

INTOSAI



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# Public Debt Committee

◆  
Guidance for Planning and  
Conducting an Audit of  
Internal Controls  
of Public Debt

◆  
Final Report

◆  
May 2000

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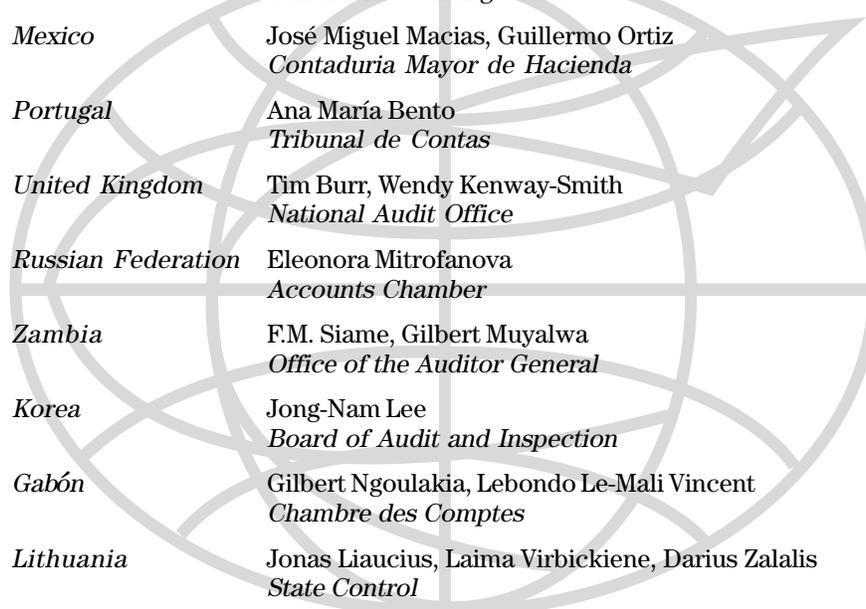
## Public Debt Committee

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# Introduction

Under the terms of reference laid down by the Governing Board of INTOSAI, the Public Debt Committee (PDC) was given the task of publishing guidelines and other information for use by Supreme Audit Institutions (SAI) to encourage the sound management and proper reporting of public debt.

In 1998, INCOSAI approved the proposal of this Committee to merge two studies—one concerning performance auditing of public debt management and the other concerning its internal controls—into unified guidance for planning and conducting an audit of the internal controls of public debt. This guidance incorporates the feedback received in the 1998 Congress and subsequent comments received by PDC.

The 1998 PDC report to INCOSAI made several observations that bear upon the role of SAIs in public debt audits. The increase in the volatility of global financial markets, the emergence of complex debt instruments and practices, the lack of consistency in valuation of debt instruments, and the lack of transparency in reporting debt by sovereign entities pose formidable challenges for SAIs. These complicating factors affect the debt service and call into question the proper criteria for the assessment of debt operations and debt sustainability. At the same time, legislative bodies have become increasingly aware of the interrelationships that exist between debt, fiscal policy, and economic policy.



The tasks of understanding debt's fiscal and economic interrelationships and responding to legislative requests to audit debt operations open a growing field of oversight for the SAIs. The Committee believes that these tasks require new audit methods and approaches, a more active SAI presence, and the ingenuity to develop the necessary technical arsenal to review sovereign debt operations. Accordingly, PDC has provided in this guidance a set of economic, budgeting, and financial concepts and indicators that are used in assessments of these operations.

At the same time that audits of debt management operations have become more challenging, internal controls have become more inclusive. Many auditing professional organizations today define internal controls as a process that goes beyond the traditional financial controls that are designed to safeguard assets and maintain proper financial records.

Internal controls are currently defined as the set of procedures and tools that help managers achieve operational, financial, and compliance objectives. Internal controls are viewed as a continuous process, effected by an entity's management, designed to provide reasonable assurance that the objectives of the entity are being achieved in the following categories:

- (1) Operations are effective and efficient.
- (2) Financial, budget, and program assessment reports are relevant and reliable.
- (3) Responsible officials comply with applicable laws and regulations.<sup>1</sup>

Although periodic evaluations by SAIs of internal controls of debt operations do not provide absolute assurance, they increase the

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<sup>1</sup>The Committee of Sponsoring Organizations (COSO) of the Treadway Commission in the United States published in 1992 an exhaustive study of internal controls in the United States entitled Internal Control - Integrated Framework. Following COSO's report, similar reports were issued in (1) Canada by the Controls Committee (COCO), (2) the United Kingdom, (3) the United States by the General Accounting Office (GAO), and (3) internationally by the International Federation of Accountants (IFAC).



likelihood of achieving a sovereign entity’s operational, financial, and compliance objectives with respect to debt management.

At the beginning of their audits of public debt, SAIs need to decide what entities and debt instruments will be included in their audit scope. This is an appropriate time for SAIs to consider the definition of the term “public debt” (see figure 1). In this guidance, we have chosen to define “public debt” to include obligations evidenced by a legal instrument issued by a central or federal government; state, provincial, county, regional, municipal, or local enterprises; owned or controlled by the government; and other entities considered public or quasi-public. Bank loans to governments and marketable securities issued by governments are examples of this debt.

**Figure 1: How INTOSAI Defines Public Debt Transfer Clause**

At the beginning of an audit of a public debt program, SAIs need to have a clear understanding of the meaning of public debt. As noted in the Public Debt Committee’s earlier report, Guidance on Definition and Disclosure of Public Debt, the definition of public debt will vary depending on use. Economists will want a broad, all-encompassing definition when looking at the contribution of the public sector to the economy. Alternatively, if the concern were one of accountability, the definition would be narrowed to debt issued by a government entity with appropriate authority and responsibility. Each SAI will need to exercise its own judgment on the appropriate entities and commitments to be included.

Public debt might include liabilities incurred by public bodies such as a central or federal government; state, provincial, county, regional, municipal, or local authorities; enterprises owned or controlled by the government; and other entities considered public or quasi-public.

Each of these bodies has a variety of commitments that could be considered public debt. These include marketable securities, bank loans, long-term leases, loan guarantees, borrowing from government-controlled entities with cash surpluses, issuance of national currencies, proceeds from public savings plans, loans from foreign governments and international organizations, pension and health care liabilities of public employees, and accounts payable.

Source: INTOSAI’s Public Debt Committee, *Guidance on Definition and Disclosure of Public Debt*.

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# SAI Role

At the beginning of an audit of the public debt, audit, SAIs must decide which components of internal controls to examine and the depth of analysis of each component. The audit's breadth and depth will depend on the SAI's legal mandate, previous audit work done, and what resources are available to perform the audit. Some SAIs have a restricted legal mandate to audit sovereign debt. Other SAIs may have a broader mandate to review public debt issues, but lack the technical expertise required to review complex public debt transactions that have significant linkages to fiscal and monetary operations.



## Figure 2: Scope of Public Debt Audits by SAIs: The Case of Mexico

The SAI of Mexico audits public debt data submitted by the Executive Branch in two main forms.

1. *The Annual Preliminary Report on the Revision of the Public Accounts of the Federal Government*, produced by the SAI, contains a chapter that analyzes public finances in the context of the actual performance of fiscal policy set for the year. In this report, the SAI examines the reported public debt, its foreign and domestic components, the changes in debt balances during the period, and its financial costs. The SAI performs a variance analysis of actual versus authorized debt levels, but does not perform substantive tests at this stage.

2. Mexico's SAI also performs substantive field audit work, in which all elements of public debt management are examined. This step includes verification of debt records that provide support for the annual preliminary report examined earlier. Mexico's SAI has the legal authority to have in place a comprehensive public debt audit program, and an average of 18 audits are carried out each year. As part of its audits, the SAI examines components of internal control that affect internal authorizations, procedures for making and recording transactions, and compliance with laws and regulations. Mexico's SAI examines the following areas of public debt management in central government and state-controlled corporations:

- contract terms and conditions;
- service (interest, commissions, and expenses) payment procedures;
- authorizations;
- revaluation of foreign loans;
- applications of resources from foreign placements;
- legal provisions that affect the Banking Service Protection Institute, the Secretary of Finance, the Central Bank, the Banking and Securities Commission, and the Expenditure-Financing Intersecretariat Commission; and
- regulatory requirements for granting federal government guarantees.

In its audits of special debt operations, Mexico's SAI reviews support studies, analyses, and market strategies used to manage those operations. For example, the SAI audited the placement of high-rated bank notes to refinance part of the



emergency package negotiated with the U.S. Treasury a few years ago. One particular debt operation examined involved the cancellation of Brady bonds and the subsequent recovery of its collateral. This transaction resulted in a substantial gain in the renegotiated debt terms, which were of longer duration and enjoyed lower rates.

SAIs can define the scope of debt audits by using the five components of a system of internal control:

- Control Environment,
- Risk Assessment,
- Control Activities,
- Information and Communication, and
- Monitoring.

Each component can be viewed as a door that represents a potential audit area. Each element or door leads to areas whose audit varies in scope and technical complexity. The first door - the Control Environment - leads auditors to examine sovereign debt management's attitude, awareness, and actions concerning controls. This door may be opened by SAIs that have a clear mandate to audit the effectiveness of debt management. The other four internal control areas are more closely related to traditional audits of internal controls. For example, risk assessment would lead auditors to identify what events and circumstances affect the ability of debt management to record, process, and report debt information.



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## *Control Environment*

The control environment is the foundation of internal controls by virtue of its influence on the conduct of public debt personnel. Senior debt management is responsible for establishing and nurturing a control environment that promotes ethical values, human resource policies that support public debt objectives, an organizational structure with clear lines of responsibility and communication, and computer-based information systems that incorporate adequate security controls. Senior debt management is also responsible for achieving public debt objectives within the limits of its authority, ensuring that its personnel are conscious of the benefits of an adequate control environment, and monitoring external factors that affect the government's ability and willingness to service its debt.

**Integrity and ethical values.** The effectiveness of internal controls cannot rise above the integrity and ethical values of the individuals who create, manage, and monitor them. Because senior management can override internal controls, the integrity and ethical values of senior public debt officials are essential to maintaining effective internal controls.

**Human resource policies.** The increasingly complex nature of public debt operations - which may involve multiple currencies, variable interest rates, debt restructuring, and swaps of currency and interest payments - demands increasingly skilled staff to manage public debt instruments. Senior debt management is responsible for obtaining the competence levels necessary to achieve public debt objectives and assigning employees with the appropriate skills to each task.



**Organizational structure.** Most public debt organizations have several operational units with different management functions and reporting responsibilities. Public debt managers have two basic functions—a high-level function that involves coordinating debt operations with the government’s fiscal and monetary operations, and an operational function that involves managing specific debt transactions.

**Computer-based debt information systems** have major implications for audits of sovereign debt operations. Auditors must have sufficient computer expertise to perform tests of the internal controls built into computer systems, which are commonly classified into general and application controls.

General controls are the overall policies and procedures that create the environment in which applications are performed. General controls fall into six major categories:

- (1) Overall design and management of the computer security.
- (2) Access controls applied to computer data, programs, equipment, and facilities.
- (3) Controls that prevent the use of unauthorized software programs or a change to existing programs.
- (4) Controls that monitor access to the computer hardware and security applications.
- (5) Segregation of duties to prevent one individual from obtaining control of key aspects of computer operations and thereby gain unauthorized access to records.
- (6) Service continuity controls to ensure that critical operations are not interrupted or are promptly resumed, and critical data are protected when unexpected events occur.

When these general controls are weak or nonexistent, the reliability of application controls is severely reduced. Application controls help ensure that debt information fed into the computer is correct and is correctly processed. These controls are frequently divided into input, processing, and file controls.

Data input controls ensure the correctness, accuracy, and completeness of debt information is entered into the computer. Processing controls are used to verify whether all critical elements of a debt transaction are provided, the data entered have the appropriate format (text or numeric), the values fit within a predetermined range, and the transaction data correspond to a valid record in the master file. File controls, such as external file labels and internal read-only file markers, ensure that the correct files are updated and prevent destruction of files.

Many application controls are imbedded into the specific computer system used by the Ministry of Finance and/or the Central Bank to manage sovereign debt. Approximately 50 countries have adopted the Debt Management and Financial Analysis System (DMFAS), a computer system designed by the United Nations Conference on Trade and Development (UNCTAD), and 54 countries have adopted the Commonwealth Secretariat Debt Recording and Management System (CS-DRMS). DMFAS is a Microsoft Windows-based application that uses Oracle's Relational Database Management System. CS-DRMS has electronic links with the World Bank's debtor reporting system as well as with the Debt Sustainability Model of the World Bank.

**Laws, regulations, and practices** define how debt managers work with their counterparts in other government units, including the budget office and central bank, and the extent of SAI's authority over debt matters. SAIs should review their countries' legal framework and actual debt procedures to gain an understanding of the environment in which debt managers operate and determine the scope of their audit (see figure 2).

Some laws may prohibit the use of public borrowing to finance recurring expenditures and other laws may impose an overall public debt ceiling that can only be changed by the legislature. The legal framework can also impose audit limitations. In some countries SAIs might not have legal authority to perform a

complete audit. For example, SAIs might not have legal authority to examine debt data of major government-controlled enterprises that issue loans guaranteed by the central government.<sup>1</sup>

In addition to a review of the laws and regulations, SAIs need to verify that laws and written procedures are followed in practice. Auditors should have the ability to observe actual debt operations, communicate with the debt management staff and have access to their reports.

As part of a debt audit, some SAIs may be able to examine how public debt estimates are programmed into the budget as a use and source of budget resources. In these audits, SAIs are able to assess the public debt office's ability to provide budget officials reliable debt service requirements over the next year. Budget documents can also be viewed as the blueprint for new debt issuance over the next budget cycle, as they define cash resources required to carry out the government's investment and operating programs.

SAIs would also examine how public borrowing is used to fund temporary cash operating deficits, which requires close communication between cash and debt management staff. A key element of a strong cash management system that directly affects public debt operations is the capacity to develop cash flow projections based on expected receipts and disbursements. This forecasting capacity depends on the government's budget execution and the ability to promptly collect cash and consolidate cash balances in a unified account. Failure to match the timing of cash inflows and disbursements may lead to unnecessary amounts of public debt and excessive amounts of idle cash.

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<sup>1</sup> The Committee of Sponsoring Organizations (COSO) of the Treadway Commission in the United States published in 1992 an exhaustive study of internal controls in the United States entitled Internal Control - Integrated Framework. Following COSO's report, similar reports were issued in (1) Canada by the Controls Committee (COCO), (2) the United Kingdom, (3) the United States by the General Accounting Office (GAO), and (3) internationally by the International Federation of Accountants (IFAC).

**External factors** that affect the government's ability and willingness to service its debt should not be ignored by SAIs, even in audits of limited scope restricted to a debt management unit. Also, external sources of information can help SAIs to verify information provided by debt management staff. The ability to assess external factors and have access to debt information from third parties strengthen SAIs' capacity to evaluate the likelihood of sovereign debt defaults.

International agencies that monitor sovereign debt have reported an increase in debt defaults in the last four decades. The number of total sovereign debt defaults increased from 18 defaults by four countries between 1956 and 1965 to 203 defaults by 65 countries in the period 1986-1994. Major international debt rescheduling initiatives have been initiated under the auspices of the International Monetary Fund (IMF) and the World Bank in recent years. The Heavily Indebted Poor Country (HIPC) initiative is designed to enable 41 countries (see table of HIPCs in the appendix) to achieve a sustainable debt level and to offer them an effective exit from recurring debt rescheduling negotiations.

In order to obtain more information about these initiatives and validate debt data with external sources, SAIs can contact international organizations listed in figure 3. The external providers of debt data include creditors like IMF and the World Bank, international organizations like the United Nations and the Organization for Economic Co-operation and Development (OECD), creditor organizations like the Paris and London Clubs, and credit rating organizations.

**Figure 3: External Sources of Debt Information**

Debt information sources	Institutions and contact information
World Bank Debt Reporting System  World Bank's Quarterly <i>Financial Flows and the Developing Countries</i>	World Bank, <a href="http://www.worldbank.org">http://www.worldbank.org</a>  Punam Chuhan (202) 473-3922 Pchuhan@worldbank.org William Shaw (202) 473-0138
International Monetary Fund	Article IV Surveillance Consultations. <a href="http://www.imf.org/external/standards">http://www.imf.org/external/standards</a>
United Nations Conference on Trade and Development	Debt Management and Financial Analysis System (DMFAS), <a href="http://www.unctad.org">http://www.unctad.org</a>  Dr. Enrique Cossio-Pascal Telephone: 41 22 907 274 (Geneva, Switzerland) Email: <a href="mailto:dmfas@unctad.org">dmfas@unctad.org</a>
Commonwealth Secretariat	Debt Recording and Management System (CS-DRMS), <a href="http://www.csdrms.co.uk">http://www.csdrms.co.uk</a> Dr. Dev Useree, Telephone: 44 020 7747 6434 (London, United Kingdom) Email: <a href="mailto:d.useree@commonwealth.int">d.useree@commonwealth.int</a>
Sovereign credit rating agencies	Standard & Poor's Corporation (212) 208-1989 Moody's Investor Services (212) 553-1653

International institutions also provide criteria that can be used in sovereign debt audits. For example, rating agencies have identified economic and political factors that determine a country's ability and willingness to pay its debt. These factors include the stability of a country's form of government, the level and changes in a country's inflation, the exports of goods and services that provide foreign exchange reserves to service external debt, and reserve balances of the central bank (see figure 4).

#### **Figure 4: How Standard & Poor's (S&P) Rates Sovereign Debt**

S&P's sovereign credit ratings—which in April 1997 covered local and foreign currency debt issued by governments in 69 countries—are an assessment of each government's capacity and willingness to repay debt. S&P's appraisal is both quantitative and qualitative. Willingness to pay is a qualitative issue distinguishing sovereigns from most other types of issuers because a government can default on some or all of its obligations even when it possesses the financial capacity for prompt debt service.

Key economic and political risks S&P considers when rating foreign debt include the following.

Political institutions. The stability and perceived legitimacy of a country's form of government set the parameters for economic policymaking. France's "AAA" credit standing, for instance, in part reflects a democratic political framework that makes policymaking transparent and the government's response to policy errors predictable over time.

Inflation and public debt. Significant monetization of budget deficits fuels price inflation, which can undermine popular support for governments. Such conditions are fertile ground for a sovereign default. For these reasons, S&P regards the rate of inflation as the single most important leading indicator of sovereign local currency credit trends.

External debt. To evaluate the magnitude of public external debt, S&P compares it with the annual net flows of exports of goods and services, which provide foreign exchange, needed to service external debt. For the 69 sovereigns with public ratings in April 1997, the median net public sector external debt-to-export ratio is 53 percent.

Reserves. Central bank reserves are another external indicator, but their importance varies across the ratings spectrum. Reserves usually act as a financial buffer for the government during periods of balance-of-payments stress. Reserve adequacy is measured in relation to imports, as well as projected current account deficits and total debt service.

European Monetary Union (EMU). Ratings of states joining the EMU present a special case. Governments in the EMU, which was launched in 1999, cede monetary and exchange rate responsibilities to the new European Central Bank. As a result, S&P expects to rate each government's foreign currency debt the same going forward. Fiscal analysis, important in the past, will be the main criterion for differentiating credit quality of the sovereigns inside the EMU.

Source: Standard & Poor's, "Sovereign Credit Ratings: A Primer," in *CreditWeek*, April 16, 1997.



Some SAIs use high-level indicators or warning signals to measure sovereign debt sustainability, budgetary flexibility, and vulnerability to debt defaults. Debt sustainability is the degree to which a government can maintain existing programs and meet existing creditor requirements without increasing the debt burden on the economy. Debt flexibility is the degree to which a government can increase its financial resources to respond to rising commitments by either expanding its revenues or increasing its debt burden. Debt vulnerability is the degree to which a government becomes dependent on sources of funding outside of its control or influence. The Public Debt Committee plans in the future to examine in more depth the relationship between high-level indicators and other warning signals, including measures of the viability and transparency of financial institutions.

**Figure 5: Devaluation Crises and Controls Over Foreign Currency Debt**

Devaluation crises are commonly related to unsustainable levels of short-term foreign currency debt. Countries that can borrow abroad are able to invest more than would be possible if they depended only on domestic savings, but export earnings must eventually provide sufficient foreign exchange to service the country's foreign currency debt.

When debt service payments in foreign currency grow faster than a country's exports, the country would experience balance of payments difficulties as its international reserves decrease below critical levels and its national currency is devalued. Countries with rapidly growing foreign currency debt should, therefore, develop internal controls that send advance signals to policymakers when foreign borrowings and debt service payments are approaching stress levels.

After assessing the external factors that could affect the governments' ability to pay their debt, SAIs would then be prepared to review the five internal control elements of the public debt unit or function.

**Figure 6: How Organizational Structure Affects Public Debt Management**

In some countries attempts to improve and strengthen internal controls have focused on making the finance ministry the key institution responsible for public debt management. The finance ministry is put in charge of debt monitoring in coordination with the central bank, and all contracting of public debt and government guarantees requires its approval.

Despite efforts to date, much remains to be done in some countries where the finance ministry is formally responsible for debt management, but the de facto institutional responsibility for public debt monitoring is dispersed among the finance ministry, planning ministry, and the central bank. Also, the finance ministries in some countries do not yet have the authority to obtain loan records of previously contracted public debts. Lack of direct access to loan records has made it difficult for finance ministries to accurately project the scheduled debt-service obligations and pay them promptly.

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## *Risk Assessment*

Risk assessment is the process of identifying circumstances and events that can prevent senior management from meeting debt objectives and measuring the probability of their occurrence. Operational risks arise in the normal course of managing debt transactions. Fraud risks arise from intentional misdeeds committed to gain personal benefit. The responsibility for identifying risks and developing plans to manage them lies with management. A risk plan would describe procedures to minimize damages caused by the risks. In the course of an audit of internal controls of debt, SAIs would examine the risk plan and compare the actual performance of debt managers against the risk plan.

### **Operation Risks**

Operations risks usually arise in the areas that provide support services to the public debt organization. SAIs would recognize the following operations risks when they examine the organizational structure of the public debt management unit.

- i. Lack of separation of duties or functions.** Public debt transactions must be independently processed, confirmed, valued, and reviewed, and monitored by an independent administrative office.
- ii. Inadequate staff expertise.** Supervisors must have the proper expertise to avoid becoming a “rubber stamp” to the debt traders. Support staff is usually the first line of defense to uncover errors and irregularities that may occur in processing debt transactions.
- iii. Product risk.** New debt instruments can be too complex or poorly understood. This could lead to the inability of the support area to process, value, and control new debt instruments.



- iv. System and technology risks.** These risks exist when the staff fails to stay up to date in technological developments associated with new information systems or adopt computerized information systems without “re engineering” their debt management practices.
- v. Procedures risks.** These risks exist when the debt management functions do not have written procedures and the work flow is not structured in a predictable and well- designed manner, with proper audit trails maintained. These written procedures become more important the more complex debt instruments are.
- vi. Disaster recovery risks.** These risks exist when the debt organization has not planned for alternative sites, computer resources, communications, resources, trading facilities, and other support services in the case of a disaster. Debt market makers must have alternative remote trading and technology sites and be able to recover from “point-of-failure” with minimal disruptions.
- vii. Documentation risks.** These risks exist when debt transactions do not have well-designed agreements that are legally authorized, properly executed and supported by appropriate confirmation in a timely manner. Legal departments and support staff must maintain master agreements and supporting confirmations.
- viii. Valuation risks.** These risks exist when the support staff cannot perform, at least on a regular basis, an independent valuation of all debt instruments or if the valuation of the support staff differs from the valuation of the SAI or an independent third party.

## **Fraud Risks**

One of the major themes of the XVI INCOSAI in 1998 - Preventing and Detecting Fraud and Corruption - highlighted the conditions that cause fraud losses and audit methods to detect and prevent fraudulent activities. Fraud in the area of public debt is more likely to arise when three conditions are present.

- (i) Individuals who exercise control over debt operations have financial needs or desires caused by unexpected crises, desire to increase their consumption, or simple greed.
- (ii) The perpetrators of fraud have the ability to rationalize their illegal act - “The government owes me.” Fraudulent acts are rationalized in order to reconcile illegal behavior with commonly accepted notions of decency and trust.
- (iii) Individuals have an opportunity to commit and conceal fraudulent debt transactions.



Of these three conditions, senior government officials have direct control over the third - fraud opportunities. In their assessment of the risk of fraud, auditors look for “red flags” that have been found in past fraud cases. Common fraud indicators include the following.

- (1) Lack of basic internal controls in public debt operations, such as separation of duties involving debt accounting and execution of debt transactions.
- (2) Government officials who fail to correct past audit findings promptly.
- (3) Public debt transactions that lack a clear business or public policy purpose.
- (4) Managers who are reluctant to produce documentary evidence when asked by auditors.



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## *Control Activities*

Control activities are comprised of the policies and procedures that help ensure that the government's directives are carried out and actions are taken to achieve the government's debt objectives. Establishing an effective link between debt objectives and control activities is a critical component of internal controls.

### **OBJECTIVES**

In most countries, the objectives pursued by debt managers address short-term and long-term fundamental issues that have been defined by a higher government authority independent of the debt managers. Sovereign debt objectives include the following.

**Achieving liquidity for the Treasury.** The primary purpose of a debt manager is to provide liquidity for the Treasury. This means not only ensuring that the maturity dates of the existing stock of debt are spaced reasonably, but also having an adequate stock of cash to allow the government to meet its short-term obligations, short of printing money.

After ensuring "liquidity" come two secondary objectives.

**Maintaining a balance between cost and stability.** Assuming liquidity can be achieved, a major objective is to find a balance between cost and stability, taking into account the risks associated with lowest cost. Because interest rates generally are higher for bonds with longer yields to maturity, lowest cost can generally be obtained by issuing instruments with shorter terms

to maturity. But with that comes increased risk. The shorter the term to maturity of a debt stock, the more susceptible it is to fluctuations in interest rates, inflation, and currency movements.

**Developing and maintaining an effectively functioning domestic capital market.** In countries with a domestic bond market in which the government is a major debt issuer, ensuring that the bond issuance and trading rules are fair and transparent is fundamental to encouraging both issuers and investors to use this market.

## **STRATEGIES**

Debt strategies should be linked directly to debt objectives and defined in a way that allows them to be assessed. Debt strategies are commonly defined in terms of desired characteristics of the stock of public debt, like the following.

**Ratio of Fixed to Floating Debt.** Generally speaking, fixed debt is any marketable debt that is maturing or being repriced in more than 12 months. For example, Canada had a policy to raise this ratio from 50 percent in 1990 to 65 percent by 1998. A reason for moving to a higher ratio of fixed debt is to stabilize the long-term debt servicing costs.

**Average Terms to Maturity.** The benefits from increasing the ratio of fixed to floating debt come from the cost stability that longer debt provides. The longer the term to maturity, the greater the stability. But increased stability may involve increased cost. The debt manager has to have a way of assessing the trade-off between cost and stability, taking into account the increased risk associated with borrowing in the short end of the yield curve.

**Need for Benchmark Yields.** A government could have a policy to maintain a well-functioning debt-based domestic financial market. If the government is the largest single borrower, it will have to consider whether it has issued sufficient tradable securities in a variety of maturity dates to sustain an efficient debt market.



**Ratio of Domestic to Foreign Currency Debt.** Assuming there is a domestic currency market for a country's debt, there are two principal reasons for borrowing in foreign currency: to lower costs and to maintain a reserve of foreign currency as part of a country's exchange rate policies. But with borrowing in foreign currencies comes currency risk, which has to be weighed against the benefits of foreign currency debt.

**Ratio of Real to Nominal Debt.** Governments have also issued debt that varies with inflation. The rate on this debt is a base rate (economists call this the real rate) plus an adjustment for inflation. With such debt, the government rather than the creditors assumes the risk associated with inflation. If the government believes that its inflation reducing policy will be effective, then such an investment policy may be less costly to the government. Governments have also issued inflation-indexed debt in order to provide a market-based measure of inflation expectations.

## **OPERATIONAL PLAN**

Debt program implementation would include developing an operational plan that is consistent with its objectives and strategies. This plan includes procedures for selling debt securities; developing relationships with creditors and underwriters; and establishing control systems to collect, measure, and report on debt transactions and levels and their associated risks. Some of the steps involved in a debt program include the following.

### **Selection of Primary Dealers, Domestic and/or Foreign.**

Most governments use dealers/jobbers/underwriters to sell their debt. The choice of dealers (given their location, nationality, and other attributes) and the maximum share of each bond issuance would be based on criteria consistent with a debt strategy.

### **Designing an Appropriate Debt Issuance Process (by auction or other means).**



Debt is generally distributed to dealers either by auction or “on tap.” The process would be designed to ensure market integrity. This means that the markets would be transparent, orderly, liquid, and efficient.

**Developing a Program to Maintain Relations With Stakeholders.** Maintaining confidence in the issuer, both in terms of the economic stability of the country and its transparency as an issuer of debt, is important. While nations are sovereign, they still rely on the confidence of stakeholders. In this context, markets do not like surprises. They expect governments to behave in an open and consistent nature. Maintaining a program that provides confidence and transparency requires regular consultations with stakeholders on process, disclosure, issuance schedules, etc.

**Developing a Program to Identify and Manage the Operations Risks.** This is discussed in the *Risk Assessment* section.

**Developing Procedures to Maintain Financial Integrity.** A basic element of control is to reduce or minimize the risks associated with fraud, financial negligence, violation of financial rules and loss of assets or public money

**Developing Audit Objectives and Procedures.** At this point SAIs would develop audit procedures to review the controls embedded in each of the above activities. The audit procedures would include examining reports that monitor day-to-day debt operations and provide assurance that the activities support debt objectives and strategies.

## **Figure 7: Public Debt Audits by SAIs: The Case of Argentina**

Argentina's SAI is involved in the following public debt areas.

### **1. Financial Audit of Public Debt Stock**

Argentina's SAI performs audits of selected government bonds, which entail exams of cash proceeds, laws and regulations observed, account registrations, repayment schedules for principal and interest, and commissions to financial intermediaries. This type of audit focuses on the accounting and internal control systems within the Ministry of Economics and Public Works.

As part of the audit of public debt, Argentina's SAI has developed different ratios to estimate the risk exposure to external events. International organizations and the International Accounts Department within the Ministry of Economics and Public Works supply the information necessary to compute the ratios. Argentina's SAI makes extensive use of ratios to measure the government's budget's capacity to service the debt, such as Debt-to-GDP, Debt-to-Central Bank-Reserves, Debt-to-Export Revenues, and the Interest Payments-to-Export Revenue ratios. These ratios are calculated annually to monitor the government's solvency evolution. Argentina's ratios are compared to those of other countries belonging to the Latin American region, such as Mexico, Brazil, and Chile.

### **2. Audits of Interest Payments**

Argentina's SAI performs a detailed audit of interest payments using data supplied by the Debt Administration Department, the General Accounting Department, the National Treasury, the Credit Negotiations Department, and the National Budgeting Department. The main audit task focuses on the administrative management of debt services and commissions and the corresponding audit controls. Reviews are made of documentation that provides evidence of payments and budget appropriations.

Argentina's SAI is also responsible for the following public debt reporting and communication areas.

#### **1. Financial audit reports to International Financial Institutions (IFIs)**

The SAI in Argentina audits loans by World Bank, Inter-American Development Bank, and United Nations Development Program to institutions in that country. For each program that has been financed by these loans, the SAI issues a final audit report.

#### **2. Performance audit reports to IFIs**

Similarly, the SAI in Argentina reviews the attainment of goals and monitors the programs and projects financed by IFIs in terms of their effectiveness, efficiency, and economy. Gaps and differences between planned and actual results are evaluated by the SAI.



**Figure 7: Continued**

**3. Monitoring report of Evolution of Public Debt**

Argentina's SAI monitors the National Public Debt Stock as of June 30 and December 31 each year. The SAI obtains debt information from the Ministry of Economy and Public Works and compares it against its own data, which it obtains by examining loan agreements and other sources.

The results obtained determine the public debt stock figures for each date. This debt stock is analyzed and reported as follows: (1) government bonds issued in local and international currencies; (2) loans obtained from multilateral institutions and (3) commercial, bilateral, and Paris Club debt.

Other evaluations performed by Argentina's SAI include exchange rate and interest rate influences on debt, debt maturity, debt stock classification according to currencies, and interest rate types.

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## *Information and Communication*

In order to achieve public debt goals, policymakers need to rely on an information system that captures and disseminates relevant and reliable sovereign debt information. Relevant and reliable sovereign debt information is easier to produce under the following conditions:

- i. A uniform system of government accounts is used consistently in budget, cash, and public debt operations.
- ii. An integrated database provides consistent cash, budget, and public debt data and facilitates the flow of information between and within operating units.
- iii. An accounting standards-setting body establishes a uniform accounting framework and form and content reporting requirements.
- iv. Interagency coordinating groups manage the evolution of information systems in an integrated and responsive manner.

For public debt transactions, the accrual basis of accounting is recommended over a cash or hybrid basis. Governments that record transactions on a cash basis could miss obligations to vendors for goods and services received but not yet paid for, which are usually a substantial liability. Similarly, governments that operate credit and loan guarantee programs on a cash basis may recognize obligations when claims are paid rather than when commitments are made. This accounting method could lead to an understatement of public debt and produce distorted incentives for credit managers.

Timely public debt reports help to prevent irregularities and safeguard assets. Because public debt operations are associated with large sums of cash, timely information on cash proceeds and payments associated with public debt transactions can discourage fraud perpetrators.



**Figure 8: How a Government Reports on Its Debt Operations:  
The Case of Canada**

Since 1991, the Government of Canada's Finance Ministry has been producing a Debt Operations Report (now called Debt Management Report). It describes and explains various aspects of the debt program, both for the past year and from an historical perspective. This report deals with the government's debt management, borrowing, and cash management activities and provides background information on Crown corporations (government enterprise) borrowing. The most recent report is more forward-looking to give market participants a better sense of the government's debt strategies and current concerns. For example, the report notes that with the reduction of deficits and the virtual elimination of increased market borrowing, the government is now focusing on maintaining a liquid and efficient market.

The 1997 Debt Management Report provides an overview of current federal debt management strategy, the status of the federal debt programs as of November 30, 1997, and a review of federal debt operations for 1996-97. The report is divided into the following sections:

- the federal debt management environment, including the size and structure of the debt, and the current fiscal environment;
- an overview of current federal debt management strategy and the federal debt managers;
- current debt management issues and initiatives taken to address them;
- details on the federal debt programs;
- the distribution of holdings of Government of Canada market debt;
- a review of the government's domestic and foreign-currency debt operations in 1996-97; and
- a statistical summary of 1996-97 federal and agency debt operations.



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# Monitoring

The design and operation of virtually any organization are not immune to the need for change. Thus, appropriate vehicles for monitoring change should be in place that help decisionmakers detect when the environment has changed and help debt managers to respond promptly and effectively. Monitoring internal controls over public debt could involve using communications of outside parties, such as reports of external stakeholders, including institutional creditors, sovereign credit rating agencies, and international organizations.

Monitoring can be effected through both the normal ongoing public debt operations and separately focused audits. Debt managers normally depend on periodic reports and inquiries from inside and outside stakeholders to detect unexpected trends or changes. Ongoing monitoring should be built-in through the use of periodic site visits, checks to determine whether procedures are being followed, and management review of reports. From time to time, senior debt management could also order a separate, thorough evaluation of internal controls.

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# Audit Objectives and Procedures

This section provides suggested audit objectives and procedures for each of the five internal control elements - the control environment, risk assessment, control activities, information and communication, and monitoring. The following sources of information are commonly used in the audit procedures listed in this section.

1. Past audit experience
2. Interviews of public debt officials
3. Biographical details of senior public debt officials
4. Organization charts
5. Procedure manuals
6. Laws and regulations covering issuance and reporting of public debt
7. Management reports
8. Internal Audit reports
9. Meeting minutes



## **Control Environment<sup>2</sup>**

As discussed earlier, the elements of the control environment can be categorized as (A) integrity and ethical values, (B) human resource policies, and (C) organizational structure. The audit objectives and procedures for these elements are listed next.

### **A. Integrity and Ethical Values**

*Objective 1:* Determine whether a code of conduct exists and how it is implemented.

*Procedures:* SAIs would obtain oral and documentary evidence to answer the following questions:

- i. Does management promulgate a written code of conduct, applicable to management and staff, to act as a benchmark for management and staff attitude and behavior?
- ii. Does the code of conduct cover conflicts of interest or expected standards of behavior?
- iii. Is the code communicated throughout the debt management unit?
- iv. Do employees periodically acknowledge it?
- v. Are employees informed of what they should do if they encounter improper behavior?
- vi. Are written policies in place to regulate management's dealings with employees, customers, creditors, and insurers?
- vii. Is there a written policy regarding transactions with related parties?
- viii. Is there a written policy regarding the gift and hospitality that may be accepted?

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<sup>2</sup>The questions in this section were obtained from the Control Environment Questionnaire, provided by the National Audit Office, United Kingdom.

- ix. Is there a written policy regarding declaring pecuniary benefits and outside financial interests (including such things as sponsorships, commission payments, and directorships) by key public debt officials?
- x. Are independent checks performed to reveal common ownership, directorships, and family relationships before major public debt transactions or orders are placed?

*Objective 2:* Determine the debt manager's attitude to internal controls.

*Procedures:* SAIs would examine documentation to answer the following inquiries:

- i. Does management encourage and act on independent assessments of the control environment and internal controls?
- ii. Are auditors' management letters reviewed and responded to at board level?
- iii. Are internal audit reports on controls encouraged by senior management?
- iv. Does an audit committee exist with oversight of internal and external audits arrangements?
- v. Does management actively respond to breaches of codes of conduct and law?
- vi. Is disciplinary action taken as a result of the breaches communicated throughout the organization?
- vii. Does management ever override normal procedures, codes, or internal controls? Are such overrides documented and investigated?
- viii. Does management provide adequate resources for an appropriate level of internal audit work? Consider whether the internal audit function is of an appropriate size, quality, and independence.

## **B. Human Resource Policies**

*Objective 1:* Determine the debt manager's recruitment, retention, and remuneration policies and practices.

*Procedures:* SAIs would examine documentation to answer the following inquiries:

- i. Are vacant senior positions widely advertised within the pool of suitably qualified individuals (internally and/or externally)?
- ii. Are promotion and appointment mechanisms transparent and based on objective and appropriate criteria to prevent undue patronage and nepotism?
- iii. Is there an independent review (i.e., by a sponsoring department or remuneration board) of remuneration, including termination payments?
- iv. Are factors other than achievement of short-term performance targets included in performance appraisals?
- v. Are integrity and ethical criteria included in performance appraisals?
- vi. Is there an independent review (i.e., by the internal audit, external audit, or supervisory board) of the function and competence of key officers?
- vii. Are there job descriptions? If so, do they contain sufficient reference to control-related responsibilities?
- viii. Are executive functions assigned to appropriate levels of management?
- ix. Do delegated authorities appear to be appropriate?

*Objective 2:* Determine debt manager's recruitment and training policies and practices.

*Procedures:* SAIs would obtain evidence by observation and examination of documents to answer the following questions:

- i. Are recruitment policies in writing? Suitably trained management personnel who are aware of the requirements of vacant positions and have appropriate interviewing skills would carry out application screening and recruitment interviews.

- ii. Are there appropriate procedures to verify candidates' experience, qualifications, and references?
- iii. Do hiring policies require investigations for criminal records?
- iv. Are new employees made aware of their responsibilities and management's expectations, preferably by a detailed written job description that is kept up-to-date over the course of their employment?
- v. Is there a regular review of each employee's job performance by relevant line management, and is it reviewed by senior management?
- vi. Do performance reviews cover achieving developmental and training needs and the future developmental and training requirements of employees?
- vii. Are there appropriate disciplinary or remedial procedures for ineffective performance?
- viii. Are there appropriate disciplinary procedures for transgressions of the organization's code of conduct or other unacceptable employee behavior?

### **C. Organizational Structure**

*Objective:* Determine the organizational structure of debt management.

*Procedures:* SAIs would obtain evidence by observation and examination of documents to answer the following questions:

- i. Is there a clearly defined management/organization structure? Does it have clear reporting lines encompassing all of the organization's functions and staff?
- ii. Are the responsibilities of public debt officials clearly defined (preferably in writing)?
- iii. Are public debt officials' employment contracts reasonable (in terms of length, remuneration conditions, etc.)?
- iv. Are there appropriate checks and balances within the senior management structure (for example, non executive directors, audit committees, separation of chairman and chief executive responsibilities, and oversight by the appropriate authority)?

- v. Does the board (or its equivalent) have an appropriate range of expertise and experience (in areas such as economics, finance, accounting, and information systems)?
- vi. Are there up-to-date procedure manuals covering both public debt operational and financial/accounting procedures?

## **D. Computer-Based Debt Management Systems**

*Objective 1:* Evaluate general controls of computer-based debt information system.

*Procedures:* SAIs would obtain evidence to answer the following questions:

- i. Is the computer-based debt information system administered by a high-level person who reports to senior officials in the Ministry of Finance, Central Bank, or both?
- ii. Are the developers of the software prevented from operating the computers and using the software with real debt data?
- iii. Are the debt program and debt data secured and checked out only to authorized individuals by a custodian?
- iv. Does the custodian of the debt program and debt data have access to the computer equipment to operate programs or change the debt data?
- v. Are passwords formally assigned, routinely changed, and protected from use by unauthorized people?
- vi. Are there terminal identification codes to prevent access by unauthorized terminals over communication lines?
- vii. Are current lists of authorized personnel and the extent of their authorizations maintained and verified?
- viii. Are sensitive hard-copy printouts routinely destroyed before they are discarded? Are debt data on diskette and magnetic tapes thoroughly erased when the corresponding file addresses are removed from the file directory?
- ix. Is encryption used to protect confidential transmissions of debt data?



- x. Is debt-related computer hardware tagged with identification numbers and assigned to specific employees? Is there a reconciliation of financial records and inventory counts?
- xi. Are modifications to software tested to verify the changes process debt data correctly?

*Objective 2:* Evaluate application controls of computer-based debt information system.

*Procedures:* SAIs would obtain evidence to answer the following questions:

- i. Does the computer system have imbedded rules, such as edit checks, to verify the accuracy of debt information as it is entered into the computer?
- ii. Are debt officials promptly notified of errors in processing debt transactions?
- iii. Are file controls used to verify that the correct debt information is being updated and to prevent inadvertent destruction of files?
- iv. Are backup copies of debt files, programs, and documentation maintained?
- v. Is there adequate documentation of the programs, applications, and debt processing procedures?
- vi. Are exception reports provided to debt managers promptly? Are exceptions investigated and resolved?



## *Risk Assessment*

As discussed earlier, risk factors related to operations are greater in a debt management unit that lacks separation of critical duties and trained staff, has systems that do not meet technical standards, has work procedures that are informal, lacks the ability to revalue debt securities on a regular basis, and does not keep complete documentation of debt transactions. Audit objectives and procedures for operations risk and fraud risk are as follows.

*Objective 1:* Determine whether operations risk indicators are present in debt management operations.

*Procedures:* Obtain sufficient evidence to answer the following questions:

- i. Is staff responsible for custody of assets (debt securities, cash) separated from accounting?
- ii. Is staff responsible for public debt accounting provided access to cash, debt instruments, or bank accounts?
- iii. Is staff responsible for authorizing public debt transactions separated from the custody of the related assets?
- iv. Is recording of debt transactions separated so that a single staff member is not able to record a public debt transaction from its origin to its ultimate posting in the subsidiary and general ledgers?
- v. Do the specialists who engage in debt transactions, their supervisors, and the processing staff have comparable technical levels of experience and qualification in the field of debt management?



- vi. Is debt management staff properly trained in valuing, trading, and processing new, complex debt products before they are introduced?
- vii. Are the systems for capturing, processing, and reporting debt transactions reliable? Do they meet the latest technical standards?
- viii. Are the procedures in the debt management unit written, predictable, and well-designed with proper audit trails maintained?
- ix. Has the debt management unit planned for alternative site, computer resources, communication resources, trading facilities, and other support services in case of disaster?
- x. Are debt transactions properly covered by well-designed master agreements that are properly executed and supported by appropriate documentation in a timely manner? Are debt transactions executed according to laws and restrictive covenants, including pledging of government assets, use of cash proceeds, and debt restructuring agreements?
- xi. Is debt management staff able to perform an independent market valuation for all debt securities?

*Objective 2:* Determine whether fraud or high-risk indicators are present in debt management operations.

*Procedures:* Obtain sufficient evidence to answer the following questions:

- i. Are public debt officials reluctant to provide information to auditors?
- ii. Are past audit findings of weak internal controls ignored?
- iii. Is there a significant risk of management overriding prescribed policies and procedures for illegitimate purposes with the intent of personal gain or enhanced presentation of sovereign debt's condition or compliance status?
- iv. Are serial-numbered documents always used in public debt transactions?
- v. Are there photocopied or missing debt documents?

- vi. Are there unexplained public debt transactions that lack a clear purpose?
- vii. Are there public debt transactions that have not been approved by senior officials?
- viii. Have public debt securities been exchanged at other than fair market value with private investors?
- ix. Are government officials using foreign bank accounts held in a company name?
- x. Are there unreconciled discrepancies between bank deposits and payments and public debt accounting records?
- xi. Are there unexplained public debt transactions involving dormant banking accounts?
- xii. Are there unexpected overdrafts or declines in account balances used in public debt transactions?
- xiii. Have there been significant recent changes in debt regulations or accounting pronouncements that have not been implemented?
- xiv. Have new personnel been assigned to perform control activities without adequate training?
- xv. Have new computer-based debt information systems been installed without adequate testing?
- xvi. Have new debt transactions or securities been introduced without an understanding of their full impact on the government's financial condition and budget?

## *Control Activities*

As discussed earlier, control activities help ensure that the debt management staff is acting to achieve the government's debt objectives. A requirement to have effective control activities is a statement produced by senior debt officials defining the debt objectives in specific areas, like debt liquidity, cost, and stability of the debt service. Control activities that seek to achieve specific debt objectives are complemented with general control activities that encourage proper authorization to engage in debt transactions, complete enumeration and accounting of debt transactions, and safeguarding of assets.

*Objective 1:* To determine if the government has clearly defined debt objectives, policies, and procedures.

*Procedures:* Obtain sufficient evidence to answer the following questions:

- i. Does the government have a debt management strategic plan and procedures manual?
- ii. Are public debt transactions authorized and executed in accordance with senior management directives so as to achieve specific objectives, like guaranteeing sufficient liquidity to pay current obligations, a target average maturity of debt, a desired mix of foreign-currency debt, and active domestic capital market?

*Objective 2:* To determine if transactions were executed in accordance with general control policies related to effective and efficient recording of debt transactions, safeguarding of assets, reconciliation of debt records, and transparency of debt reporting.

*Procedures:* Obtain sufficient evidence to answer the following questions:



- i. Are public debt forms properly designed and adequately used to provide a complete recording of the public debt terms, including date public debt transaction is made, original amount, collateral, period of repayment, interest rate, creditor's identity, currency, amortization of principal schedule, and guarantor?
- ii. Is a single entry of debt data used to avoid duplication errors and inconsistency in reports and to minimize costs?
- iii. Is the numbering system for debt transactions and instruments consistent with the reports to external stakeholders, such as the World Bank?
- iv. Do debt reports meet the disclosure and transparency standards set by the international community?
- v. Is access to debt documents and cash proceeds from debt issuance restricted?
- vi. Are trade confirmations of debt dealers reconciled with the government's public debt accounting records?
- vii. If the central bank acts as the fiscal agent of the government in debt transactions, does an independent auditor examine the internal controls of the central bank?

## *Information and Communication*

Internal controls in information and communication have the objective of providing senior government officials the reliable debt reports they need to make timely borrowing, budget and cash decisions.

*Objective:* Determine whether government officials receive the debt information they need to carry out their ministerial responsibilities.

*Procedures* Obtain sufficient information to answer the following questions:

- i. Do senior government officials obtain timely debt information to produce a budget that incorporates a reliable debt service?
- ii. Do debt management officials obtain timely information on the government's daily cash position in order to issue enough debt to guarantee government's liquidity at reasonable cost?
- iii. Do senior government officials in HIPC's have relevant and reliable debt information to obtain all the benefits of debt reduction under the HIPC initiative?
- iv. Do public debt reports incorporate the most current information on new issues, debt restructuring, and debt of government-sponsored enterprises guaranteed by the central government?
- v. Are debt reports presented in accordance with the generally accepted accounting standards of the country and the disclosure standards adopted by the international community?

# Monitoring

Monitoring of internal controls would be done by in-house audit staff; outside consultants can be called to perform major reviews of internal controls.

*Objective:* To evaluate the effectiveness of ongoing monitoring activities.

*Procedures:* Obtain sufficient information to answer the following questions:

- i. Are there previous internal audit records of public debt transactions? If so, review internal audits' recommendations and corroborate if corrective actions have been taken.
- ii. Are internal audit reports submitted to senior debt policymakers?
- iii. Has staff obtained internal audit records and management reports that compare budget with actual performance in terms of public debt borrowings, repayments and interest expenses.
- iv. Are significant variances between budgeted and actual borrowing, repayments, interest expenses, and debt balances reviewed and explained by debt managers?
- v. If the number of public debt transactions has been small and the amounts involved high, have audit procedures been expanded to trace the cash proceeds of funds from new borrowings into the cash account and cash receipts?
- vi. Are communications from creditors, regulators, and other outside parties monitored for items of significance in debt management?

- vii. Is the appropriateness of current control activities evaluated when new accounting and information systems are developed and implemented?
- viii. Are accounting and information systems upgraded when the volume and complexity of debt transactions and debt stock information increase significantly?
- ix. Are employees required to “sign off” to evidence the performance of critical internal control activities?
- x. Are investors’ complaints promptly investigated for their underlying causes?

# A ppendix

## *Public Debt Glossary*

### **Agreed Minute**

The agreed minute sets out the common terms of a debt re-scheduling agreed between creditors of the Paris Club and a debtor country and is signed by representatives of the creditor countries who are obliged to recommend its terms to their governments. The agreed minute specifies which debt service will be rescheduled and over what period. The rate of interest charged on rescheduled debt is a matter for negotiations leading to a bilateral agreement between the debtor country and each individual Paris Club creditor.

### **Debt and Debt Service Reduction (DDSR)**

Debt restructuring agreements between sovereign states and consortia of commercial bank creditors involving a combination of buy-backs, the exchange of bank loans at a discount for bonds or the exchange of bank loans for bonds at par but that lend below-market interest rates. In most instances, the new financial instruments are secured with U.S. Treasury bonds. Under the Brady Plan of March 1989, these arrangements are supported by loans from official creditors.

### **Debt Sustainability**

A debt position of a country when the net present value of debt to exports ratio and the debt-service to exports ratio are below certain country-specific target levels within ranges of 200 through 250 percent and 20 through 25 percent, respectively. Debt measure includes public and publicly guaranteed debt liabilities.



### **Debt Sustainability Analysis (DSA)**

A study jointly undertaken by IMF and World Bank staff and the country concerned, in consultation with creditors, at the decision point. On the basis of the DSA, the country's eligibility for support under the HIPC will be determined.

### **Enhanced Surveillance**

Under Article IV of its Articles of Agreement, IMF monitors the economic progress of countries that are no longer using IMF resources, but are continuing to receive debt relief under multiyear rescheduling agreements. Countries are authorized to release edited versions of IMF staff reports to their official and commercial creditors.

### **Export Credits**

Loans extended to finance specific purchases of goods or services from within the creditor country. Export credits extended by the supplier of goods are known as suppliers credits; export credits extended by the supplier's bank are known as buyers credits.

### **Goodwill Clause**

This clause was introduced into Paris Club agreements in 1978 for debtors requiring relief beyond the usual consolidation period of 12 to 18 months. Under the standard goodwill clause, the Paris Club creditors agree in principle, but without commitment, to consider subsequent debt relief applications favorably for a debtor country that remains in compliance with its IMF program and that has sought comparable debt relief from other creditors. An improved goodwill clause, first introduced in 1983, goes beyond the standard clause by specifying the future consolidated period.

### **Grant Element**

The measure of concessionality of a loan, calculated as the difference between the face value of the loan and the sum of the discounted future debt service payments to be made by the borrower expressed as a percentage of the face value of the loan. By convention, a 10 percent discount rate is used.



### **Heavily Indebted Poor Country (HIPC)**

An original group of 41 developing countries, including 32 countries with a 1993 gross national product (GNP) per capita of US\$695 or less and 1993 present value of debt to exports higher than 220 percent or present value of debt to GNP higher than 80 percent (see table 1 below). Also includes nine countries that received concessional rescheduling from Paris Club creditors (or are potentially eligible for rescheduling). The original HIPC list will change in the context of implementing the HIPC Initiative, and will expand to include more countries that face unsustainable debt situations, even after the full application of traditional debt relief mechanisms, and that have embarked on World Bank/IMF supported adjustment programs.

### **London Club**

A term commonly used for a group of commercial banks that join together to negotiate the restructuring of their claims against a sovereign debtor. There is no organizational framework for the London Club comparable to the Paris Club.

### **Moratorium Interest**

Interest charged for rescheduled debt. In the Paris Club, the moratorium interest rate is negotiated bilaterally by the borrowing country with each individual creditor and therefore differs from one creditor to the next. In the London Club, where all creditors are deemed to have access to funds at comparable rates, the moratorium interest rate applies equally to all rescheduled obligations under a given agreement.

### **Most Favored Nation Clause**

Agreements concluded in the Paris Club that require the debtor to obtain debt relief from creditors outside the Paris Club on terms no more favorable than those obtained from Paris Club creditors.

### **Naples Terms**

Concessional debt reduction terms for low-income countries approved by the Paris Club in December 1994 and applied on a case-by-case basis. Countries can receive a reduction of eligible external debt of up to 67 percent in net present value terms.



**Table 1: Heavily Indebted Poor Countries: External Debt.**

Country	Total External Debt at End-1994 (US \$billions)	Owed to World Bank, IMF and other multilateral institutions (percent)
Angola	8.5	1.9
Benin	1.5	52.1
Bolivia	4.2	54.4
Burkina Faso	1.0	84.7
Burundi	1.1	82.8
Cameroon	6.2	26.1
Central African Republic	0.8	73.1
Chad	0.7	79.3
Congo	4.7	14.9
Cote d'Ivoire	13.9	24.3
Equatorial Guinea	0.2	44.9
Ethiopia	4.8	44.1
Ghana	4.1	65.0
Guinea	2.9	45.3
Guinea-Bissau	0.7	49.5
Guyana	1.8	34.0
Honduras	4.0	51.8
Kenya	6.2	44.6
Lao P.D.R.	2.0	26.2
Liberia	1.1	38.6
Madagascar	3.6	44.8
Mali	2.6	47.0
Mauritania	2.1	39.9
Mozambique	5.0	20.9
Myanmar	6.1	23.9
Nicaragua	9.0	14.6
Niger	1.5	56.3
Nigeria	28.5	16.9
Rwanda	0.9	82.8
Sao Tome and Principe	0.2	72.3
Senegal	3.1	56.9
Sierra Leone	0.7	45.2
Somalia	1.9	40.0
Sudan	16.6	17.0
Tanzania	6.2	42.3
Togo	1.2	55.5
Uganda	3.0	68.6
Viet Nam	22.2	1.0
Yemen	5.3	22.7
Zaire	9.3	25.1
Zambia	4.9	40.8

Source: World Bank Debtor Reporting System and IMF staff estimates.



### **Net Present Value (NPV) of Debt**

The sum of all future debt-service obligations (interest and principal) on existing debt, discounted at the market interest rate. Whenever the interest rate on a loan is lower than the market rate, the resulting NPV of debt is smaller than its face value, with the difference reflecting the grant element.

### **Nonconsolidated Debt**

This is debt that is wholly or partly excluded from rescheduling and has to be repaid at terms close to the original conditions.

### **Official Creditors**

Public sector lenders. Some are multilateral, consisting of international financial institutions such as the World Bank. Others are bilateral, being agencies of individual governments, including central banks.

### **Paris Club**

This is the forum in which debt restructuring has been provided since 1956 by official creditors. The common feature of participating creditor countries is that they each have a system of export credit insurance, because the primary type of claim rescheduled under the Paris Club is guaranteed (or insured) export credits. The Chairman of the Club and a small secretariat are provided by the French Treasury.

### **Publicly Guaranteed Debt**

The external obligation of a private debtor that is guaranteed for repayment by a public entity.

### **Pull-back Clause**

This clause in a debt restructuring agreement declares that an agreed minute is “null and void” unless certain actions have been taken before specific dates.



### **Standby Arrangements**

An understanding between IMF and a member country that purchases can be made under that country's credit tranche facilities up to an agreed amount during a specified period - typically 12-18 months. IMF resources are made available under standby arrangements in installments, and, typically, conditions must be met regarding credit policy, government or public sector borrowing, foreign trade policies, and use of foreign credits.

### **Standstill**

This is an interim agreement between the debtor country and its commercial banking creditors that principal repayments of medium- and long-term debt will be deferred and that short-term obligations will be rolled over, pending agreement on a debt reorganization. The object is to give the debtor continuing access to a minimum of trade-related financing while negotiations take place and to prevent some banks from abruptly withdrawing their facilities at the expense of others.

### **Toronto Terms**

Special rescheduling terms for HIPC's that were in effect from October 1988 through December 1991.

### **Transfer Clause**

A provision that commits the debtor government to guarantee the immediate and unrestricted transfer of foreign exchange in all cases in which the private sector pays the local currency counterpart for servicing its debt to the Paris Club creditors.



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# Public Debt Bibliography

Bank for International Settlements, International Monetary Fund, Organization for Economic Co-operation and Development, and World Bank. Debt Stocks, Debt Flows and the Balance of Payments, 1994.

The Canadian Institute of Chartered Accountants. Indicators of Government Financial Condition, 1997.

Federal Reserve System, Board of Governors. Trading and Capital Market Activities Manual, 1999.

International Monetary Fund. Official Financing for Developing Countries. December 1995.

International Monetary Fund. Debt Relief for Low-Income Countries, The HIPC Initiative, Pamphlet Series No. 51, 1999.

INTOSAI Internal Controls Committee. Guidelines for Internal Control Standards, June 1992.

INTOSAI. International Journal of Government Auditing, “Recognizing Fraud Indicators,” April 1999.

INTOSAI, Public Debt Committee. Guidance on Definition and Disclosure of Public Debt.



## Bibliography

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INTOSAI, Public Debt Committee. Guidance on the Measurement and Identification of Actual and Contingent Public Debt, 1999.

Klein, Thomas. External Debt Management: An Introduction, World Bank Technical Paper 245, 1994.

Standard & Poor's, "Sovereign Credit Ratings: A Primer." CreditWeek, April 16, 1997.

United Nations Development Programme. Debt Management, November 1997.

United Nations Development Programme. Debt and Sustainable Human Development, Technical Advisory Paper No. 4, May 1999.

United States General Accounting Office. Standards for Internal Control in the Federal Government, GAO/AIMD-00-21.3.1, November 1999.

United States General Accounting Office. Federal Information Systems Controls Audit Manual, GAO/AIMD-12.19.6, January 1999.

United States General Accounting Office. Status of the Heavily Indebted Poor Countries Debt Relief Initiative, GAO/NSIAD-98-229, September 1998.

World Bank. Financial Flows and the Developing Countries, quarterly.

World Bank. Global Development Finance, annual.



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