STORKEY & CO

MANAGEMENT CONSULTANTS

PRESENTATION
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Outline of the Presentation

Introduction

Sovereign Debt Management

- What is it and why is it important?
- With a Risk Management Focus
- Within an Asset-Liability Management Framework

IMF/World Bank Public Debt Management Guidelines

Sovereign Debt Management Trends in Developed Economies

Sovereign Debt Management Trends in Emerging Market Economies

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INTRODUCTION

International financial markets assign the status of "sovereign debt" to the public debt issued by governments. They often rank alongside the debts of the supranational agencies such as the Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD) and the World Bank (IBRD). This status reflects the highest quality debt issuers in the market, and most with the strongest credit rating.

As a result of this status, sovereign borrowers are expected to have a risk management culture which fully reflects the government's risk preferences and the special set of responsibilities associated with representing the government in the international financial markets. These responsibilities are considerable, particularly if the government's reputation in the financial markets is to be maintained at the highest level.

Many countries have clear and orthodox objectives for monetary policy, normally based on annual inflation targets. On the other hand, government objectives for sovereign debt management are often not well specified in terms of cost and risk. In many countries, debt management policy is undertaken with a limited understanding of the government's risk preferences and its tolerance to risk.

Over the past 10-15 years, some governments particularly in the developed economies have recognised this shortcoming and taken measures to address this by establishing an autonomous debt management office or agency with the sole responsibility for public debt management. This has only recently become the focus of some of the less developed or emerging market economies, primarily as a follow up to initiatives driven by the World Bank.

Sovereign debt management is the process of establishing and implementing a strategy for prudently managing the government's debt in order to achieve the government's cost, risk and other objectives.

This presentation will cover:

- a definition of sovereign debt management and why it is important
- the risks governments face and how they are managed within a sovereign debt management framework
- guidelines for sovereign debt management as prepared by the IMF and World Bank
- current trends in sovereign debt management both within the developed economies and emerging market economies and what opportunities this creates for financial market participants

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Sovereign Debt Management

What is Sovereign Debt Management?

Sovereign debt management is the process of establishing and implementing a strategy for prudently managing the government's debt in order to achieve the cost, risk and other objectives the government may set. The main objective of the sovereign debt manager is typically set to mange the risks incorporated in the public debt portfolio taking due account of the trade-offs between cost and risk. For many governments, the objectives are broader, including fostering the development of the domestic debt market to ensure an efficient market for government securities. Sovereign debt management addresses the structure and composition of the public debt portfolio, including the desired mix in terms of currency, interest rate and maturity profile. While the desirable or sustainable level of debt is usually addressed by fiscal policy, the debt managers have a responsibility to ensure that the fiscal authorities are aware of the impact of government financing requirements and debt levels on borrowing costs. Public debt sustainability is normally viewed in the context of public debt service ratios such as the ratio of public debt to GDP (e.g., Maastricht's 60 percent target for EMU entry) and to tax revenue.

Why is Sovereign Debt Management Important?

A government's debt portfolio is often the largest financial portfolio in the country. It often contains complex and risky structures and can generate substantial risk to the government and the country's financial stability. Therefore, sound risk management and sound public debt structures are required by governments to reduce the exposure to market, credit, funding, liquidity and other risks.

Recent events in the financial markets have shown that poor public debt management can exacerbate financial crises, even if macroeconomic conditions was sound. While emerging market governments' debt to GDP ratios are often below that of many OECD governments, their economies may be less diversified and susceptible to external shocks. Prudent debt management is important to prevent a future financial crisis evolving into a solvency issue for the country.

Sovereign Debt Management with a Risk Management Focus

The prime focus of any government debt management operation should be on risk management. The government should be risk averse in its financial management, therefore, protecting against adverse events that may impact negatively on the government's finances. Ideally, this should also incorporate contingent liabilities.

Three main considerations underlie the government's preference for low risk in its portfolio management:

- Evidence suggests that individuals or, more relevant in a public choice context, "median voters", tend to be risk averse in their decision-making and expect the government to reflect this preference in managing its interests.

- Losses incurred in the government's debt portfolio impose costs which most taxpayers are unable to avoid. Taxpayers have limited practical scope to foresee and undo the consequences of poor financial decisions by the government. Risk-averse policies reduce the risk of surprises, providing greater certainty for planning.
- The government does not have any competitive advantage over other market participants in attempting to derive excess returns from its debt management, except for its privilege as a tax and regulation-exempt institution and internal information on the fiscal situation or government policy objectives. However, most governments would not consider it is ethical for these exemptions to be exploited.

The determination of a government debt management objective has been tackled by a number of developed countries. Most have been established with the objective of cost minimisation subject to an acceptable level of risk or minimisation of risks subject to the expected costs of risk reduction.

Examples of some countries' debt management objectives are:

- **Australia** "….to minimise the long-term market value of the public debt (cost) and contain the volatility of budgetary debt cost (risk)...."
- **Ireland** "….contain the level and volatility of annual fiscal debt service costs, contain the government's exposure to risk…."
- **New Zealand** "….to maximise the long-term economic return on the Government's financial assets and debt in the context of the Government's fiscal strategy, particularly its aversion to risk…."
- **Sweden** "….to minimise the cost of borrowing within agreed risk tolerances…."
- **United Kingdom** "….to carry out the Government's debt management policy of minimising finance costs over the longer term, taking into account risk, and to manage the aggregate cash needs of the Exchequer in the most cost efficient way."

In a globalised economy, the risks to be managed by the government include:

- **Market risk** which measures the impact on public debt of adverse movements in interest rates, exchange rates, commodity prices and inflation.
- **Funding risk** which makes it difficult, if not impossible, for the government to access markets when it needs funds to roll-over debt or finance the budget and to raise these funds at an acceptable cost.
- **Credit risk** which measures the impact of counterparty downgrade, default or loss on positions with respect to the liquid assets or derivative contracts held by the government.
- **Liquidity risk** which impacts on the government's cash management functions with unused funds and idle cash balances, the inability for fast or cost effective liquidation of instruments, or access to standby facilities.

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- **Portfolio concentration risk** which can be due to the concentration of exposure to a specific debt instrument, individual transaction, market, industry or country.
- **Operational risk** which covers a wide range of potential exposures and events (using Generally Accepted Risk Principles) such as:
  - **audit, compliance and controls** which include the risk of fraud, segregation of duties, unauthorised transactions, and poor monitoring and compliance;
  - **business continuity** which does not enable the Debt Management Office to operate and/or recover from an incident such as natural disasters, building damage, power failure, or loss of documents or data including virus corruption;
  - **legal** which results from a breach of legal requirements in the effective jurisdiction;
  - **key person** which causes problems if key staff are unavailable or depart from the Debt Management Office;
  - **reputation** which leads to a decline in the government's reputation in the market as a result of negative publicity, loss of business or transaction failures or losses;
  - **security** through a breach of physical or data security;
  - **systems** which are due to errors or failures in system controls and services;
  - **transactions** which are due to errors in executing, capturing, confirming, settling and documenting transactions undertaken by the Debt Management Office.

SOVEREIGN DEBT MANAGEMENT WITHIN AN ALM FRAMEWORK

The World Bank has been instrumental in developing an Asset-Liability Management (ALM) framework. It is based on a sovereign balance sheet approach, which takes into account both the sovereign's assets and liabilities, allowing the government to maximise the potential for natural hedges and providing the basis for evaluating risk/cost trade-offs in an integrated fashion. The most orthodox ALM solution for a sovereign is to match local currency, long-duration cash flows with local currency, long-duration debt. Many developing country governments, however, are constrained from immunising the debt portfolio, the primary reason being the underdevelopment of the domestic debt market. Risk analyses of different types of debt portfolios, given the government's risk tolerance, are then carried out. The decisions for a particular debt portfolio are translated into an explicit strategy, usually with a medium-term horizon. The sovereign debt management strategy resulting from the ALM framework needs to be backed by strong operational bases with respect to organisational structure, legal framework, trained staff, and systems.

This approach is expected to become the framework for sovereign debt managers in future. This will be particularly important if/when the government moves from a cash-based to an accrual-based accounting and budget system.

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The following table sets out the assets and liabilities that make up the government's balance sheet:

Assets	Liabilities
◆ PV of income flows ◆ Foreign exchange reserves ◆ Marketable securities ◆ Onlending (eg IBRD Loans) ◆ Investments in State Entities ◆ Investment in: ▪ infrastructure (eg roads) ▪ property (eg Govt buildings, schools etc) ▪ other assets (eg military)	◆ PV of expenditure obligations ◆ Market value of sovereign debt ◆ Present value of contingent obligations ◆ Equity (net worth of Govt estate)

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IMF/World Bank Public Debt Management Guidelines

The International Monetary Fund (IMF) and the World Bank have prepared a set of Draft Guidelines on Public Debt Management to assist countries in their efforts to reduce financial vulnerability. The Draft Guidelines cover both domestic and external public debt and encompass a broad range of financial claims on the government. They are designed to assist policymakers in reforms to strengthen the quality of their public debt management and reduce their country's vulnerability to international financial shocks. The Draft Guidelines cover:

- Debt Management Objectives and Coordination
- Transparency and Accountability
- Institutional Framework
- Debt Management Strategy
- Risk Management Framework
- Development and Maintenance of an Efficient Market for Government Securities

The Draft Guidelines identify areas in which there is broad agreement on what generally constitutes sound practices in public debt management. They also recognise that building capacity in public debt management can be a lengthy process. Moreover, each country's situation and needs may vary widely depending on the capital market constraints it faces, its exchange rate regime, the quality of its macroeconomic and regulatory policies, the institutional capacity to design and implement reforms, the country's credit standing, and its objectives for public debt management.

The IMF/World Bank suggest that building capacity in sovereign debt management involves:

- establishing key objectives and priorities
- establishing prudent risk management strategy and policy
- strengthening middle office analytical capability
- defining a framework for risk management
- ensuring consistency with other macroeconomic policies and objectives
- establishing an organisational structure that ensures clear accountability and transparency of responsibilities
- establishment of a legal framework
- recruitment of trained staff, and selection and implementation of effective management information systems

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The Draft Guidelines are being discussed with country officials in a series of Regional Conferences. A copy of the guidelines can be obtained from the World Bank Financial Product and Services website at:

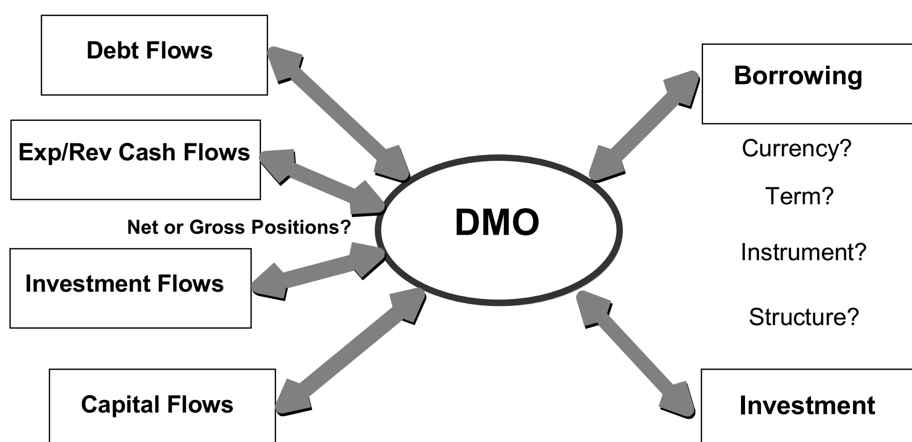
http://www.worldbank.org/fps/news.htm

Sovereign Debt Management Trends in Developed Economies

For the developed countries, governments are continuing to enhance their debt management capacity by ensuring the debt managers are more accountable, their activities are more transparent, and performance measures are established often on a risk-adjusted basis. As many of these countries are currently running fiscal surpluses, the debt management office has become more active in asset management within an asset-liability management framework.

The information flows necessary by sovereign debt managers to make decisions on borrowing and investments can be complex, particularly if all of the functions are not integrated or consolidated into a single debt management office. Integration of cash management with debt management can create significant benefits to governments through more efficient liquidity management including the use of idle cash balances.

This complexity can be illustrated using the following diagram:



While debt and investment cashflows are normally predictable and can be forecast with reasonable accuracy, it is not so easy with government's expenditure/revenue cashflows and the capital flows, particularly if the government is active in its privatisation program. Some countries like New Zealand have implemented a government cash management regime with incentives to provide better forecasting of expenditure/revenue cashflows which then creates greater certainty for the public debt managers to make decisions on its borrowing and investment program.

A major issue confronting governments is the separation of debt management policy and monetary policy. Conflict can, and sometimes do arise, between monetary and debt management authorities as a result of differences in their objectives. For example, some central banks may prefer that the government issues inflation-indexed debt to bolster the credibility of monetary policy while the debt managers may believe that the market for such debt has not been fully developed.

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Conflicts can also arise between the debt managers and fiscal authorities – such as with the budget cash flows where issuing zero coupon debt can transfer the debt burden to future generations or budget years.

The key issues facing the different countries' sovereign debt managers include:

- establishment/development of an autonomous debt management office (e.g., Australia with the establishment of the Australian Office of Financial Management)
- development of/enhancements to benchmarks established for measuring the performance of the debt management office and its staff
- how to manage a decreasing public debt portfolio due to ongoing fiscal surpluses (e.g., Australia, NZ, UK, USA)?
- enhancing asset management capacity of the debt management office (e.g., Ireland where the NTMA will be responsible for managing a "future generation" fund)
- the implications of a move from a cash-based to an accrual-based accounting and budget system
- enhancing the government's overall cash management capability

Each of these presents opportunities to the financial markets as the debt management offices seek solutions to address these issues.

SOVEREIGN DEBT MANAGEMENT TRENDS IN EMERGING MARKET ECONOMIES

Many emerging market economies have to operate their sovereign debt management under significant constraints. These can be due to:

- difficult macroeconomic conditions such as high inflation and/or interest rates
- underdeveloped domestic debt market for government securities
- a low credit rating
- limited access to international capital markets or debt financing

If the government has a large fiscal and/or balance of payments deficit (with a fixed exchange rate), then the debt managers can face enormous difficulties not only in financing the government's borrowing requirement but also in managing the risks inherent in the public debt portfolio.

In response to borrower demand, the World Bank has implemented a number of initiatives to its IBRD loan program to provide these countries much greater flexibility to manage its loans with a new range of financial risk management products. This is in addition to the IBRD loans such as currency pool loans, LIBOR-based or fixed-rate single currency loans, or fixed-spread loans. Using standard market techniques, IBRD Hedging Products can transform the risk characteristics of a borrower's IBRD obligations even though the negotiated terms of particular loan contracts themselves may be fixed. These products allow borrowers improved risk management capability in the context of projects, lending programs, or sovereign asset-liability management. IBRD Hedging Products include interest rate swaps, interest rate caps and collars, currency swaps and, on a case-by-case basis, commodity swaps.

The World Bank Guidelines covered in an earlier section are also driving changes to sovereign debt management within the emerging economies. For example, there is an active program of technical assistance to help countries such as China, Fiji, Indonesia, Korea, Poland, Russia, South Africa, and Thailand to enhance their sovereign debt management capacity including the establishment/development of an autonomous debt management office and the development of the domestic debt market. These changes will have a significant impact on these domestic markets and present a range of opportunities to financial market participants.

The key issues facing the different emerging economy countries' sovereign debt managers include:

- the level of debt sustainability and potential impact on the government's borrowing programs to refinance public debt and contingent liabilities that the government has taken over (e.g., Indonesia and Thailand are two countries that have a significant refinancing program to cover contingent liabilities inherited after the Asian Crisis)
- the institutional framework needed for sovereign debt management and the need to establish an autonomous debt management office (e.g., China, Fiji,

Indonesia, Korea, Poland, Russia, South Africa, and Thailand are in the various stages of establishing an autonomous debt management office)

- development of the domestic debt market
- establishing a debt management strategy and risk management framework
- how to manage the risks associated with contingent liabilities
- acquisition and implementation of debt/risk management systems