that was established in 1997 to implement a Capacity Building Program (CBP), the overriding objective of which is to build the capacity of HIPC governments to manage their debt strategy and analysis independently. The Program, which is implemented in close collaboration with four regional providers of debt management TA, covers 36 HIPC-eligible countries. DRI's scope of advisory services covers institutional reform, external and domestic debt management, debt re-negotiations, macro-economic forecasting, and poverty reduction programming. It also co-ordinates regional and national workshops. CBP also finances (i) short-term capacity-building advisors; (ii) activities related to the HIPC Ministerial Network, which convenes biannual meetings of HIPC Ministers of Finance and their senior officials; (iii) the HIPC Technical

Network, comprising middle-level management; and (iv) newsletters, publications and a website that facilitate communication among HIPCs.

Macroeconomic & Financial Management Institute of Eastern & Southern Africa (MEFMI).

105. MEFMI was established in 1997 and is owned by its 13 regional member countries: Angola, Botswana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe. It manages a training program focusing on macro-economic and financial sector management, including debt sustainability analysis, cash management and domestic public debt market development, which are offered through workshops and seminars. MEFMI works with DRI's CBP to assist HIPC members build capacity in carrying out debt sustainability analysis and strategy formulation.

Pôle-Dette (Regional Debt Management Training Center of Central and Western Africa)

106. Pôle-Dette is based in Yaoundé and responsible for managing the Debt Management Capacity Building Project established jointly by the Training Centers of the Central Bank of Western African States (BCEAO) and the Bank of Central African States (BEAC) in 1999. The organization's membership encompasses 14 countries (Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo Republic, Cote d'Ivoire, Equatorial Guinea, Gabon, Guinea-Bissau, Mali, Niger, Senegal and Togo). In addition, assistance is provided to Guinea and Mauritania. The majority of its seminars and workshops are organized jointly with DRI. In addition to training workshops in debt sustainability analysis and other areas covered by the CBP, Pôle-Dette and DRI organize joint missions to countries to evaluate capacity building requirements and to assist with urgent debt strategy support.

West African Institute for Financial and Economic Management (WAIFEM)

107. WAIFEM was established in 1996 by the Central Banks in Gambia, Ghana, Liberia, Nigeria, and Sierra Leone, the member countries, with the primary objective of building capacity for debt, macroeconomic and financial management. A key part of its mission is to help strengthen the capacity of its member countries to develop, present, and negotiate a case for debt relief through the HIPC Initiative. Training subjects include debt management, financial sector management and macro-economic management. Under the CBP, WAIFEM has extended its activities to institutional and governance dimensions of human resource development and management in debt management, and it has expanded its audience to include legislators and the mass media with a view to improving their capacity to assess economic and financial policy issues and performance.

Center for Latin American Monetary Studies (CEMLA)

108. The Center for Latin American Monetary Studies (CEMLA) was established in 1952, and is based in Mexico City. Its objective is to promote a better understanding among central bank and other financial agency personnel of monetary and banking matters, pertinent

aspects of fiscal policy, and their relation with the economies of Latin America and the Caribbean. CEMLA organizes seminars and special training courses, and publishes surveys and research studies. After the launch of HIPC, in collaboration with DRI, CEMLA began assisting its HIPC members to develop their debt management capacity to benefit from the HIPC Initiative and avoid future over indebtedness.

Crown Agents

109. Crown Agents is a limited company that delivers capacity building and institutional development services in public sector transformation, particularly in revenue enhancement and expenditure management, banking, public finance, training and procurement. The company has provided debt management services to developing countries throughout the world. The company has a technical partnership with ComSec to install and service the CS-DRMS. It also has links with debt management offices in a number of OECD countries who collaborate with them by providing technical advice, delivering training sessions on their courses and by receiving study tours.

United Nations Institute for Training and Research (UNITAR)

110. UNITAR has developed the 'legal aspects' for training and capacity building of debt managers in Africa. Training has been conducted since 1987; partnerships with regional organizations like MEFMI, WAIFEM and Pôle-Dette have started as early as 1998; and since 2001 UNITAR has been offering six-week e-Learning courses for capacity building and training of debt managers using new information and communication technologies. UNITAR's training in the legal aspects focuses on skill building of lawyers and non-lawyers in negotiating, drafting and structuring international financial transactions. UNITAR has also developed a diagnostic tool to develop national profiles of the existing legal infrastructure of developing nations with a view to providing guidance and inputs in improving financial governance and transparency.

THE WORLD BANK
AND INTERNATIONAL MONETARY FUND

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

Prepared by the Staff of the World Bank and the IMF

Approved by Kenneth Lay, Danny Leipziger and Jaime Caruana

March 29, 2007

Contents	Page
I. Managing Public Debt: From Diagnostics to Reform Implementation.....	1
A. Introduction.....	1
B. From Country Diagnostics to Designing and Implementing Reforms: An Overview.....	1
C. Debt Management Strategy and Risk Management.....	3
D. Coordinating PDM with Cash Management and Macroeconomic Policy.....	6
E. Governance.....	9
F. Capacity.....	13
II. Recent Developments in Debt Management Operations in Emerging Markets.....	24
A. Recent Trends.....	24
B. Factors Influencing the Debt Management Operations.....	25
C. Implications of Debt Management Operations.....	26
D. Selected Operations.....	27
III. Public Debt Management in Low Income Countries (LICs).....	38
A. Introduction.....	38
B. Is Debt Management in LICs Different?.....	38
C. The Quality of Debt Management in LICs: Evidence on Current State of Play.....	45
D. Costs of Deteriorating or Poor Debt Management in LICs.....	50
E. Development of a Debt Management Performance Indicators.....	58
F. Conclusions.....	59
References.....	61

Tables

1. Authorizations Required by Parliament and Other Institutions for Government Borrowing in the Pilot Countries	15
2. Distribution of Debt Management Functions in the Pilot Countries	16
3. Reporting Requirements Specified in the Legal Framework in the Pilot Countries	18
4. Debt-Recording Systems in the Pilot Countries	19
5. Recent Examples of World Bank Project Loans with a Debt Management Component	20
6. Selected External Debt Buy-Back Operations by EM Sovereigns: January-August 2006 ..	32
7. Evidence on Debt Management in Select HIPCs	45
8: Countries with Problems in Reporting Data	47
9. Results of Probit Regression Analysis: Quality of Debt Management and HIPC Eligibility	54
10. Indicative Costs of Passive Debt Management.....	56

Figures

1. Characteristics of Long-Term Public and Publicly Guaranteed External Debt in Middle and Low Income Countries	40
2. Size and Frequency of Negative Shocks in Real Export Prices Across Countries.....	41
3. Domestic Debt in LICs and Financial Market Development	42
4. NPV of Debt After HIPC Initiative, Additional Bilateral Debt Relief and MDRI.....	43
5. Debt Management Capacity in LICs	46
6. Arrears and Debt Management	51
7. Price and Cost of Public Domestic Debt in LICs	55
8. Concessional and Non-Concessional Debt Service In Four HIPCs	57

Boxes

1. Public Debt Legal Reform in Bulgaria and Nicaragua	10
2. Innovation in Mexican Debt Management—Sale of Debt Exchange Warrants	32
3. Debt Management in Kenya: Lessons from SIDA’s Technical Assistance Program.....	49

Annexes

I. Governance and Other Institutional Factors	15
---	----

I. MANAGING PUBLIC DEBT: FROM DIAGNOSTICS TO REFORM IMPLEMENTATION

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.

¹ The Guidelines, published in March 2001, and subsequently updated in November 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 strategy led to inconsistencies in the management of different parts of the debt portfolio. For

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.

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 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.

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 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.

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.

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

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*.

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.

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.

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.

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 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

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.

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

Country	Location of the Front Office Functions				Location of the Back-Office Functions		
	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)
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

Country	Location of the Front Office Functions				Location of the Back-Office Functions		
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 1	Unit 2	Unit 3
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 for 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.csdrrms.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 (GFM RAP 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
Tunisia	P075893	Fourth Economic Competitiveness Adjustment Loan (ECAL IV 2005).	<p>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 of 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.</p> <p>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.</p>	<p>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.</p>
Turkey	IDF grant supporting capacity building in the front office for foreign debt (2006)		<p>The main objective is to support the further development towards sound PDM practices in Turkey by focusing on capacity building in the front office</p>	<p>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.</p> <p>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</p>

Country	Document Source	Project	Description of the Overall Project	Debt Management Component
Zambia	P082452	Public Sector Management Program Support Project (2005)	<p>function for external borrowing.</p> <p>The objective is to strengthen and increase efficiencies in the legal, accounting and administrative frameworks for public expenditure management, public service management and decentralization.</p>	<p>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.</p> <p>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.</p> <p>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.</p>

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.

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 the Appendix.

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 two-thirds of total in 2002 to under 50 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.

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.

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 €494 billion 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-August 2006**

Type of Operation	Description	Objective	Impact on Sovereign Debt
<p>Prepayment of nonmarketable debt to multilateral and private creditors</p>	<p>Brazil (January) – prepayment of the Paris Club Debt (\$2.6 billion) financed by international reserves.</p> <p>Colombia (February) – announcement of prepayment (\$580 million) of multilateral and syndicated loans during March to May to be financed by issuing peso-denominated bonds</p> <p>Russia (January) – announcement of prepayment of all remaining non-Aries Paris Club Debt (US\$12.5 billion) in 2006 to be financed by international reserves/Oil Stabilization Fund</p> <p>Venezuela (February) – announcement of a plan to prepay (US\$ 700 million) bilateral and multilateral loans in 2006, financed by windfall oil revenues and/or domestic issuance</p> <p>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.</p>	<ul style="list-style-type: none"> - Improvement of debt profile - Reduction of US\$ debt exposure - Reduction of US\$ debt - Reduction of debt level - Reduction of US\$ debt - Reduction of foreign debt - Reduction of forex public debt exposure - Increase local issuance - Issuance of a benchmark to develop yield curve - Reduction of foreign debt - Reduction of forex public debt exposure - Increase local issuance -Reduction in foreign reserves and reduction of Central Bank outstanding liabilities issued for OMO purposes. 	<ul style="list-style-type: none"> - Reduction of debt level - Reduction of US\$ debt

Type of Operation	Description	Objective	Impact on Sovereign Debt
	<p>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).</p> <p>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.)</p>	<p>– reduction of debt exposure.</p> <p>- Reduction of interest payments</p> <p>- Improvement of country's debt profile, by extending its average maturity</p>	<p>– public external debt to GDP ratio fell to 23 percent of GDP at end-2006, down 13 percent points on the year.</p> <p>- Improvement of external debt profile</p>
<p>Brady bond exchanges, calls and buy-backs</p>	<p>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 billion; and to be financed by international reserves.</p> <p>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 billion; and to be financed by windfall oil revenues</p>	<p>- Reduction of interest payments</p> <p>- Smoothing of amortizations</p> <p>- Reduction of public debt's forex exposure</p> <p>- Reduction of sovereign's risk premium and spreads</p> <p>- Reduction of cost of funding for companies</p> <p>- Reduction of foreign debt</p> <p>- Reduction of forex public debt exposure</p>	<p>- Collateral released = US\$1.5 billion</p> <p>- Reduction of interest payments on net present value terms = US\$345 million.</p> <p>- Expected reduction of foreign debt by 15.2 percent (to US\$ 26.3 billion)</p> <p>- Expected collateral release</p>

Type of Operation	Description	Objective	Impact on Sovereign Debt
<p>Global bond exchanges, calls and buy-backs</p>	<p>Brazil (January-March) – buy-backs of globals, US\$2.3 billion, 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 billion) and its reopening in March (US\$500 million)</p> <p>Brazil (February) – announcement of a plan to buy back external debt up to US\$20 billion in 2006, financed by international reserves</p>	<ul style="list-style-type: none"> - Reduction of forex debt - 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 forex exposure - Developing liquid forex benchmark bonds - Deepening of local markets by exchanging external debt into local-currency financing and improving liquidity of yield curve at the long end 	<p>- Debt reduction = US\$2.3 billion</p>
	<p>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 billion, and re-opening of the existing global 2037 for US\$1.5</p>		

Type of Operation	Description	Objective	Impact on Sovereign Debt
	<p>billion</p> <p>Colombia (February) – offering to buy back part of US\$3.27 billion of global bonds maturing during 2006 and 2010, and €841 million of euro-denominated bonds maturing in 2008 and 2011, financed by international reserves and by reopening the global peso bond.</p> <p>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 \$1 billion benchmark bond maturing in 2037.</p> <p>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.</p> <p>Ecuador (July) – announcement of the repurchase of the remaining outstanding \$ 510 million of the 2012 bond by the November 15 call, according to press reports; government has to issue a notice by end-September.</p> <p>Mexico (February) – announcement of a US\$2.8</p>	<p>- Increase of average duration of external debt</p> <p>- Reduction of public debt's forex exposure</p> <p>– creation of benchmark issues and improvement of liquidity along its curve.</p> <p>- Reduction of external public debt</p> <p>- Reduction of foreign interest rate payments and maturity extension</p> <p>Reduction of external public debt</p> <p>- Reduction of foreign interest rate payments</p> <p>- Creation of few liquid, benchmark bonds on</p>	<p>- Upgrading the outlook of S&P BB rating to positive</p>

Type of Operation	Description	Objective	Impact on Sovereign Debt
	<p>billion buy-back of global bonds (various US dollar-, euro-, and British pound-denominated issues) maturing during 2007 and 2031, to be financed by a new US\$ 3 billion global bond maturing in 2017 (with a spread of 105 bps over US treasuries, the lowest spread ever achieved for a similar maturity)</p> <p>Mexico (October) – announcement of an exchange of US dollar-denominated external debt for local-denominated debt, where investors exercised exchange warrants issued in 2005 to exchange \$905 million of US dollar bonds maturing between 2012 and 2016 for local bonds maturing in 2014.</p> <p>Panama (January) – global bond exchange (buy-back of global bonds, maturing in 2020, 2023, and 2034, of US\$1.062 billion and issuance of a new global bond due 2036 of US\$1.363 billion)</p> <p>Philippines (September) – an exchange offer, with a buy-back of global US dollar bonds maturing through 2025 in an amount of \$1.2 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.</p> <p>Russia (January-February) – intention to retire eurobonds at the long end of the curve (\$2.5 billion of 2028 bonds), according to market participants; to be financed by international reserves/Oil Stabilization Fund and/or domestic</p>	<p>the US dollar curve</p> <ul style="list-style-type: none"> - 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 <p>– continuation of the process of switching foreign currency debt into local domestic debt.</p> <ul style="list-style-type: none"> - Retirement of illiquid bonds - Creation of a benchmark, liquid bond at the long end of the curve - Reduction of future cost of issuance <p>– creation of a new liquid benchmark, and enhance the liquidity of the 2031s.</p> <ul style="list-style-type: none"> - Reduction of expensive foreign public debt - Development of a domestic liquid yield curve at the long end by issuing rouble-denominated 30-year 	

Type of Operation	Description	Objective	Impact on Sovereign Debt
	<p>issuance</p> <p>Russia (July) – announcement of the second tranche of exchange of former USSR commercial debt into Russian Eurobonds due 2010 and 2030 (\$ 600 million, with same terms – a 33% haircut – as the first exchange -- \$1.37 billion, concluded in December 2002); will be officially launched in September.</p> <p>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 US 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.</p>	<p>bonds</p> <p>– smoothing of the debt maturity profile.</p>	<p>- Enhancement of investor sentiment towards the sovereign</p>

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.¹⁸ By contrast, 55 percent of the external debt stock in MICs is made up of

¹⁸ 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...)

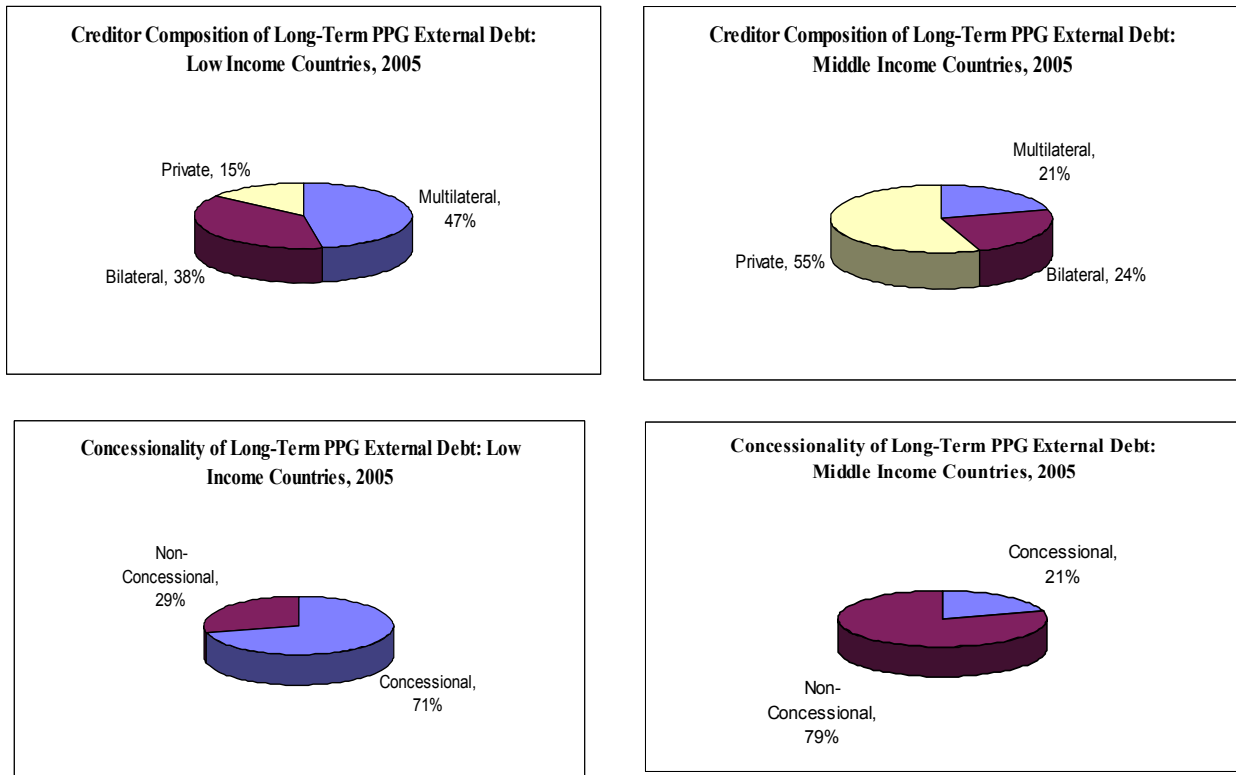
credits from the private sector. This debt and the nonconcessional financing provided by bilateral and multilateral institutions implies that almost 80 percent is on nonconcessional terms (Figure 1). The predominance of concessional external debt in LICs on fixed terms limits the scope for managing the 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.¹⁹ 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.

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

¹⁹ IDA, for example, allows the pre-payment of loans without a penalty charge.

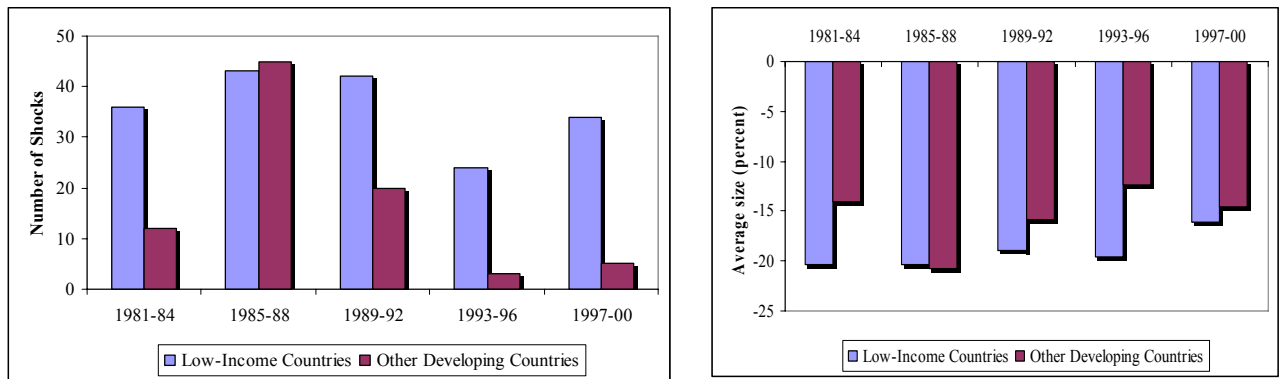
Figure 1. Characteristics of Long-Term Public and Publicly Guaranteed External Debt in Middle and Low Income Countries



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.²⁰ 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.

²⁰ 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.

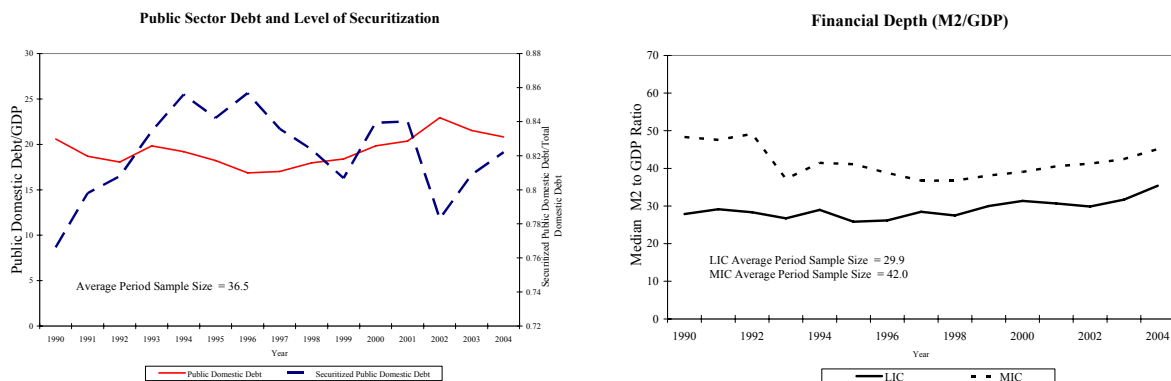
Mix of external and domestic financing often determined exogenously

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 2000–04. 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).²¹ 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).

Figure 3. Domestic Debt in LICs and Financial Market Development

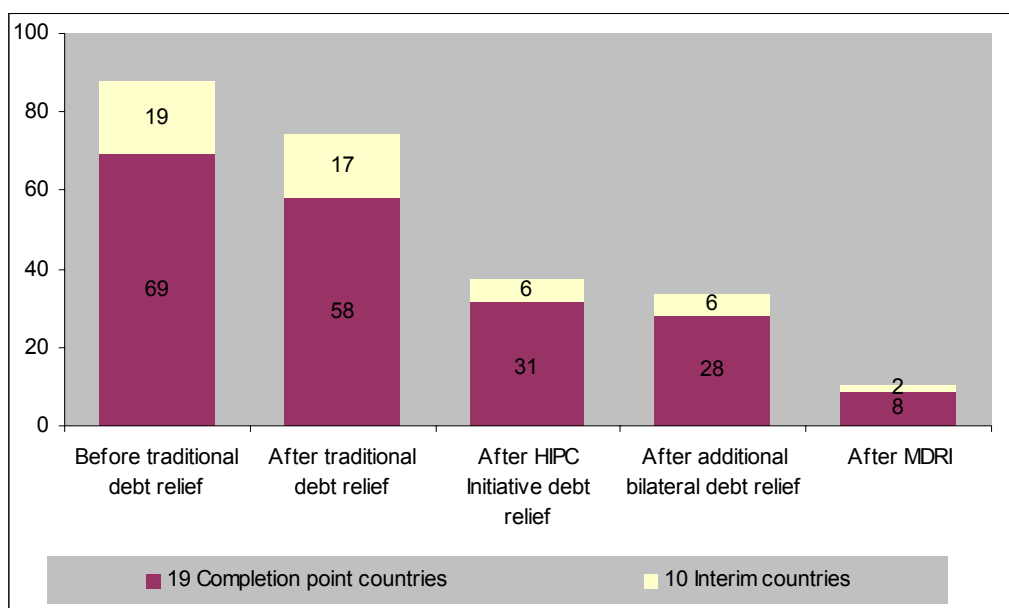


²¹ This domestic debt data is taken from a new database compiled by Bank and Fund staff and is drawn from government publications, unpublished disaggregated IFS money and banking data, and country statistical appendices. Data for the domestic debt stock includes 66 countries for the period 1998–2004, 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.

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.²² 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 HIPCs²³ and underscores the latest Independent Evaluation Groups' review of the HIPC Initiative that the quality of debt management may have deteriorated (World Bank, 2006).

²² The terms on which these resources will be transferred remains an unresolved question.

²³ See *External Debt Management in Heavily Indebted Poor Countries*, SM/02/92.

Table 7. Evidence on Debt Management in Select HIPC

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

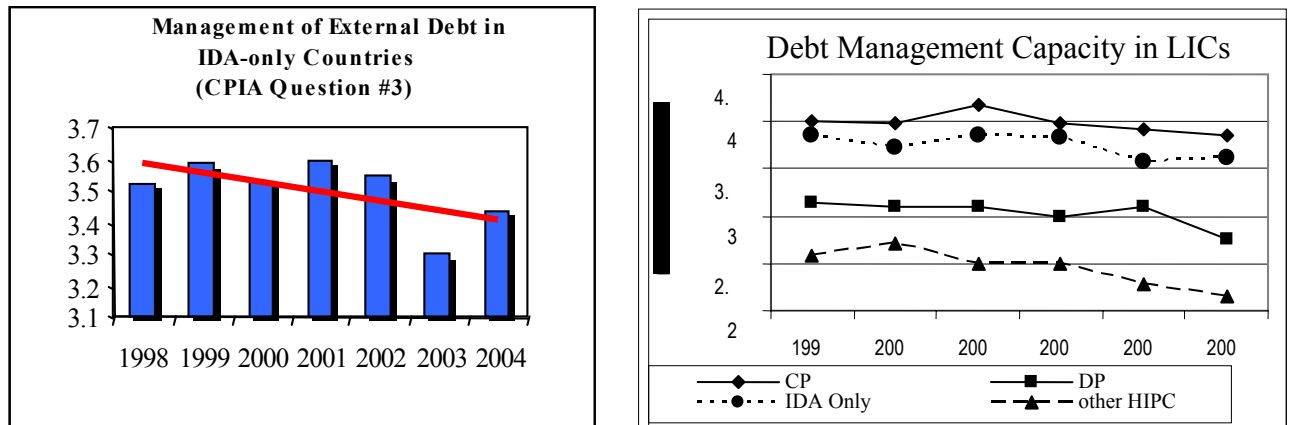
Quality of debt management improving in only a few LICs

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 CPIA²⁴ ratings shows a declining trend for IDA-only countries (Figure 5). At a more 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).**²⁵ 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.²⁶

Figure 5. Debt Management Capacity in LICs



²⁴ The CPIA scale is from 1 to 6, with 6 for the best performance and 1 for the worst.

²⁵ 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.

²⁶ 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 HIPCs 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.²⁷ 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.²⁸ 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).

²⁷ 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).

²⁸ 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.

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.²⁹ 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

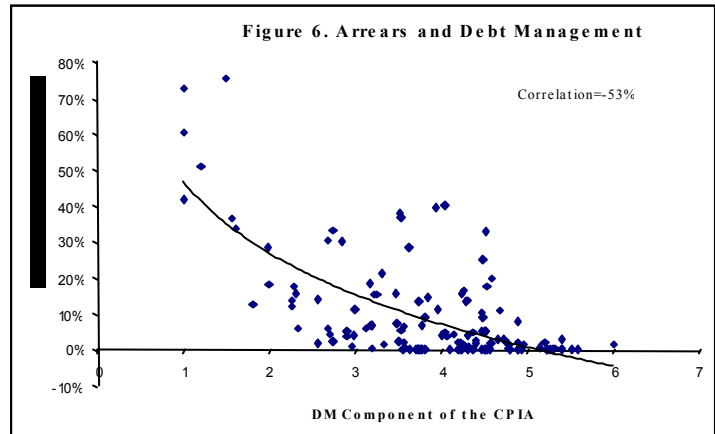
²⁹ Living with Debt: How to Limit the Risks of Sovereign Finance, Inter-American Development Bank, 2007.

lowered to arrive at current thresholds when the Initiative was enhanced in 1999.³⁰ 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.³¹ 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 others. To provide some comfort



³⁰ 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.

³¹ 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.

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.³² 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

³² 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.³³ 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.³⁴ 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, except 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.³⁵

³³ 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.

³⁴ 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.

³⁵ 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

	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>	<u>VI</u>	<u>VII</u>
NPV debt / GDP	0.23*** <i>2.56</i>	0.19*** <i>2.85</i>	0.28*** <i>2.64</i>	0.12** <i>2.09</i>	0.19*** <i>2.89</i>	0.11*** <i>2.83</i>	0.61*** <i>3.03</i>
Income	-0.28*** <i>5.74</i>	-0.24*** <i>5.51</i>	-0.30*** <i>5.73</i>	-0.22*** <i>5.80</i>	-0.24*** <i>5.41</i>	-0.25*** <i>4.59</i>	-0.43*** <i>5.25</i>
CPIADM		-0.32*** <i>2.65</i>		-0.25** <i>2.51</i>	-0.32** <i>2.54</i>	-0.48*** <i>3.60</i>	-0.71*** <i>3.41</i>
CPIA			0.04 <i>0.72</i>				
Growth 85-95				-0.38*** <i>2.89</i>			
Growth vol 85-95					-0.12 <i>0.08</i>		
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).³⁶

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

³⁶ 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.³⁷

Table 10. Indicative Costs of Passive Debt Management

Averages (2000-05)	Kenya	Malawi	Tanzania¹
Exchange rate (National currency to USD)	77.36	89.26	982.79
<i>Annual average depreciation</i>	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
<i>Annual average interest differentials</i>	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

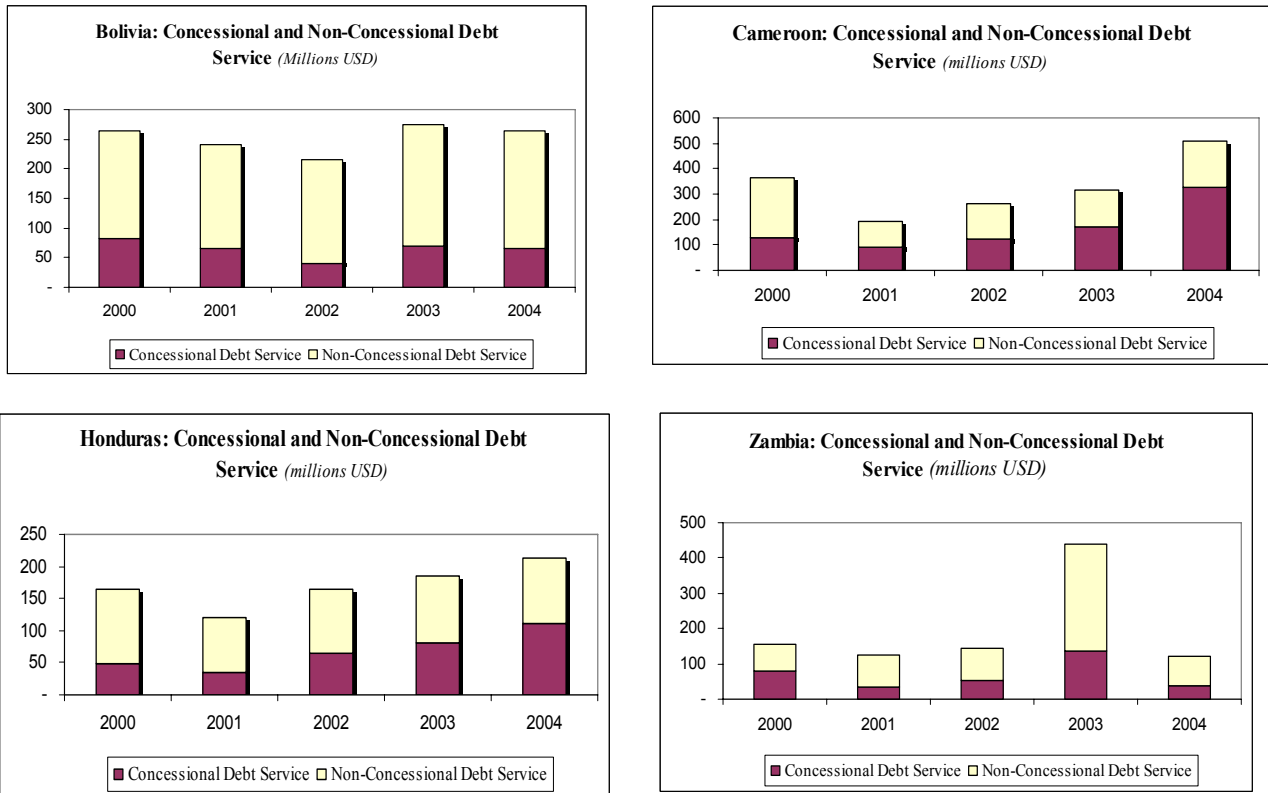
109. **The build-up of nonconcessional external debt can place a heavy debt-servicing burden on LICs.** If debt management units or Ministries of Finance lack the capacity to undertake a credible forward-looking debt sustainability analysis then borrowing strategies may not be aligned with long-term 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

³⁷ 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 HIPC



111. **IDA's Board has recently approved a two-pronged package of measures addressing the issue of non-concessional borrowing by IDA-only countries.**³⁸ 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

³⁸ International Development Association, "IDA Countries and nonconcessional Debt: Dealing with the Free-Rider Problem in IDA14 Grant-recipient and post-MDRI countries," June 2006.

significant increases in nonconcessional debt, especially in the area of debt monitoring capacity.

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,³⁹ and validation and audit of records.⁴⁰

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.**⁴¹ The target audience for dissemination

³⁹ To ensure transparency, debt information should be produced in a timely manner for public dissemination.

⁴⁰ This is necessary to mitigate operational risks (e.g., fraud, errors, data loss, etc.)

⁴¹ Government consent may be required to share with third parties information obtained in the course of providing TA.

includes the Bank and Fund staff, donors, clients and TA providers. Government counterparts in debt offices, ministries of finance, central banks, audit committees and 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.

REFERENCES

- Arslanalp, Serkan, and Peter B. Henry, 2006, "Debt Relief," NBER Working Paper 12187 (Cambridge, Massachusetts: National Bureau of Economic Research) (April).
- Bulir, A. and A.J. Hamann, 2006, "Volatility of Development Aid: From the Frying Pan into the Fire?," IMF Working Paper 06/65 (Washington: International Monetary Fund).
- Christensen, Jakob , 2004, "Domestic Debt Markets in Sub-Saharan Africa," IMF Working Paper 04/46 (Washington: International Monetary Fund).
- Cohen, Daniel, 1996, "The Sustainability of African Debt." World Bank Policy Research Department Working Paper No. 1621 (Washington: World Bank).
- Commonwealth Secretariat, 1999, "Effective Domestic Debt Management in Developing Countries," A Compendium prepared by The Economic and Legal Advisory Services Division (London: United Kingdom) (March).
- Cordella, T., Luca Antonio Ricci, and Marta Ruiz-Arranz, 2005, "Debt Overhang or Debt Irrelevance? Revisiting the Debt-Growth Link," IMF Working Paper 05/223 (Washington: International Monetary Fund).
- Easterly, William R., 2001, "Growth Implosions and Debt Explosions: Do Growth Slowdowns Cause Public Debt Crises?" Contributions to Macroeconomics, Vol. 1, No.1.
- Eifert, B. and Alan Gelb, 2005, "Improving the Dynamics of Aid: Towards More Predictable Budget Support", World Bank Policy Research Working Paper 3732, (Washington: World Bank).
- International Development Association and the International Monetary Fund, 2002, "External Debt management in Heavily Indebted Poor Countries," IDA/SecM2002-0148, (Washington) (March 21).
- International Financing Review, 2003-2006, various issues (IFR).
- International Monetary Fund, and World Bank, 2003a, *Guidelines for Public Debt Management* (Washington, revised ed.).
- _____, 2003b, *Guidelines for Public Debt Management: Accompanying Document*, (Washington) (August).
- _____, 2001, "Developing Government Bond Markets: A Handbook," (Washington).

- Khamfula, Y., Montford Mlachila, and Ephraim Chirwa, 2006, "Donor Herding and Domestic Debt Crisis," IMF Working Paper 06/109, (Washington: International Monetary Fund).
- Kraay, Aart and Nehru, Vikram, 2005, "When is External Debt Sustainable?" World Bank Policy Working Paper No. 3200 (Washington: World Bank) .
- Kumhof, M., and Evan Tanner, 2005, "Government Debt: A Key Role in Financial Intermediation," IMF Working Paper 05/57 (Washington: International Monetary Fund).
- Organization for Economic Cooperation and Development, 2002, "Debt Management and Government Securities Markets in the 21st Century," September (Paris).
- Pardo, J.C.V., and Gustave Nebie, 2005, "Assessing Debt Management Capacity: The HIPC CBP Methodology," Publication No. 10, (April) (London: Debt Relief International Ltd.).
- Underwood, J. 1990, "The Sustainability of International Debt, Manuscript," (Washington: World Bank).
- United Nations Institute for Training and Research, 2001a, "Best Practices in the Field of External Borrowing," Best Practices Series No. 1, (August) (Geneva).
- _____, 2001b, "Best Practices in External Debt Management," Best Practices Series No. 2, (August) (Geneva).
- Wheeler, Graeme, 2004, "Sound Practice in Government Debt Management," (Washington: World Bank).
- World Bank, 2007a, *Managing Public Debt: From Diagnostics to Reform Implementation*, (Washington).
- _____, 2007b, *Developing the Domestic Government Debt Market: From Diagnostics to Reform Implementation*, (Washington).
- _____, 2006, "Debt Relief for the Poorest—An Evaluation Update of the HIPC Initiative, Independent Evaluation Group," Report No. 35608, (March 28) (Washington).