



Manual on Effective **Debt** Management



ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

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MANUAL ON EFFECTIVE DEBT MANAGEMENT



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Manual on Effective Debt Management

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PREFACE

Effective debt management has become an important issue in many developing countries and emerging market economies, particularly since the international debt crisis in 1982. The Asian financial crisis also brought to light new dimensions and complexities of debt management. While the global focus is primarily centered on Highly Indebted Poor Countries (HIPC), mainly in Africa, growing debt is becoming a major development challenge for many countries in the Asia-Pacific region. Recent classifications indicate that 10 countries of the Asia-Pacific region are severely indebted while another 11 are moderately indebted. A change in the culture of debt management is necessary for debt sustainability and to make use of scarce resources for development purposes in these countries.

The *Manual on Effective Debt Management* is an important output of the project “Capacity Building for External Debt Management in the Era of Rapid Globalization”, a regional response to the call by the Monterrey Consensus to address debt problems in developing countries. It is with great appreciation that we acknowledge the generous financial support for the project by the Republic of Korea. This manual gives an in-depth overview and analysis of key areas of debt management including risk management, debt sustainability analysis and debt restructuring. It also highlights some best practices for debt managers. I hope that this manual will be an important tool for analysis, policymaking and knowledge management on debt issues.

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ABBREVIATIONS

BAC	Bank Advisory Committee
CS-DRMS	Commonwealth Secretariat Debt Recording and Management System
DMFAS	debt management and financial analysis system
DMO	debt management office
DOD	total disbursed outstanding debt
ESCAP	Economic and Social Commission for Asia and the Pacific
FDI	foreign direct investment
GDP	gross domestic product
GNI	gross national income
HIPC	highly indebted poor countries
IDA	International Development Association
IFIs	international financial institutions
IMF	International Monetary Fund
MDRI	Multilateral Debt Relief Initiative
MIS	management information system
NPV	net present value
NTMA	National Treasury Management Agency
NZDMO	New Zealand Debt Management Office
ODA	official development assistance
OECD	Organization for Economic Cooperation and Development
PNG	private non-guaranteed
SNDO	Swedish National Debt Office
UNCTAD	United Nations Conference on Trade and Development
XGS	exports of goods and non-factor services

I. PUBLIC DEBT MANAGEMENT:¹ MAIN ISSUES

A. INTRODUCTION

Public debt management has become a priority in many developing countries and emerging market economies – a change from the early 1980s. When the international debt crisis occurred in 1982, Governments that were managing their external borrowings focused attention on controlling and recording medium- and long-term external debt but paid little attention to short-term debt. Typically, different institutions within Governments dealt with domestic and external borrowings, and the management of domestic debt was not considered a priority. Domestic and external debt obligations were consolidated only when government debt service payments were estimated for the budget, and the payments made were accounted for audit purposes.

Several factors altered the international environment facing borrowing countries. Prior to the 1980s, the volume and terms of private sector debt were regulated under a regime of exchange controls. Liberalization of capital accounts brought about a new approach to debt management in many emerging markets. As a result, exchange control of private sector debt was replaced initially by a system of registration that was used mainly for monitoring purposes. Later, this was dispensed with in many emerging markets in the belief that borrowing abroad by private sector firms was the responsibility of the firms themselves. The institutional capacity needed to monitor the volume and maturity structure of external obligations of a growing private sector was absent in debtor countries and had to be built up. With the removal of capital controls, the public and private sectors had a choice of raising financial resources from either international capital markets or the domestic market, provided the

¹ Nihal Kappagoda, 2001. Public Debt Management: A New Priority in ESCAP, *Bulletin on Asia-Pacific Perspectives 2001/02*, United Nations publication Sales no. E.02.II.F.2 (New York).

latter was adequately developed. The main considerations in the choices made were the comparative risks and costs of each course of action and the state of development of the domestic debt market. These changes eliminated the distinction between domestic and external sovereign liabilities to a large extent and made the management of the total domestic and external debt of the Government and public sector a priority.

1. LESSONS FROM THE FINANCIAL CRISES IN THE 1990s

The financial crises in Asia and Latin America in the latter half of the 1990s raised the importance of Government contingent liabilities beyond the explicit guarantees provided mainly to State enterprises and less often to private firms. Implicit guarantees covering a range of financial activities such as non-guaranteed borrowings of State enterprises and the private sector, due to Government policies that encouraged these borrowings, added a further dimension to the level of contingent liabilities. The payments that could arise from deposit insurance and unfunded pension schemes of the central Government are also a potential burden. All these need to be estimated and the magnitudes monitored in the interests of sound macroeconomic management.

The external changes made it necessary for Governments to assess and manage risks in their loan portfolios by adopting guidelines and targets or benchmarks. The growing volume of international capital flows arising due to globalization increased the vulnerability of economies with liberalized capital accounts. Consequently, periodic vulnerability and debt analyses should be undertaken using selected indicators to obtain early warnings of impending financial crises. In some countries, short-term debt has become a large component of total external debt outstanding, introducing the possibility of a rollover risk when the payments position deteriorates. Monitoring this has become more important than the import cover ratio that is more relevant for countries that have liberalized only their current account transactions. In some emerging markets public sector external debt has become a smaller component of total external debt outstanding than private non-guaranteed (PNG) external debt, and this is projected to become even smaller over time. In view of this, debt managers in a

liberalized economy should monitor the level of PNG debt outstanding and manage it through sound macroeconomic policies. Effective legislation and regulations are also required to supervise all financial institutions – including non-bank institutions – and facilitate debt restructuring of corporate entities when necessary.

B. FRAMEWORK FOR EFFECTIVE DEBT MANAGEMENT

There is no unique organizational and governance structure that can apply to debt management offices (DMOs) in different countries. Nevertheless, there are some common issues that should be considered when a framework for debt management is established. The more important among these are discussed in the paragraphs below.

1. DEFINITION OF OBJECTIVES

Governments should set clear objectives for public debt management. A survey conducted in 2000 by countries of the Organization for Economic Cooperation and Development (OECD) identified several overall policy objectives for debt management, which were to:

- Mobilize the financing needs of Governments efficiently
- Ensure that the debt service payments of Governments are made promptly
- Minimize borrowing costs
- Keep risks at an acceptable level
- Support the development of domestic markets

These objectives are appropriate for a country with a well-developed domestic capital market that can access international capital markets. Many developing countries and emerging markets give priority initially to obtaining the financing needs of the public sector at low costs and to ensuring

that debt service payments of Governments are made on time. As their access to international capital markets increases, the objectives are expanded to take into account the risk preferences and tolerances of Governments. The push to strengthen and deepen domestic capital markets and develop secondary markets would take place with the liberalization of the capital account of the balance of payments when borrowers begin to exercise a choice between the domestic and international capital markets.

2. INSTITUTIONAL ARRANGEMENTS

Debt management encompasses more than the mere mobilization of domestic and external resources, recording this debt and making timely debt service payments. A transparent legislative and regulatory framework is required for the full range of debt management functions to be performed effectively.²

The changes in the international economic environment and the resulting priorities for debt management make it necessary for countries to review their institutional arrangements and institute changes. Emerging market economies and developing countries that are liberalizing their capital accounts need to undertake these reviews as a matter of priority, noting that public debt management covers all the activities of a loan cycle as before. DMOs should develop the capacity for more advanced debt management due to the greater complexity of the loan portfolios covering both domestic and external loans.

The functional organization for debt management that is emerging – often based on the advice provided by international financial institutions (IFIs) – is similar to that of an investment institution. While many offices responsible for debt management are structured as in these institutions, the three main groups of activities required to perform the full range of debt management functions are:

² See chapter II for a full listing of debt management functions.

- Resource mobilization
- Debt and risk management
- Loan operations and the Management Information System (MIS)

They are named differently in various countries depending on the needs of each country.

3. LEGISLATIVE AND REGULATORY FRAMEWORK

Governments should establish a clear legislative framework for public debt management, setting out the responsibilities of agencies authorized to borrow, issue guarantees and undertake financial transactions such as on-lending on behalf of the Government in unambiguous terms. The framework should give clear responsibility for debt management to one agency when this is possible. The numbers of agencies involved should be kept to a minimum in the interest of achieving a transparent and effective institutional structure. The legislative framework should also take into account the merger of the domestic and external borrowing operations of the public sector and the need to formulate annual or multi-year borrowing plans based on the borrowing policy of the Government. A new public debt management law would be required to:

- Authorize borrowing for public purposes from both domestic and external sources
- Authorize the issue of government guarantees for both domestic and external borrowings
- Authorize on-lending borrowed funds by the Government
- Assign responsibility for public debt management and the formulation of a borrowing policy and plan for the public sector that includes both guaranteed and non-guaranteed loans

4. GUARANTEES AND ON-LENDING

Governments need to ascertain and disclose the full extent of their contingent liabilities and make adequate provision in the budget for likely losses. Debt management is strengthened if it is supported by a policy that uses financial guarantees and on-lending to finance only projects and programmes that would generate income in excess of the borrowing costs to the Government in the long run. Governments should endeavour to share some of the credit risk with other market participants. The risk should be assessed, priced and taken into account in determining the guarantee fee and the terms of on-lending. This requires the adoption of an explicit and transparent policy for the issue and management of government guarantees and on-lending.

5. DEBT INFORMATION SYSTEMS

There is a growing demand in DMOs for an integrated, user-friendly MIS. Given the range of functions that these offices are expected to perform, the functionalities of the software should include debt recording, debt service payments authorization, loan monitoring, debt analysis and risk assessment. This would require the specification and development of new software or the customization of off-the-shelf software to the extent that is necessary. Until then, newly established debt offices would have to download data from existing databases onto spreadsheets and develop links between these and off-the-shelf risk management software. The experience of other DMOs in developing their MISs should be studied before embarking on a major software development, which would be time-consuming and expensive.

6. POLICY FORMULATION

There should be effective coordination of policy formulation among the agencies and staff responsible for debt management, fiscal, monetary and exchange rate policies of the Government while maintaining separate responsibility for each of the activities. It would be difficult to implement the macroeconomic policies of the Government effectively without this

separation and coordination. Borrowing policies should ensure the long-term sustainability of the fiscal deficit. At the same time, debt management policy should not become subordinate to monetary policy, as this may cause tension between the agencies, making it less likely that debt management decisions would be based on sound portfolio management. The central bank may, for example, propose the issue of foreign currency debt to reduce the risk of inflation while the DMO could argue that such a move could increase the overall risk to the Government's loan portfolio if it already had a significant foreign currency exposure. A Government's exchange rate policy can have an impact on the strategic benchmarks chosen for debt management that specify the desired currency composition of the foreign currency debt of the Government. In view of these considerations, the institutional arrangements should clarify the objectives of the Government in these policy areas and separate accountability for each of them.

7. RISK MANAGEMENT

Governments should establish guidelines for managing risk in the loan portfolio that embody the strategy adopted by DMOs for achieving their stated objectives. These guidelines should be in the public domain. Appropriate models should be used to quantify the costs and risks of alternative strategies adopted by the DMOs to manage financial risk. It should be recognized that debt management is also a financial business that carries large exposures to market, credit, liquidity, rollover and operational risks in countries that borrow extensively in capital markets. It is important that the staff of the debt office has experience in capital market operations and portfolio expertise, and understands the risk management culture required of a sovereign borrower. There should be a sound risk monitoring and control environment in the DMO to reduce operational risk that is important for a sovereign borrower.

C. LESSONS FROM COUNTRY EXPERIENCES

Experiences of countries that have established DMOs are useful only if they can be adapted to an environment in which institutional change

is taking place. Examples of developed countries are not always relevant to emerging market economies and developing countries. One difference between the two is that developed countries established DMOs after capital controls were abolished. Consequently, the regulatory environment and the type of finance sought by developed countries are different from those of developing countries. The former borrow in the domestic or international capital markets primarily to finance the budget deficit of the central Government and debt service payments falling due. State enterprises in these countries borrow directly in the market, though on occasion there may be a need for a government guarantee. In addition to financing budget deficits and debt service payments, developing countries need to borrow for projects and programmes of the central Government and state enterprises from the domestic and international capital markets, IFIs and foreign Governments. As a consequence, project and programme finance forms a significant component of the domestic and external loan portfolio of developing countries. This has to be taken into account in establishing a framework or structure for a DMO.

The models from developed countries also show that debt offices enjoy varying degrees of autonomy and freedom from government control. The greater the degree of freedom, the more elitist the offices become. One justification for this flexibility is that it provides the offices with the ability to hire staff on terms and conditions that could compete in the market place when specialized skills are required. This is possible only when there is a clearly defined legal structure that gives debt offices flexibility without being bound by the restrictions of government regulations. Another justification is that the use of risk management techniques is possible only when debt offices could function outside the government financial regulations when risk taking is not a normal activity of a government employee.

Establishing a DMO in a developing country often involves the merger of the domestic and external borrowing operations of the public sector. In many cases it is the merger of two working cultures, with the latter being looked upon as elitist due to the higher exposure that the staff enjoys vis-à-vis the public and foreign agencies. This makes the process of institutional change, which is fraught with difficulties, even more time-consuming.

Domestic borrowing operations are often perceived to be and in fact are routine operations. This situation arises when the staff has been engaged in these activities over a long period of time without any involvement in the efforts that should be made to strengthen and deepen the domestic market and develop a secondary market. Mergers also involve overlapping functions that should be identified and eliminated. Examples of these abound, such as the same piece of information being entered into more than one loan database in the DMO.

The timing of the establishment of a DMO to manage public debt should be coordinated with liberalizing the capital account. The need for such an office is greater once capital controls are removed and steps taken to develop and deepen the domestic debt market. It is difficult to see any advantage in the creation of the office preceding the removal of controls by a considerable period. Adequate preparatory arrangements should be made even though these may be lengthy due to the complex nature of the institutional changes that the creation of a DMO would involve.

II. DEBT MANAGEMENT FUNCTIONS³

A. INTRODUCTION

In the aftermath of the Asian financial crisis of 1997/1998 it became clear that the central Government obligations were larger than the direct borrowings of and guarantees issued by the Government. They included non-guaranteed borrowings of the public sector and a range of obligations arising from implicit guarantees. As a result, a comprehensive definition of public sector debt is necessary for the purpose of collecting full and complete information on these obligations.

Countries adopt different definitions of public debt based on their data collection practices and analytical needs. There are also differences arising from the reporting obligations to international financial institutions and other bodies. This chapter reviews the definitions and proposes a coverage of data that would enable a country to meet both the international and national reporting obligations without a special effort being required for data compilation each time that debt tables have to be prepared.

B. DEFINITION AND TYPES OF PUBLIC DEBT

The World Bank defines external public debt as the sum of public and publicly guaranteed debt, defined as follows:⁴

- Public debt is the sum of all the external obligations of the central Government; states, provinces or similar political subdivisions and their agencies; and autonomous public bodies such as State enterprises and subsidiaries in which they have joint ownership and a major shareholding with the private sector.

³ Nihal Kappagoda, 2002. *Institutional Framework for Public Sector Borrowing* (Geneva, UNITAR).

⁴ World Bank, *Global Development Finance 2002* (Washington, D.C., World Bank).

- Publicly guaranteed debt is the sum of all external obligations of the private sector that is guaranteed for repayment by a public entity.

When the borrowings of the central bank, including those from the International Monetary Fund (IMF) under its various facilities, are added this definition appears to capture all public and publicly guaranteed external debt. A similar definition can be used for public and publicly guaranteed domestic debt with the sum of the two categories providing estimates of total public debt.

The IMF defines public debt as the debt of the general Government and public corporations.⁵ The general government sector is made up of central, state and local governments while public corporations are made up of financial and non-financial corporations. Financial corporations include both monetary and non-monetary institutions. The former includes the central bank and depository financial institutions owned by the public sector, and the latter non-depository institutions such as development finance lending agencies owned by the public sector. This breakdown sometimes leads to the collection of loan data of only the non-financial public sector. The data on financial public corporations are collected only if the loans are guaranteed by the Government, as the liabilities of the financial sector are included in the statistics of the monetary sector. Accordingly, the estimate of total debt obtained by this method falls short of the total for the public sector as defined by the World Bank, due to the exclusion of the debt of the central bank and non-guaranteed borrowings of depository and non-depository financial institutions of the public sector.

The IMF and World Bank classify the debt of a country as external or domestic on the basis of the residence of the lender. Both foreign and domestic currency debt held by non-residents are classified as external debt and those held by residents as domestic debt. This distinction does not have any implications for total public sector debt.

⁵ IMF, 2001. *Government Finance Statistics Manual* (Washington, D.C., IMF).

The Inter-Agency Task Force on Finance Statistics⁶ has published a guide on the compilation of external debt statistics⁷ using an institutional classification that is consistent with the *System of National Accounts*⁸ and the *Balance of Payments Manual*.⁹ The institutions are classified as follows:

- Monetary authorities (central bank, monetary authority, currency board)
- General government (central, state and local governments; social security funds; all non-market non-profit institutions controlled by government agencies)
- Banking sector (commercial and savings banks, savings and loan associations, credit unions or cooperatives, building societies)
- Other sectors, made up of:
 - Non-bank financial corporations (insurance corporations, pension funds, other financial intermediaries and financial auxiliaries)
 - Non-financial corporations

The definition of the public sector used in the guide includes the above first and second points and all public corporations in the third and fourth. Therefore public sector debt is the debt of all these institutions.

The European Union's definition of general government debt includes the domestic and foreign debt of the central Government and public entities whose revenues cover less than 50 per cent of their operational costs. The debt of public entities includes both guaranteed and non-guaranteed debt.

These definitions give different estimates of total public debt outstanding. For expediency, some countries may adopt their own definitions

⁶ The Task Force is chaired by the IMF and consists of representatives of the Bank for International Settlements, Commonwealth Secretariat, European Central Bank, Eurostat, OECD, Paris Club Secretariat, UNCTAD and World Bank.

⁷ IMF, 2003. *External Debt Statistics: Guide for Compilers and Users* (Washington, D.C., IMF).

⁸ OECD, 1993. *System of National Accounts* (Paris, OECD).

⁹ IMF, 1993. *Balance of Payments Manual* (Fifth Edition) (Washington, D.C., IMF).

leading to the collection of less than complete data. The categories omitted may be borrowings of joint ventures even when public bodies have a majority ownership and the non-guaranteed borrowings of the financial public sector. Whatever IFIs may advise, countries should collect complete information on public and publicly guaranteed debt. This would also enable countries to obtain a complete picture of their external indebtedness by adding external public and PNG debt.

It is necessary to be clear about the type of debt that constitutes liabilities of the public sector. All borrowings with an original maturity exceeding one year are classified as long- and medium-term debt. The borrowings with an original maturity of less than one year are classified as short-term debt and should not be confused with borrowings that have a remaining maturity of one year and should have been included in long- and medium-term debt. All domestic and external payments that have been in arrears for a period exceeding three months should also be included in the estimates of public debt. Whether these arrears are short-, medium- or long-term depends on the length of time that the payments have remained in arrears.

Public debt management also requires that the following public sector loan operations be monitored and managed:

- Guarantees issued by the Government for foreign and domestic borrowing of non-government and other public sector agencies
- Government counter-guarantees for guarantees issued by foreign national and international institutions
- Funds borrowed by the Government and on-lent to corporations and government-owned companies
- Borrowings from foreign and domestic sources by corporations and government-owned companies without government guarantees

C. DEBT MANAGEMENT FUNCTIONS

As stated, debt management covers more functions than the mobilization of foreign and domestic resources, the recording of debt, and making timely debt service payments. There is a range of analytical functions at all stages of the loan cycle that need to be performed for effective debt management. They are identified below and cover activities from the borrowing plan; the annual budgetary process; the mobilization, use and repayment of loans; the recording of loans; and monitoring of loan operations through an MIS. These functions have been grouped into resource mobilization, debt and risk management, and loan operations and the MIS, as identified in the first chapter.

1. RESOURCE MOBILIZATION

It may be necessary to have separate resource mobilization activities for project and programme finance and capital market borrowings, the latter to meet emerging budget deficits. Further, sub-activities may be required for foreign and domestic borrowings depending on the state of development of the domestic debt market. Activities requiring both foreign and domestic borrowings should be dealt with in a holistic manner and not separately as occurs when foreign and domestic borrowings and their management are the responsibility of different agencies. The main functions required for resource mobilization are to:

- Implement the public sector borrowing plan based on the strategy approved by the Government
- Raise resources for financing public sector projects and programmes and emerging budget deficits from foreign Governments, international financial institutions, and foreign and domestic commercial banks and capital markets based on the borrowing strategy adopted by the Government. These may be separated into those from foreign and domestic sources as follows:

Foreign Sources

- Negotiate loans from international financial institutions and foreign Governments
- Negotiate loans from foreign commercial banks and other foreign financial institutions
- Access international capital markets

Domestic Sources

- Access the domestic capital market by conducting auctions and other measures
- Negotiate loans from domestic commercial banks and other domestic financial institutions
- Mobilize short-term resources from capital markets to meet the Government's emerging liquidity requirements
- Organize and execute hedging transactions
- Identify and execute derivative transactions
- Develop the domestic debt market
- Develop the domestic secondary market
- Process applications for government guarantees, issue guarantees and conclude agreements with borrowers
- Process applications for on-lending borrowed funds and conclude agreements with the borrowers
- Function as a clearing house for requests of information from donors, international financial institutions, commercial banks and other creditors

2. DEBT AND RISK MANAGEMENT

Debt and risk management, as well as the other debt management functions, require close coordination and consultation with the staff engaged in resource mobilization and loan operations and the MIS. Although the work is analytical in nature and involves research, it underpins loan operations and requires a detailed knowledge of lenders and capital markets. While the capacity to undertake the analytical work necessary for debt management can be developed in the DMO, close links should be established with outside departments and agencies. Borrowing forecasts should be tested for macroeconomic consistency, necessitating liaison with the department responsible for maintaining a macroeconomic model. Similarly, links should be established with the department responsible for budget operations to obtain up-to-date forecasts of government revenue and expenditure and the Treasury for forecasts of cash requirements. Links are also needed with the agency responsible for balance of payments forecasts – specifically for forecasts of exports of goods and services – and economic policy in other areas. It would be counterproductive for the DMO to be self-sufficient in preparing the output required from these agencies as it would result in overlapping activities, particularly when there is a shortage of skills.

The capacity to undertake debt and risk analyses can be built up only over time as this requires expertise in risk management techniques and capital market operations. Consultancy inputs and training are needed in the initial period. The main functions necessary for debt and risk management are to:

- Undertake frequent portfolio analyses to assess future debt service prospects and problems and propose action that should be taken to overcome them.
- Prepare debt sustainability analyses to assess the long-term sustainability of projected levels of public sector borrowing.
- Adopt specific targets, benchmarks or guidelines for various debt variables such as the currency mix, share of the floating rate debt, foreign debt, short-term debt in total debt outstanding, and maturity profiles.

- Assess and manage market movements (foreign exchange and interest rate) and rollover, liquidity, credit, settlement and operational risks in the loan portfolio including those that arise from on-lending and the issue of guarantees.
- Formulate a borrowing policy and an annual borrowing plan for the Government/public sector. It could include the adoption of ceilings for total disbursed outstanding debt (DOD) broken down into foreign and domestic debt and targets for various stock and flow debt indicators.
- Prepare a borrowing strategy for implementing the annual borrowing plan involving choices between domestic and foreign borrowings, creditor sources and capital markets to be accessed, currency of borrowing, and interest rate and maturity structures.
- Assess external vulnerability using debt and reserve adequacy indicators.¹⁰
- Formulate guidelines for non-guaranteed borrowings of State enterprises and the private sector.
- Formulate policies to regulate the issue of government guarantees and lending and on-lending borrowed funds by the Government, their monitoring and management.
- Estimate the level of contingent liabilities and prepare estimates of loan loss provisions that should be included in the expenditure estimates of the government budget.
- Prepare or provide inputs on public debt to periodic economic and financial reports presented to the Government and Parliament or the National Assembly.

¹⁰ The importance of this type of analysis was highlighted during the Asian financial crisis. The central cause of the instability was not the weakness of the Government's fiscal position but the short-term currency liabilities of banks, finance companies and individual companies that were not hedged.

3. LOAN OPERATIONS AND THE MANAGEMENT INFORMATION SYSTEM

Maintaining a loan database for public sector borrowings by recording all loans and loan transactions is a major activity in an MIS. This is facilitated by using software that is adequate for both debt recording and analysis. The staff responsible for the MIS should keep abreast of developments in information technology and ensure that all the staff of the DMO is provided with access to the updated database. The maintenance of an accurate database underpins the analytical work that is performed in debt and risk management tasks. It also facilitates debt service payments being made on time. The main functions required for loan operations and the MIS are to:

- Manage the debt information system and maintain an accurate and up-to-date loan database.
- Link the debt management software to other software used for Treasury management and accounting systems of the Government.
- Prepare debt service forecasts for public sector external borrowings as an input to the balance of payments forecasts and of total domestic and foreign government borrowings as an input to the expenditure estimates of the fiscal budget.
- Process debt service payments and effect them on time.
- Ensure that sinking fund contributions are made in accordance with the approved appropriations.¹¹
- Monitor the implementation of loan agreements including the utilization of loans and the obligations of the Government.
- Monitor the performance of loans guaranteed by the Government and report non-performance to the Government.
- Monitor the performance of lending and on-lending agreements and report defaults to the Government.

¹¹ These are appropriations for debt service payments in advance of actual payments.

- Monitor all contingent liabilities and ensure that adequate loan loss provisions are made in the budget to meet likely defaults.
- Prepare forecasts of government cash requirements to provide guidance on the volume and timing of Treasury-bill issues.
- Prepare periodic statistical and other reports on the status of public debt that are required by the Government and lenders.
- Maintain a website for the DMO and provide critical information on public debt to the public. The long-term goal should be to place an annual status report on public debt on this website.

The full range of debt management functions that should be performed have been described in this chapter. It is important that the functions are performed in a government agency at the beginning while institutional capacity for debt management is being developed. The institutional structure for debt management that evolves would be specific to each country based on the functions that have to be performed. It also depends on the bureaucratic structures established for loan operations. The institutional framework for public sector borrowing will be discussed in greater detail in the next chapter.

III. INSTITUTIONAL AND OPERATIONAL FRAMEWORK

A. INTRODUCTION

An effective and transparent institutional and operational framework and organizational structure are necessary for efficient public sector borrowing in a country. The *Guidelines for Public Debt Management* states that an effective governance structure for public debt management requires a clear legislative framework and well-defined organizational arrangements with the mandates of different agencies defined accurately to ensure that there is no overlap.¹² The debt management functions that need to be undertaken require an accurate MIS that would facilitate analyses of loan portfolios as they become more complex and Governments wish to undertake debt and risk analyses. This chapter deals with an institutional structure for public debt management that is being adopted in many emerging market economies and developing countries to perform the full range of debt management functions that were identified in the previous chapter.

A clear legislative framework is necessary for making appropriate institutional arrangements for public sector borrowing, that is, borrowings by the Government (for its own use or on-lending), State enterprises and central bank, and monitoring the external borrowings of the private sector. The legislation should be supported by regulations and procedures that set out the explicit roles of the various agencies involved in loan operations at all stages of the loan cycle for each category of borrower. Legislation covering the issue of government guarantees (typically by the ministry of finance) on behalf of the Government, and criteria and procedures for their approval and monitoring are also required.

Several government agencies have responsibility for a part or all of the loan cycle related to domestic and external borrowings and debt management

¹² IMF and World Bank, March 2001. *Guidelines for Public Debt Management* (Washington, D.C.).

functions. The ministry of finance, central bank, Treasury and possibly the ministry of planning (if the planning function has not been integrated with the ministry of finance) would be the main agencies involved in loan operations. In some instances, an autonomous DMO with special responsibility for public debt may be set up by either legislation or administrative order. In addition, there are agencies responsible for implementing projects and programmes for which the funds have been borrowed. Effective public debt management requires well-defined organizational arrangements and transparent coordination mechanisms among all the various agencies.

B. INSTITUTIONAL FRAMEWORK¹³

The institutional framework adopted by a country should facilitate the process of borrowing and the effective utilization of borrowed funds. Only the agencies and committees that make a substantive contribution to the loan cycle should be involved in loan operations. They should not participate in the loan cycle for historical or bureaucratic reasons as this would only slow down or impede borrowings. The process should not be initiated if there is no requirement for funds. Once initiated, the institutional arrangements should ensure that the various stages of the loan cycle are handled expeditiously.

1. THE NEED FOR A NEW STRUCTURE

The changes in the international economic environment and the requirements for effective debt management make it necessary for countries to review the institutional arrangements that exist for public sector borrowing and their management. Emerging markets that are liberalizing their capital accounts need to undertake these reviews as a matter of priority cognizant of the fact that public debt management covers all the activities of a loan cycle as before. It requires a higher level of sophistication due to the greater complexity of the portfolios covering both domestic and foreign loans and

¹³ Op. Cit. Kappagoda (2002).

the more advanced techniques in use for debt management including those of multinational investment institutions.

Many emerging markets are beginning to coordinate their external and domestic borrowings and have established or are considering establishing DMOs with varying levels of legal authority. While lessons on the organizational structure can be learnt from developed countries that have established DMOs, the financing requirements in emerging markets are different. One important difference is the continuing need for project financing by the Government and State enterprises from bilateral and multilateral institutions at varying degrees of concessionality. Although domestic capital markets are being strengthened and new instruments introduced to mobilize domestic capital, many countries are far from exercising a real choice between the domestic and international capital markets for mobilizing resources for the public sector.

2. FRAMEWORK FOR A DEBT MANAGEMENT OFFICE

The framework and functional organization for debt management that is being established in many countries is similar to that of an investment institution. While all offices responsible for debt management may not be structured as in these institutions, three operational offices can be set up to correspond to the three categories of debt management functions identified in the previous chapter. These are referred to in this chapter as the front, middle and back offices.

Front office

Front office should be responsible for resource mobilization and make the major decisions on foreign and domestic borrowings based on the approved borrowing plan. It should also take responsibility for on-lending and guarantee operations and hedging and derivative transactions of the Government.

Middle office

Middle office should be responsible for debt and risk management and should undertake portfolio analyses, develop a risk management strategy

and borrowing scenarios, and compare the emerging debt indicators with agreed benchmarks. This would enable sustainable levels of public sector borrowings to be estimated and a borrowing policy and plan for the public sector to be prepared. The front office should formulate a strategy for implementing the borrowing plan by mobilizing resources from domestic and foreign sources with the assistance of the middle office.

Back office

Back office should be responsible for loan operations and the MIS and make debt service payments based on creditor invoices that are cross-checked with its own database, monitor loan utilization, and prepare accounting and other reports required by creditors and the Government. Straddling all three offices should be a legal group whose principal function should be to support the activities of the front and back offices. The three offices should be interdependent and exercise checks and balances over each other in the interests of transparency and accountability.

The organizational structure for public debt management should include a debt policy (or management) committee. This should be a high level committee chaired by the Minister of Finance and comprise the Governor of the central bank, Secretary of the ministry of finance and heads of other relevant government agencies and organizations representing private sector groups such as banks and manufacturing firms. Membership should be broad-based to function in a transparent and effective manner and provide technical direction to the DMO, oversee and approve the broad parameters of loan operations of the public sector and guidelines for the private sector. The Government should endorse important policy decisions made by the committee, such as the annual borrowing plan of the public sector. Consideration should be given to making it report directly to Parliament.

Some debt management activities are presently performed by other government agencies. It is not proposed that these be transferred to the DMO immediately in the new organizational arrangements. It may be more efficient for them to remain where they are initially and establish firm institutional links to the relevant divisions or units of the DMO in the execution

of debt management activities or the use of its output. In the long term they should be brought under the umbrella of the DMO.

Many of the front and back office functions are currently undertaken by the agencies dealing with foreign and domestic borrowings for the Government, while the functions of the middle office are not being performed. A strong analytical capability for public debt management to support the borrowing activities of the public sector should be built up in the middle office. This is a long-term process and requires a combination of appropriate staffing, relevant technical assistance and on-the-job training.

The status of a DMO is important for it to function effectively. While establishing an autonomous office functioning independent of the ministry of finance is an attractive idea, there is not an overwhelming need for this in an emerging market. One compelling argument for establishing a debt office outside the government administration is that it could recruit staff with the required debt and risk management skills, paying the salaries of the market place. Establishing an autonomous office, which would tend to become elitist, is not straightforward given that some of the functions of a DMO are being performed to varying degrees of efficiency and effectiveness by different agencies of the government. This makes it necessary to examine the possibility of establishing the office within the ministry of finance.

A DMO at the highest departmental level within the ministry of finance would be the most effective institutional arrangement. It should involve the amalgamation of the functions of external and domestic borrowings, debt service payments, loan accounting, debt analysis and maintenance of loan databases. These are currently undertaken in various departments and divisions of the ministry of finance. One possibility is to leave these functions where they are located and attempt to establish strong links from these sites to the office responsible for debt and risk management. The MIS should link all the offices that perform debt management functions. The second choice is to amalgamate all the functions in one office in the ministry of finance and cope with the problems such a move would precipitate as they arise.

Most countries have to consider the institutional dynamics between their ministry of finance and central bank in determining an appropriate location for a DMO. A decision can be based on the logic that responsibility for debt management should rest with the ministry of finance as the Minister of Finance is legally authorized to borrow, on-lend and issue guarantees on behalf of the Government. An extension of this argument would suggest that the central bank should take explicit responsibility for monitoring the volume and maturity structure of a growing private sector debt. This arrangement would ensure that monetary and debt management policies are kept separate, as suggested in the section on policy formulation in the first chapter. However, effective public debt management needs institutional capacity for undertaking analytical work. Often, this is available in the central bank and not the ministry of finance. This requires some departure from the logic set out above to use the institutional capability where it exists.

An organizational structure for public debt management should provide for the conduct of an audit to ensure that all explicit liabilities of the public sector are taken into account. This would facilitate the timely payment of public debt service and ensure that all public debt has been contracted following the laws, regulations and administrative procedures related to public sector borrowing. It would also enable the reporting of public debt to Parliament or the National Assembly, international agencies and the public in a comprehensive manner by encouraging the public sector to improve its disclosure of borrowings.

Forecasting and managing the Government's cash requirements is a short-term aspect of public debt management that should be a function of a DMO. The issuance of government securities should be coordinated closely with the open market operations of the central bank, ensuring that the liquidity situation in the market would be taken into account when debt securities are issued. An explicit coordination mechanism is required when these functions are separated.

An autonomous DMO with clearly defined links to the ministry of finance and central bank may be established by legislation depending on the needs of each country and the availability of staff skills. Often, responsibility for

government borrowings and public debt management is assigned to the ministry of finance. In some instances central banks have responsibility for some debt management functions of an operational nature delegated to them by the ministry of finance. In such cases, the functions are specified and the nature of the outputs and their timing set out in an agency agreement.

The organizational structure suggested for a DMO is illustrated in figure I, which sets out the institutional framework that is necessary for public debt management. It corresponds to the three groups of debt management functions that were identified in the preceding section. It is the structure that should emerge in a DMO when all the functions are brought under one office.

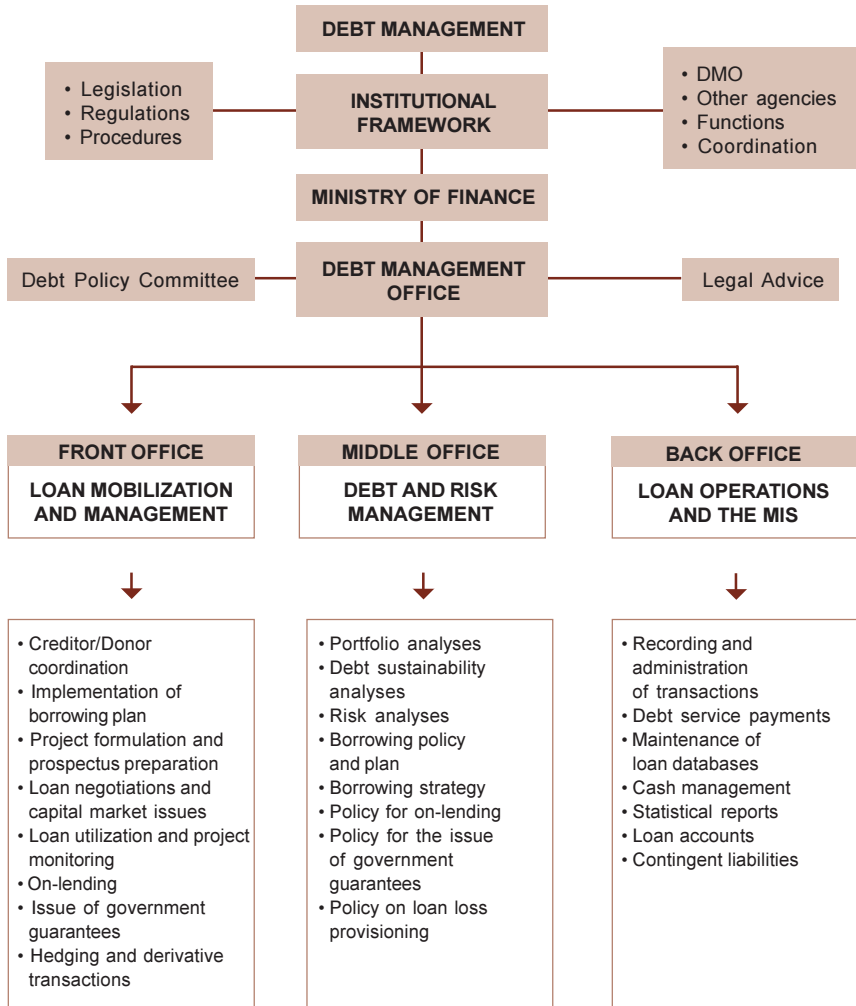
C. COUNTRY EXPERIENCES

The organizational structures of DMOs in some developed countries (New Zealand, Sweden and Ireland) are described below to illustrate how they have adapted the framework set out above.

1. NEW ZEALAND

In New Zealand the Minister of Finance has the power to borrow on behalf of the Government. The day-to-day operations arising from this authority have been delegated to the New Zealand Debt Management Office (NZDMO), a unit of the Treasury since 1988. Government borrowing and debt management have been the responsibility of this Office, based on guidelines that are approved by the Minister of Finance. The NZDMO is headed by the Treasurer who reports through the Manager of the Asset and Liability Branch to the Secretary to the Treasury, who in turn is responsible to the Minister. The Advisory Board, consisting of private sector representatives, assists the Secretary to supervise the performance of the NZDMO and provides advice on a range of operational and strategic issues.

Figure I. Organizational structure of a debt management office



Source: N. Kappagoda, 2004. *Key Analytical Functions for Public Debt Management* (Geneva, UNITAR).

The objective of the NZDMO is to “maximize the long-term economic return on the Government’s financial assets and debt in the context of its fiscal strategy, particularly its aversion to risk”.¹⁴ It pursues this objective while managing the Government’s gross borrowing and cash requirements and interest bearing assets within a risk management framework covering the six principal types of risk.¹⁵ It also lends to government organizations and State enterprises and provides advice on capital markets to other branches of the New Zealand Treasury and other government departments and agencies.

(a) Structure and functions

The structure of the NZDMO follows that of a private sector financial institution with functions that correspond broadly to those of the front, middle and back offices. It has groups responsible for portfolio management, risk policy and technology, and accounting and transactional services.

The Portfolio Management Group:

- Handles the dealing operations of the NZDMO and all borrowings of the Government
- Manages the Government’s investment portfolio and cash needs in New Zealand dollars
- Finances the foreign currency intervention reserves of the reserve bank
- Promotes investment in government securities
- Provides advice on capital markets to other government agencies
- Manages relations with investors and rating agencies and compliance requirements of international markets

¹⁴ NZDMO website www.nzdmo.govt.nz.

¹⁵ Please see the chapter on risk management (Chapter VII).

The Risk Policy and Technology Group:

- Advises on and continually improves the risk management framework of the NZDMO
- Measures the performance of the Office in adding value, measuring risk and monitoring compliance with approved policies for managing the government loan portfolio
- Maintains the information technology systems

The Accounting and Transactional Services Group:

- Accounts for government loan operations
- Prepares debt service forecasts and makes debt service payments arising from government borrowing on time
- Ensures that the above are recorded without any security breaches

While the NZDMO is responsible for managing the Government's domestic borrowing programme, some administrative functions have been delegated to the reserve bank through an agency agreement. Under this arrangement, the bank is responsible for the tenders and transactions arising from treasury bills and government bonds.

2. SWEDEN

The Swedish National Debt Office (SNDO)¹⁶ dates back to 1789 and was under the control of Parliament for 200 years. Following an amendment to the Swedish Constitution and the Act on State Borrowing, Parliament delegated the function of borrowing to the Government in 1989, which in turn delegated it to the SNDO. The Office's Board is chaired by a Director-General who reports to the Government through the Minister of Finance. The main role of the Board is to lay down limits and guidelines for the borrowing activities of the SNDO, which are to finance:

¹⁶ SNDO website www.rgk.se

- The primary balance arising from the Government's fiscal operations net of the State's expenditures and interest
- Central Government interest payments
- Changes in the borrowing and lending of the SNDO to and from agencies and State-owned companies

Parliament controls the increase in the State debt as it approves the budget, State lending and the level of guarantees. The only exception is the borrowing requirement for increasing the foreign currency reserves of the central bank. There is indirect control even in these instances as the central bank reports to Parliament.

An objective of the SNDO is to manage the debt of the central Government to achieve a minimization of costs in the long run while taking risk management into consideration. This is pursued by proposing a set of guidelines for government borrowing in the following year. These guidelines become effective when approved and guide the borrowing programme for the year. The SNDO reports on its borrowing performance in the previous year to the Government, which in turn reports to Parliament. The comments made by Parliament in its evaluation are incorporated in the guidelines proposed by the SNDO for the following year.

(a) Structure and functions

The activities of the SNDO are conducted through four operational departments. They are the Debt Management, Retail Market, Guarantees and Cash Management Departments.

The Debt Management Department:

- Manages and finances the central Government debt by issuing nominal and inflation-linked government securities in the Swedish and international fixed income markets
- Minimizes the cost of this debt while taking into account possible risks

The Retail Market Department markets government securities to households, small investors and institutional investors.

The Guarantees Department:

- Issues and manages guarantees and loans to public authorities following approval from Parliament
- Assesses credit risks and charges premiums from borrowers to cover them in the guarantee fees and interest costs
- Monitors risks associated with the activities of State undertakings across a wide range of areas, though mainly in infrastructure and property

The Cash Management Department functions as the internal bank for State agencies and public enterprises. It involves the provision of budgeted funds and loans for their investments in fixed assets without subsidy. The State agencies in turn are obliged to invest their cash surpluses with the SNDO. It is also responsible for the Government's cash management and payments.

Other departments support the work of the four operational departments and:

- Communicate with the media, investors, public authorities, ratageand the public
- Forecast State debt service payments and undertake statistical analyses of debt
- Provide legal support for SNDO activities including the registration of debt
- Confirm and settle transactions that are initiated by the operational departments
- Provide the MIS to support the borrowing activities of the SNDO
- Develop capacity to identify and manage risks and undertake risk analyses

3. IRELAND

The National Treasury Management Agency (NTMA)¹⁷ of Ireland was set up by the National Treasury Management Agency Act, 1990, Ireland to “borrow moneys for the Exchequer and to manage national debt on behalf of and subject to the control and general superintendence of the Minister of Finance and to perform certain related functions and to provide for connected matters.” This Act enabled the Government to delegate the borrowing and debt management functions of the Minister of Finance to the NTMA. Prior to this, they were the responsibility of the Department of Finance with the central bank being responsible for short-term debt.

The Minister of Finance appoints the Chief Executive who is directly responsible to him. The Advisory Committee (as opposed to a board) advises the NTMA on matters that may be referred to it and the Minister on the appointment and terms and conditions for the Chief Executive. Under the provisions of the Act, the NTMA produces a written report on its activities for the Minister who submits it to Parliament.

The main objective of the NTMA is to finance maturing national debt and the annual borrowing requirements of the Government. When the Government has a budgetary surplus (as it has in most of the past several years), the borrowing programme is required to finance only the maturing national debt less the amount of the surplus. In pursuing this objective the NTMA is expected to minimize borrowing costs and keep risks at an acceptable level.

(a) Structure and functions

The structure of the NTMA that has evolved is similar to that of many DMOs in developed countries. Originally, the main functional offices in the Agency were for borrowing and debt management, strategy and risk management, and operations. These corresponded to the front, middle and back offices framework that was described in the section on institutional framework. There is a fourth office, which provides legal services to the

¹⁷ NTMA website www.ntma.ie

Agency. This is a requirement in all DMOs, although the services are provided through different mechanisms.

This structure has changed with the change in borrowing requirements of the Government. The debt management functions are being performed in two offices-Funding and Debt Management, and Finance, Technology and Risk. The fundamental role of the NTMA remains that of borrowing for the Government and its management. Since 2000, its role has been expanded to include other asset and liability management functions. The NTMA manages the National Pensions Reserve Fund as the agent of the commission that is responsible for the Fund. The National Development Finance Agency operating through the NTMA provides financial advice and when necessary, funding and guarantees for major public investment projects. The NTMA also borrows on behalf of the Housing Finance Agency.

IV. LEGISLATIVE AND REGULATORY FRAMEWORK¹⁸

A. INTRODUCTION

Legislation and regulations are as necessary for public sector borrowing and its management as for any other aspect of financial management in the public sector. This chapter covers three of the main issues. The first is the legislative framework necessary for public sector borrowing from domestic and external sources and the regulations that are required to implement the legislation. The regulations set out the functions that should be performed by the various public sector agencies involved in the loan cycle to provide clarity and transparency to their respective roles. The second issue is the policy that should be adopted for issuing government guarantees and the modalities for issuing them and managing their performance. The third is the policy and procedures that should be adopted for on-lending funds borrowed from domestic and external sources by the Government as an alternative to issuing government guarantees.

B. LEGISLATIVE FRAMEWORK

Legislation on sovereign borrowing sets out the authority to borrow and delegates power from the institution within the State that has the financial authority to the agency that borrows on behalf of the State. In democratic countries, this power is vested in Parliament or the National Assembly, which has the responsibility of enacting laws and exercising financial authority. The latter includes the power to levy taxes, decide on the use of State funds and the right to borrow and assume financial obligations on behalf of the State. Since Parliament or the National Assembly is a collective body that does not meet on a regular basis, borrowing and its management has to be delegated to another agency.

¹⁸ Nihal Kappagoda, 2002. *Institutional Framework for Public Sector Borrowing* (Geneva, UNITAR).

Countries should have legislation that defines the Government's authority to borrow, invest and enter into financial obligations such as guarantees, hedging and derivative transactions and amortize, redeem or re-purchase government debt.¹⁹ The legislation should authorize the Minister of Finance to borrow from external or domestic sources on behalf of the Government for specific purposes, such as financing projects or programmes, budget deficits, maturing debt, and foreign currency purchases depending on the responsibilities of the central bank in this regard. The legislation should also set out the maximum amount of borrowing that could be undertaken and the guarantees to be issued during the budget year as approved by Parliament or the National Assembly. The authority given to the Minister of Finance to manage the Government's financial transactions makes it unnecessary for the Minister to seek the approval of the legislature for each borrowing or guarantee issued. The legislation should also set out the responsibilities for the management of public debt covering the roles of Parliament or the National Assembly, Office of the Government or Cabinet, ministry of finance, central bank, audit office and an independent DMO if one has been set up. There should be provisions in this legislation for the Minister to delegate the power to borrow, invest and enter into financial obligations on behalf of the government to the official head of the ministry of finance or the chief executive of the DMO.

The legislation required for institutional arrangements that result in the setting up of a DMO within the ministry of finance would be different from that for a DMO as an autonomous agency. In both cases some specific debt management functions could be undertaken by the central bank under an agency agreement concluded between the bank and the DMO. These could be the payment of debt service on public external debt and the issue, management and redemption of the domestic debt of the Government. Since debt management policy may affect both fiscal and monetary policy, it is important that coordination among the ministry of finance, central bank and DMO is transparent.

¹⁹ Graeme Wheeler, 2004. *Sound Practice in Government Debt Management* (Washington, D.C., World Bank).

Foreign and domestic public sector borrowing are handled separately in many developing and emerging market countries. The legislative framework for government borrowing is often set out in foreign and domestic loans acts for foreign and domestic borrowing respectively. These laws should be combined into a single public debt management law where foreign and domestic borrowings of the Government are combined and handled in an integrated manner. While the legislation would depend on the country's political framework and institutional arrangements, it should:²⁰

- Recognize the sole responsibility of the Minister of Finance to borrow and issue guarantees on behalf of the Government and select instruments to do so.
- Recognize the role of the ministry of finance in public debt management.
- Establish a high-level debt policy committee chaired by the Minister of Finance to set the borrowing policy and strategy. The terms of reference for the committee should be described in the regulations.
- Set limits on government and government guaranteed borrowings in the annual appropriations act.
- Provide for a separate ceiling to be set by the debt policy committee for non-guaranteed borrowings of State enterprises.
- Establish an appropriate institutional structure for public debt management.
- Introduce the audit function for public sector loan operations.
- Define the role of the central bank in loan operations related to government borrowing, such as making debt service payments at the request of the ministry of finance and the issue, servicing and redemption of domestic debt.

²⁰ Nihal Kappagoda, 2001. Public Debt Management: A New Priority in ESCAP, *Bulletin on Asia-Pacific Perspectives 2001/02*, United Nations publication Sales no. E.02.II.F.2 (New York) and *Institutional Framework for Public Sector Borrowing* (Geneva, UNITAR, 2002).

- Assign responsibility to the ministry of finance to maintain a database of all government and government guaranteed debt and prepare periodic reports to the Cabinet and Parliament.
- Recognize the right of sub-national bodies such as provinces and states to borrow within agreed parameters in the domestic and/or foreign markets.

Some of these items could be included in the regulations that would be formulated to implement the legislation.

The issue of government guarantees for State enterprise and private sector borrowings could be governed by a loans guarantee act or a unified public debt management law authorizing the Minister of Finance to issue guarantees after obtaining the approval of the Cabinet. In some countries, the Minister is required to report the guarantees issued on a periodic basis to Parliament and ensure that annual or cumulative ceilings that have been adopted by the Government and/or Parliament are complied with.

The legal requirements governing external borrowings by the private sector and State enterprises without government guarantees and the procedures that should be followed should be set out in a central bank/ exchange control act and/or regulations. Private and State enterprise borrowers need to obtain the approval of the central bank before contracting loans and making service payments when foreign exchange transactions are subject to control. If there are no controls, it is necessary to introduce a system for registering these borrowings with the central bank and capturing data on transactions to monitor their build-up. This is increasingly the case due to liberalized foreign exchange regimes.

The authority to borrow and manage debt on behalf of the Government could also be included in broader public finance legislation that sets out the financial management responsibilities of Parliament, Ministers and government agencies. The Public Finance Management Act of 1999 of South Africa is an example. The debt management component of the legislation should set out the accountabilities of the Minister of Finance and the office responsible for public debt management and specify the role of the agencies involved in the management of public debt, such as

Parliament, ministry of finance, central bank and audit office. This legislation should enable the Minister of Finance to delegate the authority to borrow and undertake financial obligations on behalf of the Government and delegate public debt management to the head of the ministry of finance or chief executive of the DMO.

C. REGULATIONS

It is necessary to formulate regulations and procedures that set out the explicit roles of the ministry of finance, ministry of planning, office of the Government or Cabinet, central bank, audit office, and other agencies involved in loan operations at all stages of the loan cycle. These are required to implement the legislation for public sector borrowings approved by Parliament or the National Assembly. They should set out in a transparent manner the responsibilities for:

- Formulating proposals for submission to lenders, appraising projects and programmes, negotiating agreements and obtaining the approval of the Cabinet of Ministers for the signature of agreements
- Satisfying the conditions preceding effectiveness of loans and the fulfilment of other obligations of the borrower during implementation
- Monitoring utilization and the effective use of loan funds
- Ensuring timely debt service payments

In the interests of expediting public sector loan operations, regulations and procedures should also be drawn up for:

- Applying for guarantees and on-lending
- Making decisions on the issue of guarantees and on-lending
- Concluding agreements for the issue of guarantees and on-lending the proceeds of government borrowing
- Collecting debt service payments from individual borrowers
- Monitoring the performance of guarantee and on-lending agreements

Capacity should be built up in the ministry of finance, DMO or other agency responsible for the issue of guarantees and on-lending in close coordination with the ministry of planning to assess the viability of projects and the financial status of agencies implementing them. Without this capability, it is likely that the Government would have to assume responsibility for a substantial portion of the contingent liabilities.

D. ISSUE OF GUARANTEES

Governments and public sector agencies guarantee loans taken by State enterprises and in exceptional circumstances by private sector firms for public policy reasons. These are issued to assist the borrower to obtain more concessional terms than would otherwise be possible. When a guarantee is issued, the guarantor takes on an obligation to pay some or all the principal amount of the debt and accrued interest in the event of a default and the underlying debt and related rights of recourse against the debtor. The guarantor has a receivable from the debtor, that is, the guarantee premium or fee, with possibly some collateral pledged by the debtor.

Government guarantees required by joint enterprises between private firms and State entities should be limited to the share of the State entity in the enterprise. The Government could provide a guarantee for the whole loan, although this is not the usual practice. Problems have arisen in the case of guarantees issued for borrowings by State enterprises that were subsequently privatized. The nature of these guarantees should be clarified when the enterprises are privatized.

The issue of guarantees for borrowings allows the Government to achieve a range of policy objectives, such as reviving ailing sectors of the economy and export promotion. Guarantees have many advantages. These are that a guarantee:

- Is a more attractive option fiscally than the Government obtaining a loan to finance a project and on-lending the proceeds, thereby avoiding a build-up of government debt. This is more important in

the case of larger borrowing requirements.

- Improves the flexibility of the borrowing options as the loan could be tailored to reflect the borrower's needs regarding the maturity and terms of repayment.
- Offers spin-off benefits, particularly with large-scale projects by bringing the borrowers into direct contact with the lenders, providing direct and quick access to new financing arrangements and market instruments.

An effective guarantee policy requires a thorough assessment of projects and programmes for which guarantees are requested and the rejection of all those that are judged to be non-viable. This should be undertaken by the ministry of finance – in collaboration with the supervising ministry – prior to issuing the guarantee by reviewing the appraisal prepared by the lender to evaluate the prospects of the beneficiary, generating adequate income to repay the loan. The Government should consider the alternative of borrowing and on-lending the funds by comparing the costs and risks of issuing a guarantee with those of on-lending before a decision is made.

Three agreements have to be negotiated when government guarantees are issued. They are the loan agreement between the lender and the borrower, the guarantee agreement between the lender and the Government, and the agreement between the Government and the borrower setting out the conditions under which the guarantee is issued.

Governments should manage each guarantee actively as soon as it is issued and undertake regular risk analyses when the underlying market conditions change, as the levels of risks vary from one project to another. There should be regular consultations between the borrower and guarantor in the case of large guarantees. The former should inform the latter of an impending default and provide all the relevant financial information before notification from the lender. The lender would call the guarantee in the event of a payment default and notify the guarantor.

The total amount of government guarantees issued each year should be within a ceiling set by the debt policy committee and approved by the

Minister of Finance. The ministry of finance should have the responsibility of issuing guarantees for domestic and external borrowings of the public sector after obtaining the approval of the Minister of Finance. The processing of documents and other formalities required for issuing and managing guarantees and maintaining full records should become the responsibility of the ministry of finance or DMO (if one has been set up).

Agencies receiving government guarantees should pay the ministry of finance a guarantee fee up front into a special fund. This should cover the administrative cost of processing and monitoring the guarantee and the risk of default of the loan. The Government should make an annual appropriation in the budget of a given percentage of government guarantees outstanding as loan loss provisions. The fund – made up of guarantee fees and loan loss provisions – should be used only to make debt service payments on guaranteed loans that are in default. Surpluses in the special fund should be invested in short-term instruments at the discretion of the Government and the proceeds used for budget support. Supplementary provision should be sought from general revenue in the event of a shortfall of funds to make debt service payments on loans in default.

E. ON-LENDING

Public sector borrowers outside the Government often seek the assistance of the Government when direct borrowing for projects and programmes is difficult or not possible. The Government could borrow from foreign or domestic sources and on-lend the funds to the agency requiring them. Direct borrowing with a government guarantee is sometimes preferred by the Government as it does not increase the level of its debt. There are cost advantages to the borrower in both methods. It is easier, however, for the Government to monitor loan utilization in the case of on-lending, though the level of government debt outstanding would increase.

The legal basis for the on-lending operations of the Government should be included in a public debt management law (or other legislation on public sector borrowing). The procedures that need to be followed for the approval

of Government on-lending and monitoring of performance should be described in the supporting regulations. The principal basis for the decision to on-lend funds is that the completed project or programme would generate adequate revenue to make debt service payments without a government subsidy. This may be modified in the case of social and some physical infrastructure, environmental protection and other projects assigned national priority.

The ministry of finance should set out the terms and conditions for on-lending in a subsidiary agreement negotiated with the institutions channelling on-lent funds. They should reflect all the conditions for on-lending that are imposed on the Government by the lender. The repayment period normally stipulated for on-lending depends on the repayment capacity of the project as determined in the feasibility study. In principle, the repayment period should not exceed that in the agreement between the Government and the lender. When the Government borrows under commercial conditions and on-lends to an intermediary institution for making sub-loans, the applicable rate of interest should be the interest and fees payable to the lender by the Government plus an annual domestic on-lending fee. A preferential rate of interest may be charged for projects such as those in the social sector, those that protect the environment and for reconstruction following natural disasters. For reasons of transparency the subsidies implicit in the preferential rates should be estimated and provided explicitly in the budget. The risks arising from exchange rate fluctuations should be borne by the ultimate borrower.

The institutions through which government loans are on-lent should take full responsibility for the management of the loans that are extended by them and provide periodic reports on the implementation of the projects and programmes financed to the ministry of finance. Each borrower should be required to submit reports on implementation to the on-lending agency. These reports and data collected through supervision of the loans by the relevant on-lending agency would provide the basis for the periodic reports it submits to the ministry of finance.

Debt service payments are made by borrowers to the on-lending agency, which transfers them to the ministry of finance. In the event of default, the on-lending agencies should take the measures necessary to recover the funds from the borrower based on the agreement signed and the current laws of the country. Persistent defaulters should be reported to the Government through the debt policy committee for guidance on future requests for on-lent funds from this agency.

Governments should have the authority to borrow granted to them in the Constitution or legislation. The law should enable this authority to be delegated to a government agency subject to prior legislative authorization or within ceilings set in annual appropriation acts. Governments are required to meet their repayment obligations and provide assurances to lenders regarding the borrowing process and their rights. The legislation should also assign the responsibility for public debt management to a single agency while the regulatory framework should describe the procedures for public sector borrowings and their management. The organizational structure set in place should enable borrowings to be undertaken in the most effective manner based on the legislative and regulatory framework that is established.

This chapter described the various elements of the legislative and regulatory framework. There is no model framework that could be replicated in all developing and emerging market countries. What is adopted should be dynamic and enable change to be made because as each country and its institutions develop, its needs evolve and the international environment changes. The legislative frameworks in more developed countries can be studied for lessons and provide guidance but ultimately the needs of each country would dictate how this should be done.

V. MONITORING EXTERNAL DEBT AND CONTINGENT LIABILITIES ²¹

A. THE NEED FOR DEBT MONITORING

The performances of the debt management functions identified require the monitoring of all public sector borrowings as defined in chapter II. Attention should be given to data collection – an important issue in most developing and emerging market economies – without which effective public debt management is not possible. The information required in the data files on each loan is detailed and falls into three broad categories. They are basic loan information obtained from loan agreements or prospectuses, withdrawal applications or drawdown notices and disbursements, and invoices and payment notifications on debt service payments. Creditors require the borrowing country to maintain an inventory of all loans from official, bilateral and multilateral sources; commercial banks; export credits; suppliers' and buyers' credits; bond issues; and other capital market lending from domestic and foreign sources. A determined effort is necessary to collect the data on a systematic and regular basis. The compilation of an inventory and debt data could be time-consuming and would depend on the number and complexity of loans, and the number and capability of the staff assigned to the task.

An inventory of all public debt with detailed data on each loan is required for several reasons. First, detailed information on annual public debt service payments is necessary for their timely management. This information would be the name of the creditor, the amount and currency of the principal, the interest and other payments, and the dates on which they fall due. Second, aggregate and detailed data on debt service payments that are due on government debt are required to make budgetary provision for servicing this debt and those arising from government guarantees when

²¹ Material for this section is derived from a lesson written by Nihal Kappagoda for a course on effective public debt management to be delivered by UNITAR in October/November 2006.

the borrowers have defaulted. Third, aggregate data on the country's principal, interest, and other payment obligations on the total external debt are required annually for preparing balance of payments projections.

An inventory is crucial for performing these basic functions without which the management of foreign and domestic debt of the public sector becomes difficult, particularly when it is large. Full knowledge of public debt would enable a country to make periodic evaluations of its loan portfolio leading to more active debt management, exploit improvements in capital markets in respect to its commercial loan portfolio, and facilitate decisions on refinancing loans to avoid a bunching of payments in some years.

B. DATA REQUIREMENTS

The external loan database of the country should include all medium- and long-term foreign borrowings by the Government, State enterprises and other State agencies; the private sector; the central bank; and short-term trade and bank lines of credit with maturities of up to one year. Detailed information on each borrowing broken down into basic loan details, disbursements and debt service payments would be required. Information on exchange and interest rates applicable to the country's loan portfolio should also be collected.

Basic loan details, which are available from agreements or prospectuses, should include the creditor, country and category, such as bilateral, multilateral, commercial bank, supplier or other. The recipient should be classified to indicate whether the funds are for the Government, State enterprise or private sector, and the guarantee status of the loan. The amount and currency of the loan and the disbursement agency (if it is not the creditor) are also required. Other basic information to be collected would be the date of the agreement, the date from which commitment fees accrue, the date of effectiveness, the terminal date for disbursements; the purpose for which the funds have been borrowed; the implementing agencies; compliance with the conditions preceding loan effectiveness; the economic sector or sectors to which the funds are to be applied; the procedures for

disbursement; whether the funds are to be on-lent; and a breakdown of the sub-projects and activities that would be financed by the loan. The agency responsible for debt management should have ready access to all the loan agreements and prospectuses.

Forecast and actual disbursement data are required for the database and should be available for the implementing agencies and creditors. The data on actual disbursements should include the date, amount and currency of disbursement, and exchange rate to the local currency for external debt. Information is also required on the method of disbursement, that is, whether it is by direct payments to suppliers, on a reimbursement basis, or by other means, such as advances. The status of withdrawal applications is also required so that utilization of loans could be monitored effectively.

Capturing information on actual disbursements could be delayed for a number of reasons. Creditors transmit disbursement advices for each withdrawal or at periodic intervals covering one or more loans. These are normally the best source of information, though difficulties may arise when creditors do not identify the disbursements on different loans individually. The central bank could capture the information at the time of inward remittances if disbursements are made on a reimbursement basis unless the central bank is unable to identify disbursements on different loans separately. The date of disbursement by the creditor (that is, when interest charges begin to accrue) may differ from the date of inward remittance.

Disbursement advices are the main source of information when disbursements do not lead to the inflow of foreign exchange but to physical imports following direct payment to suppliers by creditors. These are not readily available and should be pursued with both the implementing agency and the creditor whose cooperation is very important when the procedures for collecting disbursement information are set up.

An indirect benefit of establishing a DMO with comprehensive terms of reference is the ability to monitor loan utilization, which would assist in minimizing project delays and commitment charges. This is particularly important when the bulk of the loan disbursements take place on a reimbursement basis. The lack of effective follow-up could result in a

large proportion of the country's foreign exchange reserves being tied up on reimbursement claims.

Information on forecast and actual debt service payments are required for the loan database and covers principal and interest payments, commitment fees, service and other charges. While forecast information can be estimated from the loan agreement, subsequent modifications due to delays in disbursements or rescheduling of repayments of principal and interest also need to be estimated. In the case of rescheduling, information on arrears and penalties and details of the rescheduled repayment programme are required. Payment data can most often be obtained from the ministry of finance for government borrowings, directly from State enterprises for their borrowings, and from commercial banks through the central bank for private sector borrowings when capital transactions have not been liberalized. The central bank is an important source for all data on debt service payments. As in the case of disbursements, the date, amount and currency of the payment and the rate of exchange to the local currency for external borrowings are required information.

The critical documents that should be included in the files for each loan are:

- Contractual: agreement; legal opinion; correspondence related to other conditions preceding effectiveness; loan effectiveness; amendments to agreements covering loan amount, scope, and extension of terminal date, etc.
- Disbursements: forecasts of disbursements; withdrawal applications; disbursement notices containing information on the date, currency and amount; and quarterly/monthly summaries of disbursements
- Payments of principal, interest, commitment fees and other payments: forecasts of actual payments of principal, interest, commitment fees and other payments; invoices from creditors; payment orders; and payment advices

Data common to all agreements, that is, information on actual exchange and variable interest rates that are applicable to the country's loan portfolio,

should be collected. This involves building up exchange rate files for each loan currency vis-à-vis the local currency and a base currency – generally that in which the bulk of the country's loans are designated – and interest rate files for each variable interest rate. The information on exchange rates could be obtained from the central bank. Variable interest rate files are best compiled from the creditor invoices for interest payments that set out the rates applicable in the following interest period.

C. DATA COLLECTION PROCEDURES

The collection of detailed information on existing debt requires that appropriate arrangements for effective coordination are set up among the agencies involved in loan operations. These are necessary to collect the loan inventory, ensure that the database is updated periodically and report all the information related to new commitments and transactions and revised disbursement forecasts.

Loan data on government borrowings should be available with the ministry of finance, though there have been instances when the assistance of creditors has had to be sought to build up the inventory. Even for this category of borrowing it is necessary to ensure that the agreements and data on disbursements and payments are transmitted to the DMO on the basis of agreed procedures. Data collection is more difficult from the State enterprises and private sectors. When the capital account has not been liberalized, the DMO should institute procedures that require consultation with the ministry of finance before State enterprises contract loans and for the periodic reporting of disbursements and payments. They should not be permitted to enter into external obligations directly without such consultation, even for loans that do not require government guarantees. The central bank – through the legal powers that usually exist in an exchange control act and its regulations – should insist on prior approval being obtained by the private sector for contracting external loans. Further, they should submit copies of agreements and report disbursement and payment data at regular intervals.

In countries with liberalized capital accounts there could be resistance to such regulations, but the distinction between control and monitoring needs to be pointed out and emphasized. If a country wishes to monitor its total external debt, there would be no alternative but to introduce procedures that require the reporting or registration of PNG debt with the central bank when they are contracted and for the reporting of data on both disbursements and payments on a periodic basis. This would enable the system to achieve better coverage of the country's total external debt. In its absence, it would be necessary to use a combination of reporting voluntarily by the larger private sector borrowers and by commercial banks of loan transactions of clients and a survey of private sector borrowers to obtain estimates of PNG debt.

The final category of external obligations that should be recorded is short-term trade and bank lines of credit with a maturity of one year or less. These financing arrangements may assume great importance in paying for imports and their continuing rollover, with the accompanying costs being taken for granted. As stated, these facilities are the first to be withdrawn at the onset of payment difficulties causing a fall in imports. Short-term facilities and their use should therefore be monitored closely. Their short-term nature makes this difficult as existing credits have been replaced by new ones before the data are collected.

The procedures that need to be adopted for capturing information on short-term credits depend on the conditions prevailing in each country, that is, the importance of this type of financing for imports and whether the capital account has been liberalized. Data could be collected by using a combination of sources, for example commercial banks making payments, importers making extensive use of short-term credit facilities reporting to the central bank, and customs data. These data should be gathered expeditiously as they become outdated rapidly.

The problems related to data collection by the DMO should be tackled by establishing procedures that would ensure the flow of loan data to it. The DMO should set up an efficient filing system that includes all documents of a contractual nature and those related to disbursements and payments,

if debt recording functions are to be done effectively. Letters may have to be sent to creditors requesting that copies of disbursement notices and payment invoices be sent to the DMO directly on a regular basis. This would fill a gap that exists in the debt records of many ministry of finances.

D. LOAN DATA STORAGE, RETRIEVAL AND ANALYSIS

A debt manager should collect data and organize their storage for subsequent retrieval and analysis. As stated, files, registers and ledgers should contain basic loan details, terms of repayment, disbursements and payment data for each loan agreement separately. This data can be aggregated selectively or in total to forecast debt service payments and other debt indicators.

Initially, most countries would sort the debt information and retrieve and analyse debt data manually. As loans increase and operations become more complex, there would be the desire and need to computerize data using the latest hardware and software technology to facilitate storage, retrieval and analysis. The decision to change from a manual to a computerized system should depend on the satisfaction of several preconditions. First, a fully operational manual data collection system should be in place. Second, the computer staff within the Government – particularly in the agency where the DMO is located – should be able to provide software support, possibly after some short-term training, and not be dependant on long-term consultancy support. Third, government accounts should be computerized or action should be taken to do so. Otherwise one small component of government payments would be handled electronically, while the bulk would be processed manually. Fourth, there should be a demand within the Government to undertake active public debt management, particularly in countries with complex loan portfolios.

Software with several basic features should be chosen once a decision has been made to computerize debt data on the basis of these guidelines. It should be user-friendly and have supporting user documentation that is

easy to understand. This can be achieved by an interactive system that prompts the user for a response by selecting a set of options from a menu-driven programme. The user should be able to obtain more information on the options offered by having access to online help. With the availability of comprehensive documentation on the software, DMO staff should be able to learn to utilize the software without relying on scarce and skilled computing staff or becoming computer experts themselves. Software maintenance problems should be minimal when clear instructions on corrective action to be taken in the event of a breakdown are available. A final consideration should be that the database is maintained in a spreadsheet or database management system that is used widely in the country. This would increase the possibility of interaction with other computer users and enhance the local availability of software support of a generalized nature.

1. DATA STORAGE

The software should enable data entry of basic loan details and transactions to be carried out rapidly because of the large volume of such data. In large databases, facilities should be available for data entry by more than one user simultaneously. The user should be prompted for data and able to repeat individual entries or entire loans. Rapid entry is facilitated by using codes, and good software stores and displays the full interpretation of each code enabling the user to determine whether the code has been entered correctly. The software should also be able to capture various types of loans, for example external and domestic loans, by having alternative screen formats.

The software should have automatic data validation features, as accuracy in data entry is of paramount importance. It should be possible to check the data item against a list of options built into the software and cross-check one item of a loan against another in the same loan or against a whole set of criteria for a particular type of loan. The system should be backed up regularly, copied and stored elsewhere and have the ability to keep track of all changes to the database so that files may be retrieved and

errors tracked down in the event of a system failure. The software should allow the upload of certain types of data, such as transactions data from a spreadsheet or similar software.

The more user-friendly the software, the more difficult it would be to prevent its unauthorized use. Consequently, it is necessary to password protect access for data entry to authorized personnel. Others could have limited access permitting them to extract data for analytical purposes without having the ability to alter data already entered or enter new data. A database manager with responsibility for software maintenance should have the highest level of access.

2. DATA RETRIEVAL

Data entered accurately and stored need to be retrieved efficiently and in a useful format. Most database management systems provide this in their design and allow access through keywords. The most useful software permits access to all the data by searching in a single field in a record and allows the user to specify the items to be matched, such as a particular creditor or a set of transactions occurring within a given time period. A second feature of data retrieval is the frequent need to format the information required into a table or report. Most database application packages have readily accessible reports enabling their selection from a reports menu. Software that permits new user specified reports to be written is preferable to one that produces only a predetermined set. Less regular and less complex data retrieval may not require a full report. A set of commands given to a simple text file can be used to access the data and display the results. These text files, referred to as “macros” or “scripts”, are available in some advanced database systems.

Software that provides all these features allows a user the fullest flexibility to obtain the information required in a format designed by the user. This requires the user to master the report writing system and gain a comprehensive knowledge of the structure of the data and the names of each of the data files and fields. Finally, the software should allow the data or a subset of the data to be output in a form that interfaces with

other computing applications such as spreadsheet packages. This would enhance the use of the output of the software.

3. DATA ANALYSIS

Additional software features are required by users who need loan data for management purposes. These should enable the user to change the system output or reports in response to different forecasts of variables affecting them. Facilities should be available to conduct sensitivity analyses to forecast the impact of changes in exchange rates and variable interest rates on debt service payments. It would be necessary to estimate the impact of new borrowing levels on debt service payments and key debt indicators. These and other analytical requirements, such as estimating the impact of various restructuring scenarios and conducting debt sustainability analyses, should be met by the software.

4. DEBT MANAGEMENT SOFTWARE

Several options are available to developing and emerging market economies that wish to computerize their loan data. A spreadsheet package is the first option that should be considered if the loan numbers are small and the portfolio not complex. Loan data could be recorded without difficulty, and many forecasting features are available. The second option is custom-designed software. The ability to do this depends on the availability of systems and programming skills to develop the software and maintain it in the context of rapid improvements in information technology globally. Otherwise there would be long-term dependency on consultancy inputs from within or outside the country. A third option is off-the-shelf software available from technical assistance agencies. The two packages available currently are used by over one hundred countries. The first – the *Commonwealth Secretariat Debt Recording and Management System (CS-DRMS)*²² – is provided by the Commonwealth Secretariat under its technical assistance programmes to member countries. Those outside the

²² <http://www.csdms.org/>

Commonwealth can obtain this package commercially through the Crown Agents in London. A French language version can also be obtained from l'Agence Intergouvernementale de la Francophonie in Paris under its technical assistance programmes. The second package – the *Debt Management and Financial Analysis System (DMFAS)*²³ – is provided by the United Nations Conference on Trade and Development (UNCTAD) and can be obtained by countries that need it under the technical assistance programmes of the United Nations Development Programme. Various language versions are also available.

E. CONTINGENT LIABILITIES

In the 1990s some countries that adopted sound policies for fiscal management ended up with levels of indebtedness that were not projected. This was due to expenditures that were not budgeted and were considered to be outside the budgetary framework. Nevertheless, Governments felt compelled to meet these obligations in the interests of overall financial stability and the need to maintain investment levels. There are cases of off-budget liabilities that have accumulated and may fall due in the future. They are contingent liabilities and could result in higher levels of public debt outstanding than anticipated. The need to be aware of and estimate these liabilities or to develop means of estimating them at short notice are steps taken by Governments to improve their public debt management. Keeping projected expenditures down is not adequate for fiscal stability in countries with large and unbudgeted contingent liabilities.

It is difficult to quantify the expected level of contingent liabilities for any borrower since these obligations do not necessarily always arise. The best example of an explicit contingent liability is the payment guarantee by the Government issued on behalf of a State enterprise to pay some or all of the principal amount and/or accrued interest in the event of a default by the borrower. The cost of the guarantee would depend on the nature of

²³ <http://r0.unctad.org/dmfas/intro.htm>

the guarantee given, the extent of the default, any upfront fee that is charged for the guarantee and collateral offered to the guarantor by the borrower. The estimation of the level of explicit contingent liabilities of the public sector requires a full listing and details of all the guarantees issued by the Government, its political subdivisions and all other public bodies. There are other explicit contingent liabilities that could arise, such as those from unfunded public pensions and deposit insurance schemes that are the responsibility of public sector agencies.

It would be a challenge for a DMO to identify contingent liabilities that are implicit in nature and surface only if the liability arises, making it impossible to provide allocations in the budget. These event-linked obligations could arise due to “letters of comfort” that are issued by Governments and are less legally binding than guarantees. Further, Governments may be obliged to fund the bail out of failed financial institutions that go beyond the provisions for deposit insurance. Both of these could be for public policy reasons or national interest and to prevent the collapse of the entire financial system, which would lead to serious implications for the economy. There were many examples of such support provided to financial systems by the Governments in South-East and East Asia in the aftermath of the financial crisis in 1997. There is no basis to estimate the implicit contingent liabilities that may arise each year.

DMOs should at a minimum set out the policy and guidelines for the issue of guarantees and ensure that procedures are in place for their approval, monitoring and management. An integral component of the policy should be to ensure that adequate budgetary provision is available for making foreign and domestic debt service payments on defaults or likely defaults during each financial year. These payments would be financed partly by the guarantee fee that is charged. The rest of the funding should be provided through the budget as loan loss provisions. The amount provided for each loan for which a guarantee has been issued would be based on an assessment of risk made each year.

Another crucial function that could be undertaken by a DMO – if there is adequate notice of a severe financial crisis – is to identify agencies that could be adversely affected and estimate the extent and nature of the

support that would be required. Following this the Government could take steps to mobilize support to meet the costs of bail outs.

1. CLASSIFICATION OF LIABILITIES

The types of liabilities that arise could be grouped into four categories depending on whether they are direct or contingent and explicit or implicit.²⁴ Direct liabilities are those whose outcome is predictable. Contingent liabilities are obligations that may arise due to the occurrence of a particular event or events, for example the occurrence of natural disasters, and are independent of and therefore exogenous to government policies. They could also be endogenous to or the result of government policies creating possibilities of moral hazard. Explicit liabilities are specific obligations of the Government created by law or contract. Implicit liabilities are not legal but moral obligations. Governments bear these expenditures for reasons of public policy brought about by public expectations or political pressure.

Direct explicit liabilities of the Government are those that occur and are included in conventional fiscal analysis.²⁵ They include debt service payments on domestic and foreign borrowings of the Government and budgetary expenditures, which include programme expenditures and other items such as salaries and pensions that represent a long-term commitment.

Direct implicit liabilities arise due to future public pensions, social security schemes, health care financing and recurrent costs of public investments that are not required by law. These would not be captured in a government balance sheet.

Explicit contingent liabilities are legal obligations of the Government to make a payment if a particular event occurs. These remain hidden until the event or a trigger occurs recognizing that it may happen. They include government guarantees for non-sovereign borrowings, various types of

²⁴ Hana Polackova, March 1999. "Contingent Government Liabilities" in IMF, *Finance and Development*, vol. 36, No. 1 (Washington, D.C., World Bank).

²⁵ Hana Polackova Brixi and Ashoka Mody, 2002. *Dealing with Government Fiscal Risk: An Overview in Government at Risk* (Washington, D.C., World Bank).

loans, such as agricultural and small business loans, private investments and insurance schemes including deposit, crop and flood insurance.

Implicit contingent liabilities are also dependent on the occurrence of a particular event but are not recognized as liabilities until after the event if the Government is willing to take on the obligation. The stability of the financial system represents the most serious implicit contingent liability and could involve significant outlays of budgetary resources once a decision to assume the obligation is made.

VI. MONITORING PRIVATE NON-GUARANTEED AND SHORT-TERM EXTERNAL DEBT²⁶

A. INTRODUCTION

Developing and emerging market economies that established debt monitoring systems in the 1980s concentrated initially on recording and building up databases on government and government guaranteed external loans, which constituted the bulk of their debt outstanding. Laws, regulations and administrative procedures governing these loans were adopted or strengthened. Originally reporting to the World Bank's Debtor Reporting System – a statutory requirement for all borrowers from the Bank – covered only these. When statistics became available PNG debt was reported by countries as a by-product of the application of exchange controls that were in force. These records were incomplete and the World Bank supplemented them with reports made to the OECD and the Bank for International Settlements by creditor sources. Liberalization of the economies of developing countries and the acceptance of the obligations of Article VIII of the IMF led to the removal of exchange controls on current account transactions. Discussions on issues related to the convertibility of capital accounts were initiated in the early 1990s. Borrowings by State enterprises and private sector firms (including banks) increased simultaneously and the need for more active monitoring of PNG debt became apparent. Short-term borrowings became a significant part of this debt. This chapter deals with the monitoring of PNG and short-term debt that became important for developing and emerging market economies.

²⁶ See note 21.

B. THE IMPACT OF POLICY FAILURES ON FINANCIAL CRISES

The crises in Mexico in 1995, Asia (Thailand, Indonesia, the Republic of Korea and to a lesser extent the Philippines and Malaysia) in 1997, the Russian Federation and Brazil in 1998, and Turkey and Argentina thereafter drew attention to the importance of macroeconomic and other policies for managing the external debt, including the PNG debt, of a country. Common policy failures that affected the Asian countries were the existence of macroeconomic imbalances, managed exchange rates, deficiencies in external and domestic debt management, large current account deficits and weak financial systems whose performance was made worse by overexposure to heated property markets. The problems also made them vulnerable to varying degrees of capital flight and harmful international capital flows. Further, the tequila crisis-as the problems in Mexico in 1994/1995 were referred to-showed that a financial crisis could spread to other countries with which it had no important links but which were perceived to have similar problems leading to cross-border financial contagion.

A significant component of the increase in external indebtedness in many developing countries in the 1990s was due to the activities of the private sector and State enterprises. Although these entities are accountable for their debt, the performance of some sectors could have a significant impact on the implementation of macroeconomic policies, for example heavy borrowings of the banking sector abroad to finance domestic loans that became non-performing. Similarly, the weak performance of major non-financial entities could adversely affect various sectors in the domestic economy. Governments could face difficulties in accessing international capital markets as a result of poor performance of non-guaranteed loans. Conversely, poor economic performance by the Government could adversely affect the ability of the private sector and State enterprises to raise capital in international markets without government guarantees.

A weak financial sector interferes with the implementation of monetary policy and may entail significant fiscal costs if the sector has to be supported

by the Government and central bank in the event of a crisis. Commercial banks carrying out financial intermediation for domestic borrowers with foreign funds face interest and exchange rate and asset quality risks.²⁷ Interest rate risk arises from mismatching the maturities of the banks' assets and liabilities. Exchange rate risk is caused by the banks' net asset or liability position being held in foreign exchange and through domestic operations conducted in foreign currency. The failure of projects or programmes financed by bank loans could give rise to asset quality risk. Profitable lending opportunities in the domestic economy encourage banks to borrow abroad, increasing their exposure to foreign exchange risks. Lending to domestic entities that do not earn foreign exchange results in banks taking implicit foreign exchange risks that could arise due to shifts in asset quality. Limits on the intermediation of foreign capital by the banking system could be an appropriate policy response to weak supervision and regulation by the central bank. In open economies such measures can be effective only in the short run. Their long-term application would result in foregone opportunities.

Non-financial firms should, in principle, be able to manage their risks. Governments need to ensure that State enterprises achieve adequate returns with acceptable degrees of risk. Policies should require that enterprises that produce for solely the domestic market or that have a high concentration of imports and exports do not expose themselves to foreign exchange risks that are not appropriately hedged. Further, the currency composition of a firm's foreign debt should be consistent with its export pattern. Governments should ensure that public reporting of financial information enables the activities of private firms to be assessed adequately. They should not single out strategic sectors for financial support due to the high cost to the economy, though there are examples of this in developing countries that have contributed to the successful development of these sectors. Private firms that are overexposed to external debt should be allowed to go bankrupt or be restructured.

²⁷ IMF, November 1995. Private Market Financing for Developing Countries, chapter VI (Washington D.C., IMF).

C. WHY MONITOR?

In view of the developments in capital flows, Governments should monitor PNG debt more effectively than in the past to obtain timely information on its total foreign exposure. This would fulfil the Government's responsibility to collect and publish accurate, up-to-date statistical information on the state of the economy including its indebtedness. This would provide Governments with early warning indicators of impending foreign exchange payments crises, but the management of PNG debt would depend on the efficient functioning of State enterprises and private firms based on transparent and modern business practices. With the liberalization of foreign exchange regimes, it is critical that the ability of State enterprises and private firms to access international capital markets does not outstrip the Government's ability to monitor these flows on account of their impact on the whole economy. Data on PNG debt are required to assess the appropriateness of macroeconomic policies that are being implemented. The need for monitoring has become important due to the growth in and dependence on short- and long-term PNG debt of many developing and emerging market countries in Asia and Latin America, all of which were not seriously indebted in the 1990s. PNG debt is larger than public and publicly guaranteed debt in many of them. Consequently, short-term external debt has become a concern both to countries that are severely indebted and to those that are not.

1. TYPES OF INSTRUMENTS TO BE MONITORED

The monitoring of PNG debt requires the collection of full and complete information on all external borrowings by financial and non-financial private sector firms, joint ventures and public bodies when the share of the private sector exceeds 50 per cent. A full coverage of PNG debt should capture debt instruments with original maturities exceeding one year.²⁸ These are:

- Commercial bank loans (syndicated or other) for trade or project finance

²⁸ IMF, 1993. *Balance of Payments Manual* (Fifth Edition) (Washington, D.C., IMF).

- Loans from foreign companies to their branches, subsidiaries and associates for trade, project or business costs
- Commercial or development bank loans to financial institutions for on-lending to State and private enterprises
- Bonds, debentures, notes and certificates of deposits issued in international capital markets
- Trade credits covering suppliers' and buyers' credits
- Financial leases
- Financial derivatives

Some of these instruments do not lead to an inward remittance of funds to the country through the banking system but are used for making payments externally for the purchase of goods and services. This has implications for the collection of these data.

Short-term borrowings with maturities of up to one year are also made through several debt instruments such as:

- Short-term loans from foreign financial institutions for normal inter-bank transactions
- Loans from foreign companies to their branches, subsidiaries and associates for trade finance, working capital and other business costs
- Short-term loans from buyers abroad as export advances
- Letters of credit used to finance imports subject to deferred payments
- Imports on a consignment basis with payment made on acceptance of documents
- Money market instruments such as commercial paper, banker's acceptances, certificates of deposit and short-term notes with maturities of less than one year

- Financial derivatives including options, traded financial futures, warrants and currency and interest rate swaps
- Non-resident deposits²⁹

The collection of these data should not be confused with the compilation of data on medium- and long-term loans with a remaining maturity of less than one year. These should be collected through the procedures in place for public and publicly guaranteed and PNG debt.

A monitoring system that seeks full coverage of PNG debt requires either the prior approval of each credit or, when approval is not necessary, the registration and reporting of each credit to a central agency such as the central bank. It also calls for the reporting of transactions on a systematic basis to the same agency.

D. DATA COLLECTION ISSUES

The issues related to the collection of data on PNG debt need to address the spectrum of exchange control regimes in place in developing and emerging market countries. These range from capital controls that are strictly administered to fully liberalized capital accounts with the acceptance by the country of Article IV status with the IMF.

1. COUNTRIES WITH CAPITAL ACCOUNTS SUBJECT TO CONTROLS

Some PNG and short-term debt instruments listed in the preceding section would not be applicable in countries that operate a strict regime of controls, as it is unlikely that they access international capital markets or have stock markets operations. The regulations of the central bank should require borrowers to obtain the approval of the exchange control authorities for foreign borrowing, though not all categories are applicable to the country.

²⁹ India allows these deposits for periods of up to three years. They should be moved to the PNG category when the period exceeds one year.

The approval provides the opportunity to obtain all the basic loan details that are required for an effective monitoring system. The approval of the borrowing and subsequent debt service payments could be made contingent on the submission of data on loan transactions on a periodic basis to the central bank as required by the monitoring system. The capture of this information would enable the central bank to build up a complete database on PNG debt. Central banks are known worldwide for their reluctance to share information with other government agencies including ministry of finances. It may be possible for the ministry of finance to accept this restriction provided that the bank supplies the Ministry with aggregate data on the stock of PNG debt and the actual and forecast debt service payments.

Recent country experience has shown that foreign direct investment (FDI) may include short- and long-term loan capital in developing countries. In these instances, it is necessary to coordinate approvals and monitoring of FDI with those required for PNG and short-term debt. This would ensure that there was no double counting and all the loans included in FDI were captured in the loan database. Approval of FDI and approval and/or monitoring of PNG debt are the responsibility of the board of investment and the central bank respectively. Coordinating the approval procedures for FDI with the central bank is critical for monitoring PNG debt.

2. COUNTRIES WITH LIBERALIZED CAPITAL ACCOUNTS

Problems in data collection arise when countries begin to liberalize their capital accounts and move away from strict controls. The debt instruments to be covered are complex, and the right of Governments and central banks to information on the full extent of PNG debt that is necessary for macroeconomic management should not be sacrificed due to liberalization. IFIs should recognize that liberalizing capital controls does not imply that countries should give up the right to full information on the extent of PNG debt, although the responsibility for servicing this remains the responsibility of firms making the borrowings.

The regulatory regime requires that central banks have adequate supervisory powers to ensure that all financial institutions report foreign exchange receipts and payments to enable the capture of information on foreign borrowings and their servicing. The current reporting format may not provide adequate detail, and modifications may be necessary to obtain the data required by the debt monitoring system. Much of this is now reported electronically, and over time the system should provide up-to-date information faster.

Unfortunately not all loan transactions pass through the financial system. As manufacturing and business establishments develop and become more internationalized, their overseas business operations (including investments and payments for goods and services) are financed by foreign borrowings that are not channeled through the domestic financial system. Information obtained from the financial system should be supplemented with data from other sources.

Boards of investment and their monitoring systems should provide information on foreign borrowings by FDI projects to central banks. Coordination among these agencies would be required to ensure that the detailed information needed for debt monitoring can be obtained. This would ensure transparency in the approvals given to foreign investors by these boards and their subsequent follow-up as investments take place.

Complete coverage of PNG debt also requires reporting by borrowing firms – particularly those outside the financial sector. Direct voluntary reporting requires a degree of trust to be generated in order that the information is treated as confidential and used by the central bank for only analytical purposes. As a confidence building measure, the assistance of Chambers of Commerce and manufacturers and exporters associations should be sought to persuade firms to report periodically in the detail required. Central banks could use surveys to supplement the data collected through other avenues to fill gaps that may exist and obtain a complete picture of PNG debt. Initially, the sample may have to be larger until there is a greater degree of timely reporting made on a voluntary basis.

The enormity of the task of collecting accurate data on PNG debt should not be underestimated particularly when this component of external debt becomes larger than public and publicly guaranteed debt. Ministry of finances and central banks in countries with liberalized capital accounts do not have the same leverage to collect data from private firms as those under a regime of controls. Debt information collected should serve only policy or operational needs. Requests for PNG debt data should be combined with other requests, for example balance of payments or national income statistics, whenever possible.

Timely collection of meaningful data on short-term debt is not straightforward. Ideally, a country that wishes to monitor its short-term debt should obtain monthly information in aggregate for the various categories of short-term debt by maturity. A monthly breakdown of payments for these categories for the subsequent 12-month period would be useful for a country facing acute payment difficulties. In practice, the compilation of this information may prove difficult or impossible depending on the state of development of the banking system and its supervision by the central bank. Survey data are an alternative source but not helpful to a country facing a breakdown in payments due to delays in data collection by this method.

VII. RISK MANAGEMENT³⁰

A. INTRODUCTION

The OECD survey of government debt management structures in 2000 concluded that the main objective of public debt management should be to ensure that the financing needs of the public sector are met at the lowest possible cost while bearing an acceptable level of medium- to long-term risk. Sound debt management includes risk management practices to avoid building up unmanageable debt profiles. Governments should eliminate policies that encourage excessive risk taking by the private sector when possible. This is necessary in markets with a liberalized capital account, and the best practice is to monitor the overall external indebtedness of the private sector.

B. TYPES OF RISK

Risk is defined as the possibility of an unexpected variation in the level of debt service payments, with a lower tolerance of the borrower for an increase in costs. Risk management is the process by which the possibility of such variations is minimized within the constraints of the loan portfolio. Various types of risk are associated with a loan portfolio of a sovereign borrower, not all of which carry the same degree of vulnerability. They are market, rollover, liquidity, credit, settlement and operational risks.³¹ government debt managers face rollover and market risks, specifically interest rate and foreign exchange risks, more often than the others.

³⁰ Nihal Kappagoda, 2004. *Key Analytical Framework for Public Debt Management* (Geneva, UNITAR).

³¹ IMF and World Bank, March 2001. *Guidelines for Public Debt Management* (Washington D.C.); Graeme Wheeler, 2004. *Sound Practice in Government Debt Management* (Washington D.C., World Bank).

Market risk could arise from changes in interest and foreign exchange rates affecting the cost of debt service and the prices of commodities and other variables that have an impact on foreign exchange earnings and government revenue, which affect the ability to make scheduled debt service payments. Changes in interest rates affect debt service payments when fixed rate debt is refinanced or the rates are reset at the beginning of each interest period for variable interest rate foreign and domestic currency debt. Consequently, short-term or floating rate debt is considered riskier than long-term fixed rate debt. Debt denominated or indexed to foreign currencies adds volatility to debt service payments in terms of domestic currency due to possible changes in the exchange rate.

Rollover risk is the prospect that the debt falling due cannot be rolled over if continuing access to the same volume and currency of funds is required, or that it can be rolled over only at a very high cost. While a lower credit rating would increase the rollover risk for a sovereign borrower, the DMO has to deal with this risk within the constraints imposed by the maximum level of debt service that could be financed from the annual budget. The higher rollover costs, including higher credit spread, may result in the risk being classified as a market risk. The high costs or inability to rollover could trigger a crisis of different durations in both the domestic and external market, leading to economic dislocation in addition to the financial costs of higher interest rates. Hence this risk is treated separately and is important for emerging markets.

Liquidity risk is related to rollover risk and could arise principally for two reasons. First, unanticipated cash flow obligations or difficulties of short-term borrowing could lead to a sudden reduction in the volume of liquid assets such as foreign exchange reserves. This is important for the DMO as it involves the management of liquid assets or the use of derivative contracts. Second, liquidity problems could arise due to the costs or penalties that investors could face due to the exit of bond holders from the market resulting from a sudden loss of confidence or the market beginning to lack depth.

Credit risk is the risk of non-performance by borrowers on loans and counter-parties on financial contracts.³² This is important for the DMO when it includes the management of liquid assets as in liquidity risk, and could arise in securities auctions by the Government, contingent liabilities, and derivative contracts entered into by debt managers.

Operational risk covers a range of various risks such as those arising from transaction errors, failure of internal controls, legal risks, security breaches, risk to the reputation of the borrower, which is important for a sovereign borrower, and disasters affecting the normal business activity of the borrower.

Settlement risk covers the potential loss to the Government of a failure to settle by the counter-party for whatever reason other than default.

C. ESTABLISHING A RISK MANAGEMENT FRAMEWORK³³

A DMO should establish a framework for risk analysis and management based on the risks identified above. Given the technical nature of the task, the availability of staff with a capacity to undertake the activities that are required for minimizing risk to the country's loan portfolio is important. Consultancy assistance may be necessary initially while providing on-the-job training for the staff. The DMO should determine the Government's risk tolerances and take the following steps to establish a risk management framework covering all the risk that would be encountered:

- Identify the risks to the Government's portfolio against the investments being financed and the revenue flows that are expected in the context of the overall budgetary and balance of payments position.

³² The risk is that the other party in an agreement would default. In an option contract, the risk to the option buyer is that the writer would not buy or sell the underlying asset as agreed. Counter-party risk can be reduced by an organization with an extremely good credit rating acting as an intermediary.

³³ IMF and World Bank, March 2001. *Guidelines for Public Debt Management* (Washington D.C.); Graeme Wheeler, 2004. *Sound Practice in Government Debt Management* (Washington D.C., World Bank).

- Undertake risk analysis to assess the trade-off between the expected cost and the level of risk. Borrowers expect to pay higher interest charges for longer maturities and instruments that shift a greater burden of the risk to the lender. Conversely, investors expect lower returns on less risky investments. The analysis should also identify the costs and risks to the portfolio that corresponds to the chosen debt strategy of the Government.
- Select a portfolio that meets the Government's risk tolerance and the associated costs that would set a strategic benchmark for the DMO. It should be the portfolio with the lowest cost for an acceptable level of risk.
- Conduct the activities of the DMO based on the strategic benchmark as a guide, governed by the risk management policies and procedures that are set out in a manual for the guidance of the staff.
- Monitor performance in the middle office of the DMO and compare the Government's borrowing costs with other sovereign borrowers and the realized portfolio with the strategic benchmark.

1. STRATEGIC BENCHMARKS³⁴

A strategic benchmark is the composition of the portfolio of the public sector that represents its preferred structure and sets out characteristics such as the domestic and foreign mix in the portfolio, currency mix of the foreign segment, and interest and maturity structure. It enables the Government to clarify portfolio preferences in the face of conflicting objectives brought about by the various types of risk and costs.

Benchmarks for a government debt portfolio may be expressed as the minimum and maximum levels of acceptable risk exposure. These may be specified as:

³⁴ IMF and World Bank, March 2001. *Guidelines for Public Debt Management* (Washington D.C.); Graeme Wheeler, 2004. *Sound Practice in Government Debt Management* (Washington D.C., World Bank).

- The acceptable interest rate set as a target level or range and the ratios of fixed and floating rates of interest in the debt outstanding
- The desired currency composition with a breakdown of foreign and domestic currency debt and the currency composition within the foreign currency component
- The debt maturity profile expressed as a ceiling or a proportion of the debt outstanding that would mature at the end of each year

Strategic benchmarks may be set for the total portfolio of the Government though there may be separate benchmarks for the domestic and foreign currency components.

2. RISK MANAGEMENT

Assets and liabilities arising from borrowings change in value when the projected cash flows from investments are sensitive to movements in interest and exchange rates and commodity prices. Changes in these variables affect the value of the actual and benchmark portfolio. This changes the correction that is required to bring the actual portfolio in line with the benchmarks.

Governments should establish guidelines for managing risk in the loan portfolio on the basis of the strategy adopted by the DMO for achieving its stated objectives. These guidelines should be in the public domain, and Governments should publish their borrowing plans well in advance of market entry and remove distortions in the market to ensure equal treatment of different types of investors.

Appropriate models should be used to quantify the costs and risks of alternative strategies adopted to manage risk by the DMOs. Debt management is a financial business that carries large exposures to market, credit and operational risks in countries that borrow in capital markets extensively. The staff of the DMOs needs a combination of portfolio expertise and an understanding of the risk management culture required for a sovereign borrower. A sound risk monitoring and control environment should exist in the DMOs to reduce operational risk that is vital for a sovereign borrower.

A performance measurement system is necessary to assist the staff of the DMOs to manage risks that are controllable by providing feedback on the quality of decisions made. This would enable the staff to appreciate the nature and magnitude of the impact of the discretionary decisions made.

Market risk can be managed by identifying the preferred range of the currency composition and maturity profile and taking action to move the actual portfolio closer to the benchmarks. These ranges are determined using financial models based on simple to complex software. Countries beginning to assess risk should start with simple models.

The management of interest rate risk requires that the maximum ratio of floating to fixed interest rates and the average minimum maturity of each currency is affordable within the constraints of the budget and balance of payments. Foreign exchange risk could be minimized by matching, to the extent that is possible, the currencies of debt service payments and the revenue stream that would be available to make them. This may require central banks to earmark foreign exchange earnings in the main currencies of debt service for these payments, though such micromanagement may not be practical even if it is theoretically possible.

Rollover risk can be managed by specifying an acceptable maturity profile and degree of rollover risk for the portfolio in a single year. Policies could be adopted to limit the amount of debt maturing in any one year or to reduce the portfolio concentration on short-term debt by setting ceilings for ratios of short-term or floating rate debt to total public sector debt. The currencies and instruments in which DMOs can undertake transactions should be specified.

Liquidity risk can be managed by policies that specify the minimum levels of foreign exchange reserves and the currencies and instruments in which these are held, and by setting a portfolio benchmark for investing this liquidity. A policy could be adopted to earmark reserves that are sufficient for debt service payments for a specified period and invest them in short-term instruments with a timetable that accords with the payment schedule. Liquidity levels for domestic debt may need to be established if the

Government is not assured of market access when liquidity is required and the market lacks depth.

Credit risk can be managed by establishing limits on the Government's exposure to counter-party risk through swap transactions or investment of liquid assets. The limits should be based on credit ratings assigned by sovereign rating agencies and market-to-market exposure of the position, type of instrument used and time to maturity. Credit risk to the Government can be reduced by these measures, but there may be a loss of income due to counter-party default that could have been avoided by more rigorous analysis.

Settlement risk can be managed by selecting suitable settlement banks, custodians, clearing brokers and fiscal agents and deciding on the maximum amount of exposure to a single institution. Clear settlement procedures that deal with the preparation, checking and authorization of debt service payments and transfers between bank accounts should be set.

Operational risk is managed by adopting policies to mitigate risks that threaten the continuity and reputation of Treasury operations by introducing governance practices and systems management principles. These should be transparent debt management objectives, a well-defined and clear delegation of authority, a system of checks and balances to support the organizational structure of the DMO, an effective MIS, and timely and focused reporting to the Minister of Finance and Parliament or the National Assembly.

3. RISK MANAGEMENT PRACTICES

A sovereign borrower should decide on the extent of risk that is acceptable in the loan portfolio. In making this choice, the debt manager faces a dilemma as reducing risk increases the effective cost of a borrowing programme and vice versa. It would depend on the strategy and characteristics of the foreign exchange receipts of the sovereign borrower and the income stream that would be available for debt servicing. In a period when floating interest rates move in line with crude oil prices, oil

exporting countries would find it advantageous to have higher shares of floating rate debt than countries with more stable foreign exchange income streams. The former would find a higher ratio of fixed rate debt more advantageous. A number of financial instruments, such as caps, collars, derivatives and hedges are available to limit large increases in debt service payments.³⁵ Like any form of insurance, these add to debt service costs. Ultimately, the choice has to be made after careful analysis, bearing in mind that the actual out-turn could be different from the forecasts and assumptions made.

Risk assessment should be performed by analyzing the impact of various economic and financial shocks to the economy using financial models that range from the simple to the complex. Debt managers should be cognizant of the fact that default by a government has implications beyond the government budget and that corrective action should not have a negative impact on risks faced by the private sector. Models used should enable the following analyses to be undertaken:³⁶

- Project long-term debt service payments based on assumptions of new financing, the maturity profile of the stock of debt, interest and currency composition of new debt, projections of exchange and interest rates, and non-financial macroeconomic and microeconomic variables that differ among countries.
- Develop a profile of key debt indicators, for example the share of short-term, foreign currency and floating interest rate debt in total debt outstanding, the currency composition of foreign currency debt, and the average maturity structure of debt of the existing and projected loan portfolios.

³⁵ Caps: convertible adjustable preferred stock whose adjustable interest rate is pegged to Treasury security rates and can be exchanged during the period after the announcement of each dividend rate for the next period for common stock with a market value equal to the par value of the CAPS. Collar: the lowest rate acceptable to a buyer of bonds or lowest price acceptable to the issuer. Derivative: instrument whose value is based on the performance of an underlying financial asset, index or other investment. Hedge: Strategy used to offset investment risk. *Barron's Dictionary of Finance and Investment Terms*, 1995. J.Downes & J.E.Goodman.

³⁶ IMF and World Bank, March 2001. *Guidelines for Public Debt Management* (Washington D.C.).

- Estimate the potential increase in debt service costs that would arise from the assumed economic and financial shocks to the economy.
- Estimate the costs and risks of various strategies for managing the Government's portfolio to enable decisions on future financing options to be made.

The risk management practices of developed countries differ from those of emerging markets, providing lessons on what can be achieved in the long-term. Countries with well-developed domestic capital markets and easy access to international capital markets for government securities tend to focus on market risk as defined above and often use complex models to measure this. Emerging markets have less-developed domestic capital markets and only limited access to international capital markets and should give higher priority to rollover risk in their risk analyses.

Two approaches are possible for debt managers in a country where financial markets are well developed. One is to decide periodically on a debt structure to guide future issues of government securities. The other is to set strategic benchmarks for a debt profile to guide the day-to-day management of the government loan portfolio. The difference between these approaches is the extent to which debt managers operate in capital markets to meet the various elements in the strategic benchmarks. The former approach is not applicable to emerging markets with less-developed domestic capital markets or limited access to international capital markets, as the opportunities for market action are limited. The adoption of strategic benchmarks is a key risk management instrument and provides an important signal to the market as it indicates the Government's preference of a structure for its loan portfolio and allows policymakers to articulate and quantify the trade-off between costs and risks.

Some sovereign borrowers, such as Sweden, maintain complex benchmark portfolios while others, such as Finland, adopt a simpler structure. The choice often depends on the capacity and preferences of policymakers and debt managers. The issue of securities is guided by both strategic considerations and market conditions, and it is not always

possible to tailor the new issue to the chosen benchmark. Risks that arise as a consequence can be reduced by the issue of financial derivative instruments. Currency and interest rate swaps are widely used to stabilize the volatility of exchange and interest rates. Some countries use these instruments extensively but like any form of insurance, it adds to the cost of debt servicing. There are cost limits beyond which attempting to make the loan portfolio approximate the debt benchmark becomes prohibitive.

The cost of derivatives rises progressively as a country moves down the ladder for sovereign ratings. A sub-investment grading limits the choice of swap counter-parties, leading to additional costs and risks. Technical skills – which are in short supply in many emerging markets – are required for dealing in derivatives. Accordingly, the best and most viable operating principle should be the simplest.

VIII. USE OF DEBT INDICATORS FOR DEBT SUSTAINABILITY ANALYSES³⁷

A. INTRODUCTION

The debt sustainability of a country is its ability to service its foreign public and publicly guaranteed and PNG debt including all short- and long-term debt without compromising its long-term goals and objectives. Countries estimate sustainable levels of borrowing using relevant debt indicators and benchmarks derived from inter-country studies. The ability of a country to service debt depends on the existing debt burden and the projected deficits of the balance of payments and budget, the mix of loans and grants in future financing arrangements, the build-up of its repayment capacity relative to the gross national income (GNI),³⁸ exports of goods and non-factor services (XGS), and government revenues. The quality of the country's policies and institutions and exogenous shocks to the economy also influence its ability to service debt.

When judging debt service problems it is useful to distinguish those of liquidity from insolvency. Solvency problems lead to liquidity constraints in countries as capital flees the country, while liquidity problems could arise even without solvency concerns. It is difficult to extend the concepts of solvency and liquidity to a sovereign borrower as it is not easy to measure the net worth of a country. Some countries that have attempted balance sheet budgeting could apply these concepts, but they are not many. In view of this, creditors and investors use a country's debt indicators to judge its liquidity and solvency problems. Along with debt indicators there are non-debt indicators that enable a comprehensive assessment of a country's solvency and liquidity to be made.

³⁷ See note 21.

³⁸ GNI is the gross domestic product plus the income arising from activities of residents overseas less the income accruing to foreign residents from activities in the country.

B. DEBT INDICATORS

Commonly used external debt indicators can be classified into five groups. They are liquidity monitoring, debt burden in nominal and net present value (NPV) terms, debt structure and dynamic indicators. There are fiscal indicators that correspond to some of these. The different external debt and fiscal indicators are listed and described below.

1. EXTERNAL DEBT INDICATORS

The following are liquidity monitoring ratios:

- The debt service ratio is the proportion of XGS that is absorbed for interest, principal and other related external debt service payments and refers to only medium- and long-term debt, including repurchases from the IMF. It covers all loans with an original maturity of one year or more.
- The interest service ratio is the ratio of interest payments to XGS.
- The short-term debt ratio measures the proportion of XGS that would be absorbed if all the external debt outstanding with an original maturity of one year or less at the end of the preceding year is paid without rollover.
- The total debt service ratio is the proportion of XGS that is absorbed for external debt service payments on short-, medium- and long-term debt.

The following are debt burden ratios:

- The total external debt outstanding to GNI ratio compares the amount of the external DOD to the size of the economy.
- The total external debt outstanding to XGS ratio measures the ability of the country to repay its external DOD from earnings on XGS in a single year.

- The public debt outstanding to GNI ratio compares the total public DOD to the size of the economy.

The following are debt structure indicators:

- The rollover ratio compares principal repayments to disbursements and could be estimated separately for short-term and long-term debt.
- The short-term debt to total DOD ratio measures the vulnerability of a country's debt situation resulting from its debt structure.

The following are NPV indicators:

- The NPV of debt service to GNI ratio compares the current cost of future debt service obligations to the overall level of economic activity in the country.³⁹ Only the current year's NPV is compared to the average GNI of the current and the preceding two years.
- The NPV of debt service to XGS ratio compares the current cost of future debt service obligations to the capacity of the country to generate foreign exchange receipts.⁴⁰ Only the current year's NPV is compared to the average XGS of the current and preceding two years.

The following are dynamic indicators:

- The ratio of the average rate of interest of the loan portfolio to the rate of growth of exports determines whether debt service is growing faster than exports.

³⁹ The NPV of debt is the stream of future debt payments discounted by a rate that represents the alternative cost of borrowing in financial markets. It captures the concessionality and term structure of the debt outstanding unlike the nominal value of external debt. The formula used for calculating the NPV of debt is:

$$NPV = C_1/(1+r) + C_2/(1+r)^2 + C_3/(1+r)^3 + \dots + C_n/(1+r)^n$$

Where NPV = the present value of future debt service payments; C_n = debt service payments in time period n ; r = discount rate and n = time period of the last debt service payment on the loan.

⁴⁰ IMF, 1993. *Balance of Payments Manual* (Fifth Edition) (Washington, D.C., IMF).

- The ratio of the average rate of interest of the loan portfolio to the rate of growth of GNI determines whether debt service is growing faster than the economy.

2. FISCAL INDICATORS

Fiscal indicators determine the impact of government borrowing on the budget and correspond to some of the external debt indicators defined above. The fiscal indicators commonly used are the:

- Ratio of domestic and foreign government debt service payments to government revenue
- Ratio of domestic and foreign government DOD to government revenue
- Ratio of the NPV of government debt service to government revenue
- Ratio of the average rate of interest on government debt to the rate of growth in government revenue

3. USE OF INDICATORS FOR DEBT ANALYSIS

Judging debt sustainability using debt indicators raises a number of conceptual issues. These relate to:

- Types of debt that should be included in debt stock and debt service payments (the numerator in the debt ratios)
- Method used to measure the debt burden
- Repayment capacity (the denominator in the debt ratios)
- Choice of thresholds for the selected ratios

It has been argued that a comprehensive definition of debt should be used when the debt sustainability analyses are conducted.⁴¹ Those done under the HIPC Initiative are confined to only public and publicly guaranteed external debt, although domestic debt is a serious concern in many low

⁴¹ Matthew Martin, 2004. *Assessing the HIPC Initiative: The Key Policy Debates, HIPC Debt Relief: Myths and Reality* (The Hague, FONDAD).

income countries. Although the domestic debt market may be in the early stages of development, government arrears and central bank and commercial bank overdrafts could be significant. Similarly, private sector external debt could be considerable in countries that have liberalized their capital accounts and received FDI, as much of the investment is financed by debt rather than equity. Debt sustainability analyses of public and publicly guaranteed external debt may provide only a partial assessment of a country's debt sustainability.

Three measures of debt burden are normally considered when debt sustainability is assessed. They are:

- Nominal stock of debt expressed in a single currency, typically the United States dollar
- Stock of debt measured in NPV terms by discounting the future stream of debt service payments by a series of discount rates relevant to the principal currencies in which the country borrows
- Annual or multi-year payments due on debt service

The nominal stock of debt and debt service payments were the preferred measures of debt burden until the early 1990s after which the World Bank, IMF and Paris Club began to use the NPV of debt.

Current debt service ratios are indicators of the present debt service position. However, low current ratios may mask future problems of high debt stock due to grace periods and long repayment periods. The NPV of debt is able to capture the concessionality of outstanding debt obligations but does not take into account the growth in repayment capacity that would be captured by projections of debt service ratios. Therefore, projections of debt service ratios need to be reviewed.

As stated earlier, the GNI is also used to measure the capacity to make debt service payments and estimate debt indicators. It measures the size of the economy but does not translate into a capacity to pay. Export earnings, on the other hand, are available to make debt service payments, but their availability to the Government is dependent on the openness of the economy. The usefulness of export earnings as a measure

of the capacity to make debt service payments would also depend on the scope of debts included in the stock of debt, that is, total external debt or public and publicly guaranteed external debt.

Government revenue is a third measure for estimating the capacity to repay government and public and publicly guaranteed debt. The World Bank and IMF have argued against this for two reasons. The first is that there are difficulties in its estimation. There is no rationale for this argument when the GNI estimate (which would suffer from some of the same problems of estimation as government revenue in any country) is found acceptable. Further, government revenue is a variable that is monitored in IMF programmes, and countries would be working towards improvements in estimation. The second reason is that a moral hazard argument is advanced against the use of government revenue, as lower revenue collections would lead to higher estimates of the debt indicators. A similar argument was made against the use of government revenue in the HIPC Initiative.

It is necessary to select indicators for determining a country's indebtedness and estimate threshold values for each. After the debt crisis of 1982 the World Bank classified countries as highly indebted, moderately indebted and less indebted using four external debt indicators – the nominal stock of external debt to GDP and XGS ratios and the debt service and interest payment ratios. The nominal stock of external debt was replaced by the NPV of external debt service in the two stock indicators in the early 1990s. The World Bank based the threshold values for the classification of indebtedness on inter-country debt analyses. These are set out in Table I.

TABLE I. CRITICAL VALUES OF EXTERNAL DEBT INDICATORS

Indicator	Highly Indebted	Moderately Indebted	Less Indebted
1. DOD/GNI	> 50 %	>30% and < 50%	<30 %
2. DOD/XGS	>275%	>165% and < 275%	<165%
3. TDS/XGS	>30%	>18% and <30%	<18%
4. INT/XGS	>20%	>12% and < 20%	<12 %
5. NPV/GNI	>80%	>48% and <80%	<48%
6. NPV/XGS	>220%	>132% and < 220%	<132 %

Source: World Bank, 2004. *Global Development Finance* (Washington, D.C., World Bank).
Notes: INT represents interest, TDS represents total debt service.

Other useful indicators of indebtedness in countries where domestic debt is a major component of government debt are the ratio of government debt service on domestic and external debt to government revenue, and government debt outstanding or the NPV of government debt service to government revenue.

C. VULNERABILITY INDICATORS

There are other indicators that supplement the analyses using external debt indicators, enabling a more comprehensive assessment of the country's ability to cope with future debt service problems. The indicators of vulnerability frequently used are:

- The concentration of exports, that is, the percentage share of the main export and the three main exports in total exports. This provides a measure of export diversity and the extent to which the country is reliant on a narrow range of products. A lower diversity results in a greater volatility of exports.

- The variability of exports, that is, the standard deviation of export values over the most recent 10-year period for which information is available as a percentage of the average level of exports. This provides a measure of the extent to which export earnings fluctuated over this period.
- The current account deficit, excluding interest and net official transfers, as a share of the gross domestic product (GDP).⁴² This provides a measure of the extent to which the country would continue to be reliant on external resources even if its debt service burden were eliminated.
- The foreign exchange reserves coverage, that is, the proportion of usable reserves to the annual level of imports of goods and services in the most recent 12-month period for which statistics are available. Higher import coverage indicates a greater capacity to cope with adverse shocks to the economy.
- The short-term indebtedness ratio, which compares the level of short-term debt outstanding to usable foreign exchange reserves. This is a better indicator of the vulnerability of a country's capacity to cope with a withdrawal of short-term credit facilities.
- Aid dependency – the extent of reliance of the current account deficit on net official financing. A higher figure indicates less exposure to volatility in private capital flows but greater sensitivity to the terms of official financing including policy conditionality.
- The fiscal burden as determined by the ratio of total government debt service to government revenue and expenditure, and the ratio of tax revenue and foreign grants to GDP. The higher the ratio of government debt service, the lower the flexibility of the government to respond to adverse shocks. Higher ratios of tax revenue to GDP (and less reliance on grants) are an indicator of a more developed tax base, which should enable the Government to respond to adverse shocks effectively.

⁴² IMF, 1993. *Balance of Payments Manual* (Fifth Edition) (Washington, D.C., IMF).

- The policy track record of the Government, which is an indicator of the stability of future official financing and private flows and the ability to undertake policy adjustment.

While external debt and fiscal indicators provide guidance on the medium- and long-term sustainability of public sector borrowings, they are not useful in forecasting debt service difficulties arising from short-term balance of payments problems. Forecasts of liquidity shortages require the use of indicators that are related to the level of foreign exchange reserves. This brings up issues related to the definition of foreign exchange reserves, the indicators of reserve adequacy that are useful in forecasting financial crises and the benchmarks that could be used by countries for the chosen indicators.

The foreign exchange reserves coverage and the short-term indebtedness ratios are two indicators that could provide warnings of impending crises to policymakers if statistics are available in a timely manner. Foreign exchange reserves are defined as external assets that are readily available to monetary authorities for the direct financing of external payments.⁴³ Lines of credit could be added to reserves if they are available on demand without material conditionality. Any payments that may arise due to an impending crisis should be netted out of the available reserves.

The number of months a country can continue to support its current level of imports of goods and services if all other inflows and outflows cease is the indicator of reserve adequacy that has been used by developing and emerging market countries. This focuses on the current account of the balance of payments and is more relevant for countries that have liberalized transactions in only the current account and have limited access to capital markets. The IMF has suggested a minimum level of 3 to 4 months of imports of goods and services as a benchmark for these countries.

Since the financial crises of the 1990s there has been a greater focus on comparing the level of reserves to short-term external debt. This is more relevant to countries that have liberalized their capital accounts and have

⁴³ IMF, March 2002. *Debt and Reserve Related Indicators of External Vulnerability* (Washington, D.C., IMF).

significant but uncertain access to capital markets. The level of short-term debt estimated for this indicator is estimated by the remaining maturity and not the original maturity.⁴⁴ It includes short-term debt with an original maturity of less than one year plus amortization on medium- and long-term debt falling due in the next year. The definition of external debt is comprehensive and includes all debt to non-residents – the non-equity elements of external liabilities – regardless of the currency of both the private and public sectors.⁴⁵ The IMF has suggested a benchmark of one for this indicator.

This chapter surveyed a range of external debt, and fiscal and vulnerability indicators. Countries should select the indicators that are most appropriate for their needs to assess both short-term vulnerability and medium- to long-term debt sustainability. Benchmarks should be set for the selected indicators and efforts made to estimate them promptly to meet the needs of policymakers. The benchmarks set should be reviewed periodically and adjusted based on country experience.

⁴⁴ Uri Dadush, Dipak Dasgupta and Dilip Ratha, December 2000. "The Role of Short-Term Debt in Recent Crises" in *Finance and Development*, December 2000, Vol. 37, No.4 (Washington, D.C., IMF).

⁴⁵ See note 6.

IX. DEBT RESTRUCTURING⁴⁶

A. INTRODUCTION

Debt relief in the format currently being implemented had its origins in the mid to late 1950s. In May 1956 Argentina asked creditors for assistance in financing bilateral clearing accounts, which was a mechanism used to finance trade between two countries without payment in convertible currencies, and creditors agreed to negotiate collectively.⁴⁷ Turkey requested a consolidation of arrears on short- and medium-term commercial credits in the late 1950s. The OECD, which was coordinating Turkey's international efforts to mobilize resources, called a conference that restructured these credits in May 1959. Argentina asked Governments of creditor countries for debt relief on a bilateral basis, as they were unable to service medium-term suppliers' credits again in 1961. Brazil did so for the first time in the same year, since most of the affected credits had been guaranteed or insured by export credit agencies in creditor countries. Creditor Governments again agreed to negotiate collectively.

These debt relief arrangements were the precursor to the multilateral arrangements that evolved and exist today. The procedures developed for negotiations with Argentina and Brazil formed the basis of the Paris Club (an ad hoc organization of creditor countries), established to deal with requests for debt relief on loans from and guaranteed or insured by creditor Governments and their agencies.⁴⁸ All debt to official creditors are rescheduled and restructured exclusively through the Paris Club.

Debt to commercial banks is negotiated with an advisory committee of banks. This evolved from negotiations held between the Philippines and

⁴⁶ See note 21.

⁴⁷ Thomas Klein, 1994. *External Debt Management: An Introduction*, *World Bank Technical Paper* No. 245 (Washington, D.C., World Bank).

⁴⁸ The aid consortia for India and Pakistan were used in the late 1960s and early 1970s to arrange debt relief but this has been discontinued.

its commercial bank creditors in 1970. The forum that has evolved is referred to as the London Club, as many of the meetings take place in London. The first held there was in 1976 to discuss Zaire's debt service problems with commercial banks.

Loans from multilateral organizations such as the World Bank and regional development banks are not subject to debt relief since participation in debt reorganization would affect their ability to raise funds in international capital markets. Suppliers' credits that are not insured and debt to Governments that do not participate in the Paris Club have to be negotiated bilaterally with each concerned country.

Multilateral debt relief was provided initially to alleviate temporary balance of payments problems caused by debt servicing difficulties, and obligations falling due were rescheduled over short periods of time. Longer repayment periods were provided in the 1980s and multi-year rescheduling agreements also became common. By the late 1980s, it became evident that this was not adequate to tackle the problems caused by the debt overhang in many of the affected countries. This led to many international initiatives for debt reduction. In 1996, a new debt relief scheme – the HIPC Initiative – was launched by the IMF and World Bank. It was intended to resolve the debt problems of the most highly indebted poor countries. There were 41 countries originally with the majority being in Africa.

B. THE PARIS CLUB

The Paris Club is an informal voluntary group of creditor countries mainly from the OECD. It is not an international organization. Its "permanent" members are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, Norway, Spain, Sweden, Switzerland, the United Kingdom and the United States of America from the OECD, and the Russian Federation, which joined in 1997. Other OECD members do not participate as they have not extended a significant amount of credit to the countries that are seeking debt relief. Non-OECD countries may participate on a case-by-case basis depending on the extent

of their official and officially guaranteed lending to the country. The Republic of Korea, New Zealand, Portugal and South Africa have participated in some meetings. International organizations such as the World Bank, IMF, UNCTAD and the regional development banks may also attend these meetings.

The ministry of finance in France provided the facilities for meetings from the beginning, and the French Treasury a full-time secretariat since 1974. The meetings are chaired by a Treasury director or deputy. Since France is a member of the Group of Eight – at whose meetings many of the debt policy decisions are made – and a major creditor, the Paris Club secretariat is able to translate these decisions into debt restructuring practices and implement them.

Member countries are represented by staff of ministry of finances and representatives of organizations such as export credit agencies. The borrower country seeking debt relief is normally represented by the Minister of Finance, Governor of the central bank or other senior official.

1. BASIC PRINCIPLES

The four basic principles that underpin the operations of the Paris Club are the threat of imminent default, conditionality, equitable burden sharing and decision making by consensus, which are described as follows:

- The critical test of imminent default is the existence of an unfilled financing gap in the country's balance of payments (projected over several years) after all possible corrective action has been taken. If the identified resources are less than the projected requirements, a prima facie case of imminent default exists. Sometimes external payments arrears may have accumulated before a programme is formulated, thereby providing the evidence of default.
- Appropriate conditionality embodied in an economic reform programme to respond to the balance of payments difficulties is needed before the Paris Club agrees on debt relief. This is achieved by negotiating a formal or shadow programme with the IMF prior to making the request to the Paris Club. The consolidation period for

debt rescheduling generally coincides with that of the IMF programme.

- All creditor countries must provide debt relief commensurate with their financial exposure to the debtor country to ensure equitable burden sharing. This is the most complicated aspect of the Paris Club negotiations. In addition to negotiations with the Paris Club, the debtor Government has to deal separately with multilateral institutions, official creditors who do not participate in the negotiations, and private creditors, in particular commercial banks. As stated, multilateral institutions do not reschedule debt but continue to lend support for the economic reform programme. The debtor Government needs to negotiate broadly comparable terms with all creditors who are not represented at the Paris Club. Negotiations with commercial banks are the most difficult aspect of the package.
- The principle of consensus requires that all creditor Governments accept the terms of the rescheduling agreement. A consensus must be achieved among creditors at every stage of the negotiations, that is, on the terms of the initial rescheduling offer and every subsequent stage. It cannot be done on the basis of a simple majority.

2. PROCEDURES

The negotiating process begins when the debtor requests a meeting of the Paris Club by submitting a memorandum describing the recent economic developments, adjustment measures undertaken, balance of payments outlook, schedule of debt service payments with a breakdown by creditor and a debt relief request. The meetings of the Club on each request last one or two days.

The Agreed Minute signed at the conclusion of the negotiations sets out the parameters for rescheduling, except for the moratorium rate of interest, which has to be negotiated bilaterally. To implement the Agreed Minute, the terms of rescheduling, including the moratorium rate of interest, should be set out in agreements concluded with each creditor country within

a time period specified in the Minute.

The Affected Debt covered in a Paris Club negotiation is the medium- and long-term debt of a sovereign borrower, its agencies and political subdivisions that have been extended or guaranteed by a creditor Government participating in the Paris Club negotiations.

The first time a borrower meets with the Paris Club, a cut-off date is established to determine the extent of the commitments (agreements signed) that should be included in the negotiations. Generally this date is 6 to 12 months before the date of the Paris Club meeting, though there are instances when the dates are set closer.

A standard Paris Club agreement deals with debt flows during a specified period – the consolidation period – as it is expected to deal only with temporary balance of payments difficulties. All payments falling due during this period would be aggregated and dealt with on terms specified in the Agreed Minute and subsequent bilateral agreements. This is usually for one year during which an agreement with the IMF is in force. Longer consolidation periods have been agreed upon when there have been multi-year agreements with the IMF.

There have been instances when the Paris Club dealt with the entire stock of debt to assist sovereign borrowers to exit from their debt problems. This was done with the HIPC's and in a few other instances when the creditors were confident that the borrower would fulfil the conditions necessary to exit from its debt service problems.

3. PAYMENT TERMS

Two aspects of the terms of Paris Club agreements that evolved to produce agreements leading to sustainable levels of debt service payments are:

- The lengthening of the terms of repayment. In early agreements the repayment period did not exceed 10 years including a grace period during which only interest payments on the consolidated debt were due. For low income countries, the period was later increased to 23

years including a grace period of 6 years for loans on commercial terms, and 40 years including a grace period of 16 years for debt classified as official development assistance (ODA).

- The willingness of creditors to cancel debt instead of extending the periods of repayment. The most significant development in this regard has been the HIPC Initiative.

There are four types of terms that apply today. They are the standard or classic, Houston, Naples and Cologne terms. The standard or classic terms apply to any eligible debtor that can establish a need for debt relief to the Paris Club. The terms include rescheduling of debt service payments falling due during the consolidation period over 10 years with a grace period of up to 5 years and moratorium interest payable at an appropriate market rate. These terms now apply to middle income countries that do not qualify to receive the terms described in the following paragraph.

In 1990 the Houston terms were applied to severely indebted lower middle income countries. These included the repayment of consolidated ODA debt over 20 years with a maximum grace period of 10 years. Consolidated non-ODA debt is repayable over 15 years including a maximum grace period of 8 years. They also provided for debt swaps – debt for nature, equity and development. The Agreed Minute makes provision for these on a voluntary basis, to be decided upon and set out in bilateral agreements with ceilings imposed on the percentage of outstanding claims that each creditor could undertake as debt swaps. The ceiling is set to ensure comparable treatment of creditors.

The terms offered to the highly indebted low income countries were improved in 1988 (Toronto terms), 1991 (London terms) and 1994 (Naples terms). These resulted in achieving debt reductions of 33, 50 and 67 per cent respectively by canceling non-ODA credits by these levels and extending repayments on ODA credits. Under the Toronto terms, the repayments were made over 25 years including a grace period of 14 years. The period increased to 40 years including a grace period of 16 years and progressively increasing repayments under the Naples terms. The terms also permitted debt swaps.

Under the HIPC Initiative, a debt reduction of 80 per cent was permissible for eligible countries. The Lyon terms provided for a debt reduction of 80 per cent of non-ODA debt and repayment of ODA debt as in the Naples terms. These were replaced by the Cologne terms adopted in 1999, which provided for a debt reduction of 90 per cent or more if necessary. The Cologne terms also permitted debt swaps.

C. THE LONDON CLUB⁴⁹

1. OVERVIEW

As stated earlier, the London Club began in the 1970s with restructuring the commercial debt of the Philippines and Zaire. The participants in the London Club are the sovereign debtor and the Bank Advisory Committee (BAC) consisting of 10 to 15 members representing all the creditors. It is typically chaired by the largest creditor and contains a representative cross section of creditors from across various tax and regulatory regimes. In many instances the Committee membership consists of banks, but more recently it has included non-bank creditors such as fund managers who hold sovereign bonds. Each London Club meeting is set up at the initiative of either a particular debtor or its group of creditors and is dissolved when the restructuring agreement is signed. Given the ad hoc nature of the London Club, other procedures can be established to deal with specific country situations. Examples of these are the debt restructuring agreements that were negotiated following the crises in Brazil, Indonesia, the Russian Federation and Thailand in the second half of the 1990s.

2. PROCEDURES

The negotiating process begins when the debtor announces that it is unable to meet debt service obligations, and payments would not be made after a stipulated date, triggering the process with the debtor forming a negotiating team with or without the assistance of outside advisors. The

⁴⁹ Renegotiations with Commercial Creditors: The London Club. UNITAR Training Course on the Negotiation of Financial Transactions, September 2003.

team, which includes legal counsel, develops the strategy for the negotiations. The preparatory work includes the collection and detailed analysis of all debt data. The Information Memorandum prepared covers:

- Recent economic and financial developments
- Details of adjustment policies and IMF programmes adopted
- Fiscal projections with details of revenue and expenditure
- Balance of payments projections
- Profile and projections of debt service payments
- Projections of external financing requirements to place the debt restructuring in perspective

The debtor should start discussions with the creditors through a committee structure. In some instances the banks take the initiative to form a committee referred to as the Bank Steering Committee, as opposed to a BAC. It is important for the debtor that the BAC is representative of its exposure, sympathetic to its needs and able to give advice on the terms that would be acceptable to the majority of banks. The BAC normally operates through subcommittees for economic issues and debt reconciliation.

The London Club restructures debts that are medium- and long-term external debt extended by commercial banks and financial institutions to the Government, its political subdivisions and their agencies, and external debt that has been guaranteed by these bodies. Short-term trade credit is usually excluded from these deliberations.

The final agreement is drafted in two stages. First, the Heads of Terms, or the term sheet, which identifies the clauses to be included in the final agreement and the main points to be addressed, is drafted. This is used by the BAC to consult non-member creditors to enable them to assess the impact of the agreement on their outstanding credits. At the second stage, the complete agreement is drafted based on the Heads of Terms. Following this the debtor and the BAC conduct a "road show" to sell the agreement to the remaining creditors. Usual practice requires that creditors

holding 90 to 95 per cent of the outstanding debt accept the agreement before it comes into force and implementation begins.

D. COMPARISON OF THE PARIS AND LONDON CLUBS

There are some similarities between the Paris and London Clubs. They are both informal organizations that do not have the status of international institutions. The Paris Club is more formal to the extent that it is serviced by a full-time secretariat from the French Treasury. All “permanent members” of the Paris Club (unless they have no exposure or are *de minimis*, that is, have only a very small exposure to the country) and country-specific creditors participate in the meetings. The London Club creditors are represented by members of the BAC. Similar principles – those of a case-by-case approach, imminent default, burden sharing and conditionality, an adjustment programme and IMF agreement – apply to both.

Unlike the Paris Club, where the provisions of the Agreed Minute apply to all creditors, the agreement between the debtor and the BAC is “an agreement in principle”. The agreement is signed and implemented when all or a critical mass (made up of 90 to 95 per cent of outstanding exposure) of the non-participating creditors accept it. No separate agreements have to be negotiated with individual creditors as in the Paris Club. Due to the multitude of commercial creditors, obtaining their agreement could take a long period of time.

The scope of operations of the London Club enables it to consider restructuring the country’s existing commercial debt and the terms of new lending. Concerted lending supplemented by debt relief is offered by the London Club, but this is less common now. It also offers multi-year relief. The Paris Club tends to offer shorter consolidation periods, that is, one year except in the case of countries eligible to receive assistance under the HIPC Initiative. The London Club offers the same range of instruments as the Paris Club, which is debt rescheduling, buybacks, exchanges and write-offs.

Commercial bank agreements restructure principal but consolidating interest is rare, unlike with the Paris Club. The consolidation of short-term debt is excluded by both unless it forms a significant proportion of arrears when there is no option but to restructure. The interest on rescheduled debt is the market rate as in the original agreements. The Paris Club maintains the concessionality of its original lending.

There is no link between the two institutions and no prescribed chronology for seeking debt restructuring for countries that need to negotiate with both Clubs. The Agreed Minute of the Paris Club stipulates that comparable treatment should be obtained by the debtor from all creditors without any mechanism to enforce it.

E. THE HIPC INITIATIVE

The HIPC Initiative was launched in 1996 and enhanced in 1999 to address the debt problems of the world's poorest countries. The basic premise underlying the Initiative was that these countries would benefit from a reduction in the DOD to sustainable levels, that is, levels at which they would be able to meet their current and future debt service obligations without recourse to restructuring and/or accumulating arrears. The international community agreed to support the Initiative on condition that the affected countries undertook IMF and World Bank monitored programmes of macroeconomic stabilization, structural adjustment and poverty reduction.

1. PRINCIPLES AND ELIGIBILITY

The Initiative is intended to assist HIPCs that have demonstrated a good record of implementing sound economic policies by reducing their stock of external debt. These countries should work with the IMF and World Bank to implement stabilization and structural reform programmes. The resources that are freed up should be allocated to social sector programmes, primarily health and education. The Initiative should build on the existing debt relief mechanisms of the Paris Club and include all the

concerned creditors. The preferred status of the multilateral creditors should be maintained, and new external finance provided should be on concessional terms. The goal of the Initiative is to ensure that eligible countries are able to achieve sustainable levels of debt and exit from repeated rescheduling.

The criteria for receiving assistance through the Initiative are that the country:

- Is unable to achieve a sustainable external debt position after the application of existing debt relief mechanisms
- Is eligible to receive assistance from the International Development Association (IDA) and the IMF's Poverty Reduction and Growth Facility
- Has established a good track record of implementing IMF and World Bank adjustment and economic reform programmes

2. THE HIPC PROCESS

The two milestones for the Initiative are the decision point and completion point. The decision point is reached when a country is judged to be eligible to receive assistance following a good three-year record of reform programmes and economic performance with support from the IMF and World Bank. During this period, the country receives assistance from the traditional bilateral and multilateral donors and debt relief from the Paris Club based on the Naples terms, which provide a 67 per cent stock of debt reduction in NPV terms. At the decision point, the amount of debt relief necessary to bring the external DOD to XGS ratio down to 150 per cent at the completion point is estimated and will be made available. This target is subject to other qualifying thresholds of exports to GDP of 30 per cent and government revenue to GDP of 15 per cent. The completion point is reached following a further period of implementing IMF and World Bank monitored programmes.

At the completion point the country is assessed for additional assistance that may be required due to exogenous shocks or changes in market conditions of interest and exchange rates and may become eligible

to receive funds from an additional topping up facility. In small economies that are highly open (with an exports to GDP ratio of at least 30 per cent) and that are making a strong fiscal effort (with a government revenue to GDP ratio of at least 15 per cent), an alternative debt sustainability target of 250 per cent was set for the ratio of external DOD to government revenue. This opens up a fiscal window for estimating the assistance required.

The HIPC Initiative is confined to external debt. It is necessary to estimate the debt stock to XGS or debt stock to government revenue ratio to determine eligibility. The NPV of debt for all public and publicly guaranteed external debt is used for deciding eligibility, as it is a better measure than the nominal value of the stock of debt and takes the maturity structure and loan currencies of the portfolio into account. The other variable necessary for estimating the critical indicator used for determining performance is the three-year average of XGS. Similarly, when computing the NPV of debt to government revenue ratio, a three-year average of the latter is used.

On reaching the decision point, the qualifying country is expected to continue implementing IMF and World Bank funded programmes until the completion point, when it would receive the assistance that was deemed necessary at the decision point. The completion point is treated as “floating” to enable countries that implement the adjustment programmes effectively to reach this point as quickly as possible.

The assistance required is assessed on the country’s level of indebtedness. The principle of equitable burden sharing has to be followed and the preferred creditor status of the IFIs maintained. The latter is achieved by using the HIPC Trust Fund (made up of voluntary contributions by participating bilateral and multilateral creditors) to make the debt service payments when they fall due. The assistance provided is made up of the following:

- A reduction of 90 per cent or more in the stock of debt in NPV terms by Paris Club creditors
- Comparable assistance by other bilateral and commercial creditors

- Relief by multilateral creditors using the HIPC Trust Fund to make the debt service payments due to them

3. CURRENT STATUS

At the beginning, 38 countries – mostly low income countries in Africa – were judged to be eligible to receive assistance through the Initiative. Of these, 29 had reached the decision point by March 2006.⁵⁰ Of these, 18 reached the completion point. In September 2004, the IDA and IMF Boards agreed to extend the sunset clause by two years to the end of 2006 under the enhanced HIPC Initiative and to ring-fence its application to poor countries with unsustainable external debt based on end-2004 data. Four countries were added to the list of eligible countries based on this review. Three other countries that were also judged to be eligible for assistance through the HIPC Initiative declined the assistance.

Despite reaching the completion point, a country may be assessed for additional assistance that may be required due to exogenous shocks or changes in market conditions of interest and exchange rates. The country could become eligible to receive funds from the topping up facility if these factors have resulted in the debt indicators being higher than the intended thresholds. Therefore, creditors allow HIPCs to make submissions for topping up on a case-by-case basis justified by an analysis made at the completion point. This would include the impact of the changes set out above and unanticipated new borrowing when relevant.

F. MULTILATERAL DEBT RELIEF INITIATIVE

The Group of Eight countries approved a Multilateral Debt Relief Initiative (MDRI) in 2005 to enable the African Development Fund, IDA and IMF to cancel all debt outstanding to them at the end of 2004 from countries that had reached or would reach the completion point of the HIPC Initiative.

⁵⁰ IDA and IMF, April 2006. *HIPC Initiative – List of Ring Fenced Countries that Meet the Income and Indebtedness Criteria at End-2004* (Washington, D.C.).

The MDRI provides full debt relief from these three institutions and does not require parallel debt relief from other creditors.

Non-HIPCs with a per capita income of \$380 or less are also eligible provided they were current in their obligations to the IMF and demonstrated satisfactory performance in macroeconomic policies, implementation of a poverty reduction strategy and public expenditure management. Twenty countries – 18 HIPCs and 2 non-HIPCs – were judged to be eligible for MDRI assistance in January 2006. This was delivered to 19 countries, which included 17 HIPCs and 2 non-HIPCs. Other HIPCs, including the 4 that were added to the list in March 2006, will be eligible to receive MDRI assistance when they reach the completion point.

This chapter introduced the readers to the multilateral mechanisms that are available for emerging markets and developing countries to restructure their debt dependent on the extent of the external debt problem, major creditor categories and whether the debt service problem is a short-term liquidity or systemic problem. More details on each of the mechanisms can be obtained from the references that have been provided.

X. RECOMMENDATIONS AND BEST PRACTICES FOR DEBT MANAGERS

Public debt management deals with the borrowing of only the public sector. The financial problems in South-East and East Asia in 1997 were not due to these borrowings, though they subsequently became a public sector responsibility. The problems in Brazil, Mexico and the Russian Federation, however, were caused by the activities of the sovereign borrowers. There are two issues that should be borne in mind when the requirements for a DMO are set out. The first is that public sector debt is only one component of the total debt and is smaller than private sector debt in some emerging market countries. The second is that effective public sector debt management has to be complemented by guidelines for private sector borrowing to ensure the long-term external debt sustainability of the country and overall stability of the balance of payments. Aggregate PNG debt should be monitored by the central bank without prejudice to the policy of liberalization of the capital account of the balance of payments.

Chapter II listed most of the activities that should be undertaken by a DMO, grouped under resource mobilization, debt and risk management, and loan operations and the MIS. Not all of these are performed in the countries of Asia and the Pacific. It is crucial that the need for these tasks is recognized and action is taken to build up institutional capacity to undertake them.

The Economic and Social Commission for Asia and the Pacific (ESCAP) held eight country seminars on debt management during the implementation of the technical assistance project.⁵¹ These led to the preparation of country reports, some of which cover the main issues in public debt management that are dealt with in chapters II to IX of this manual. The following are some of the recommendations that were made in these chapters and country reports:

⁵¹ Cambodia, Indonesia, Kyrgyzstan, Lao People's Democratic Republic, Mongolia, Nepal, Samoa and Sri Lanka.

- An institutional framework that recognizes the main activities to be undertaken for debt management should be set up. Major decisions on foreign and domestic borrowings based on the approved borrowing plan would be made by the office responsible for resource mobilization. The office responsible for debt and risk management should undertake portfolio analyses, develop a risk management strategy and estimate sustainable levels of public sector borrowings to enable a borrowing policy and plan to be prepared. The office for loan operations and the MIS should make debt service payments, monitor loan utilization and prepare accounting and other reports required by creditors and the Government. Effective links should be developed among the government agencies that are undertaking the various debt management functions pending the establishment of a full-fledged DMO.
- Countries should enact legislation that defines the Government's authority to borrow, invest and enter into financial obligations such as guarantees, hedging and derivative transactions and amortize, redeem or repurchase government debt. The legislation should authorize the Minister of Finance to borrow from external or domestic sources on behalf of the Government and set out the maximum amount of borrowing that could be undertaken and the guarantees issued during the budget year as approved by Parliament or the National Assembly. It should also set out the responsibilities for the management of public debt dependent on the institutional arrangements that have been established. Supporting regulations for the legislation clarifying the roles of the various agencies involved in loan operations should be prepared.
- Complete and up-to-date loan databases for the external and domestic debt of the public sector should be maintained. Several options are available to countries that wish to computerize their loan data. One is a spreadsheet package for when the loan numbers are small and the portfolio not complex. Another is the development of custom-designed software, depending on the availability and

competence of the staff for its maintenance. A third is to obtain off-the-shelf software from a technical assistance agency.

- The staff working on public debt management should receive adequate training to function as effective sovereign debt managers. Those responsible for loan negotiations should receive training particularly on capital market borrowing. The staff responsible for the MIS and information technology needs to be trained in the maintenance of the debt management software and loan database, and other staff in the use of the analytical functions of the software. Debt analysis and risk management training has to be provided to the staff so that debt sustainability analyses could be undertaken and effective borrowing policies and strategies for implementation formulated. The staff in the DMO should become familiar with the various multilateral mechanisms available for debt restructuring.
- The staff should be conversant in the types of risk that could arise to the loan portfolio of the public sector and be able to establish a risk management framework including strategic benchmarks and other practices to manage risk.
- There should be coordination in policy formulation among the agencies and staff responsible for the debt management, fiscal, monetary and exchange rate policies of the Government while maintaining separate responsibility for each of the activities. It would be difficult to implement stable government macroeconomic policies successfully without this separation and coordination. Effective debt management can be undertaken in only a stable macroeconomic environment.

Some specific recommendations were made for the guidance of sovereign debt managers at a meeting held by the World Bank in November 1999.⁵² They are the following:

⁵² Timothy Geithner, November 1999. Sovereign Risk Management in an Integrated World, paper presented at the *Second Sovereign Debt Management Forum* organized by the World Bank, Washington, D.C., 1-3 November 1999.

- The public sector should not borrow more than sustainable levels determined on the basis of agreed ceilings for debt indicators. Borrowing above these levels would make it difficult to absorb external shocks to the economy.
- A balance between minimizing costs and risks should be achieved. The extra cost of achieving a debt profile that could absorb shocks, such as longer-term debt and higher levels of reserves, is money well spent.
- Domestic borrowing at higher rates of interest does not necessarily mean that the funds are more expensive. The Asian financial crisis demonstrated that this belief was based on the expectation that exchange rates would remain stable during the lifetime of a loan.
- The issue of large foreign currency bonds with a bullet repayment is not advisable for small economies, as there is a large refinancing risk.
- Sovereign debt management should keep the exposure of off balance sheet items under review and manage contingent liabilities.
- Sovereign borrowers should pay attention to the details in loan documents to guard against surprises.

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