

# Guidelines for Government Securities Issuance in the MEFMI Region



Macroeconomic and Financial Management Institute of Eastern and Southern Africa







# Guidelines for Government Securities Issuance in the MEFMI Region

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### **TABLE OF CONTENTS**

		ATIONS LEDGMENT				
		VE SUMMARY				
	••••					
1.	INTRODUCTION AND BACKGROUND					
	1.1	Rationale for Developing Local Debt Markets	1			
	1.2	Significance of Domestic Debt Issuance in Eastern and	2			
	1.3	Southern African Countries	3			
	1.4	Processes in Government Securities Issuance	5			
2.	CURRENT PRACTICES OF SECURITIES ISSUANCE					
	IN T	HE MEFMI REGION	6			
	2.1	Overview				
	2.2	Salient Features	6			
		2.2.1 Benchmark Securities and Yield Curve Development	6			
		2.2.2 Secondary Market Trading	7			
		2.2.3 Borrowing Calendar	7			
		2.2.4 Withholding Tax	8			
		2.2.5 Investor Base	8			
		2.2.6 Central Depository System (CSD)	9			
	0.0	2.2.7 Primary Market Structure and Primary Dealers Challenges in the Current Practices	9			
	2.3	2.3.1 Limited Secondary Trading	10			
		2.3.2 Underdeveloped Yield Curve	10 10			
		2.3.3 Inadequate Market Communication	10 11			
		2.3.4 Narrow Domestic Markets	11			
		2.3.5 Limited Foreign Investors Participation	11			
3.		SONS FOR GOVERNMENT SECURITIES ISSUANCE				
	3.1	Borrowing for National Budget Support	13			
		3.1.1.1 Establishing the authority to borrow	14			
		(in both domestic and foreign markets)	15			
		3.1.1.2 Specify borrowing purposes				

		3.1.1.3 Set clear debt management objectives	15			
		management strategy	15			
		3.1.1.5 Specify mandatory reporting to parliament				
		3.1.1.6 Determine audit requirements				
		3.1.2 Cash Flow Projections and Scenario Analysis	16			
	3.2	Non budget deficit related issuance	16			
	0.2	Tion badget delicit rolated localino	10			
4.		ISLATIVE AND REGULATORY PROCESSES				
	4.1	Overview	18			
	4.2	Legislative Process	18			
	4.3	Legal and Regulatory Framework	19			
	4.4	Regulation of the Government Securities Market				
		4.4.1 Scope of regulation of the securities markets				
		4.4.2 Market Oversight	21			
	4.5	Agency Agreement on the roles and responsibilities				
		of the Agent and Principal	21			
5.		MARKET INFRASTRUCTURE				
	5.1	Overview	23			
	5.2	Trading and Trading Infrastructure	24			
	5.3	Clearing and Settlement System	25			
		5.3.1 Trade for trade settlement (gross for both funds				
		and securities) (Gross/ gross)	25			
		5.3.2 Gross for securities and net for funds (Gross /net)	26			
		5.3.3 Net for both securities and funds (net/net)	26			
	5.4	Securities Lending and Borrowing Operations	28			
	5.5	Repurchase Agreements (Repos) and Swap Markets	29			
6.		ISSUANCE STRATEGY				
	6.1	Debt instruments to be issued				
	6.2	Pricing Process and Strategy	33			
	6.3	Determination of Investor Preferences				
	6.4	Issuance and Auction Process	35			
		6.4.1 Uniform or Single Price Auction	36			
		6.4.2 Multiple Price (Discriminatory) Auction				
		6.4.3 Hybrid Auctions	38			
		6.4.4 Illustration of Auction Methodologies				
	6.5	Distribution Channels				
		6 5 1 Primary Dealer Panels	40			



	6.6	Common Risks in Issuance and Proposed	43
	0.0	Mitigation Mechanisms	44
		6.6.1 Auction failures and cancellations	44
		6.6.2 Interest Rates Spiral	44
		6.6.3 Reputational Risks	45
		6.6.4 Redemption and Rollover risks	45
		6.6.5 Operational Risks	45
7.	CON	MMUNICATION AND TRANSPARENCY IN	
		RKET OPERATIONS	47
	7.1	Overview	
	7.2	Announcement of Proposed Issuance	47
	7.3	Information Dissemination	
	7.4	Details of the Issue	
	7.5	Auction Dates and Calendar	49
	7.6	Securities Issuance Frequency	50
	7.7	Settlement Conventions	
	7.8	Auction Results	
	7.9	Market Transparency	
	7.10	Bond Market Forums	53
8.	FURTHER DEVELOPMENT OF DOMESTIC		
		URITIES MARKETS	54
	8.1	Secondary Market Trading Structures	54
	8.2	Encouragement of long term investors	54
		8.2.1 Defined Benefit (DB) Plan	55
	0.0	8.2.2 Defined Contribution (DC) Plan	55
	8.3	Transaction Costs	
	8.4 8.5	Taxation Issues  Benchmark Curves	
	0.5	benchmark Curves	
9.	CON	ICLUSION	59
		RY	
		ares	62

#### ABBREVIATIONS

BADEX Bonds and Derivatives Exchange

BCPs Business Continuity Plans

BIS Bank of International Settlement

BoBCs Bonds and Bank of Botswana Certificates

BoT Bank of Tanzania
BOU Bank of Uganda
BoZ Bank of Zambia
BWP Botswana Pula

CDS Central Depository System

CPSS Committee on Payments and Settlement systems

CSD Central Securities Depository

DB Defined Benefit DC Defined Contribution

DSE Dar es Salaam Stock Exchange

DvP Delivery versus Payment
FDI Foreign Direct Investment
FMIs Financial Market Infrastructures
FSA Financial Services Authority (UK)

FSB Financial Stability Board GDP Gross Domestic Product IDB Inter-Dealer Broker

IMF International Monetary Fund IPOs Initial Public Offerings

IRS Interest Rate Swap

ISIN International Securities Identification Number

LUSE Lusaka Stock Exchange

MEFMI Macroeconomic and Financial Management Institute of

Eastern and Southern Africa

MOF Ministry of Finance
MTM Mark-to-Market
OTC Over-the-Counter
PDs Primary Dealers

REPOs Repurchase Agreements SROs Self-Regulating Organisations

UK United Kingdom

US\$ United States of America Dollar

USA United States of America

ZADMO Zimbabwe Aid and Debt Management Office



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#### **EXECUTIVE SUMMARY**

In most countries, the development of a government securities market has been crucial in aiding the creation of a liquid and efficient domestic debt market that facilitates parastatal, corporate and other issuance. It also signals that a country is maturing financially and is less dependent on donor funding.

An important prerequisite for building investor confidence is a predictable, stable and sound macroeconomic environment. There are important macroeconomic prerequisites that need to be in place before a government securities market can be successful and which will influence the demand for and supply of securities. These include, inter alia:

- Implementing appropriate, credible and well-coordinated fiscal and monetary policies;
- Drafting and approving credible national budgets coupled with a viable balance of payments position and stable exchange rate regime;
- Developing an effective legislative and regulatory framework for financial markets, including bonds, with an effective securities market regulator;
- The development of sound, credible and enforceable bankruptcy laws;
   and
- A tax regime that does not hinder the development and liquidity of the financial markets and distort the behaviour of market participants to the detriment of markets.

Market related aspects that will influence the effectiveness of the financial markets and the success of the securities markets include, inter alia:

- The development of robust market infrastructure to facilitate cost effective trading, safe custody and secure settlement processes;
- The use of internationally accepted electronic connectivity standards to ensure seamless cost effective connections to regional and international markets and investors;
- The presence of a regular bond issuance calendar adds creditability and predictability to the issuance programme;
- The presence of clear and unambiguous trading and settlement rules; and
- Minimal cost of issuance for both government and corporate debt.



The benefits of developing a liquid bond market go beyond financing government deficits at lower costs, and include the following:

- A liquid government bond market will facilitate the pricing of other riskier financial assets;
- It has a direct impact on the degree to which other segments of financial markets (forward and futures markets, including foreign exchange hedging) can be developed to support risk management functions;
- The depth of money and bond markets has a decisive influence on the effectiveness of central bank's monetary policy;
- The yield curve in a liquid bond market strengthens the transmission mechanism for monetary policy by fostering active and informed markets:
- Reduces dependence on external aid thereby providing foreign Aid exit strategy, and enables the countries to move towards greater reliance on market-based funding sources; and
- It can cushion the domestic economy against short-term shocks.

The MEFMI member countries have adopted their own individual approaches to the development of their domestic debt markets. However, there is a common theme which all should follow and which is outlined in different sections of these guidelines. A discussion of the current market issuance practices in some of the MEFMI member states is covered in section 2 of the guidelines to give the users a synopsis of such practices.

#### 1. INTRODUCTION AND BACKGROUND

#### 1.1 Rationale for Developing Local Debt Markets

The main reasons for issuance of government securities in most countries have been to finance fiscal deficits, and for financial market development. Under certain highly regulated financial regimes, governments in many emerging markets have met much of their borrowing needs by having local banks hold government debt securities as statutory assets, usually to meet liquidity reserve requirements. In addition, insurance companies and pension funds may be required to hold a portion of their assets in government securities to meet prescribed asset ratios.

In the absence of well-developed bond markets, central banks have only short-term debt instruments at their disposal to conduct open market operations. These actions can be limiting, and can cause concentration of issues at the short end of the market. Longer dated bond issues are essential to create a benchmark yield curve, and to provide necessary assets for the longer duration investors, such as pension funds. Existence of a benchmark yield curve strengthens the transmission of monetary policy signals, by linking expectations of future short-term rates to current long-term rates. The yield curve also provides information on the market's expectations regarding future interest rates and inflation, which is a key input into the setting of a monetary policy stance.

Borrowers in the private sector also need access to long-term finance, either directly from the capital markets or arranged and/or syndicated by banks. Corporations invariably have the need to finance fixed investment projects that are expected to yield returns only in the long-term, and efficient pricing of these corporate loans is difficult without a developed benchmark curve.

The existence of tradable instruments of varying maturities also assists risk management. When banks are faced with a limited range of instruments (e.g. in terms of maturity, currency, and interest rate), they can be exposed to significant asset and liability mismatches. The availability of hedging



products and structures will also create a larger and wider range of financial instruments that are traded in markets.

Another advantage of developing debt markets is the reduction of intermediation charges, while at the same time making the financial system more stable.

Over the recent past, a number of governments in the MEFMI region have embarked on the development of their government securities markets. New systems of trading treasury securities have been developed with the main objective, amongst others, of developing the secondary market. Many countries now frequently issue maturities of 91 days, 182 days, 273 days and 364 days. Similarly, Government bond issuance has also progressed, and currently many MEFMI countries have extended yield curves from short to medium term tenors. Only a handful of MEFMI countries are issuing bonds with maturities exceeding 10 years.

The growth in the supply of government bonds has, in some cases, had an impact on issuance conditions. Issuance has, at times, met weak demand, created pricing distortions in the primary market, as well as liquidity pressures in the secondary market. These conditions, while understandable, have adversely affected the growth and deepening of both the primary and secondary markets.

Some of the major contributory factors have been lack of appropriate and documented issuance mechanisms, understanding of pricing mechanism, timing of the issuance calendar, transparency in dissemination of market information, development of the prospectus, and the developing state of the domestic market.

Whilst debt issuance procedures in MEFMI countries differ from country to country in terms of technical issuance standards, primary dealership systems and other primary market arrangements, it is important to recognize that the current globalization and integration of markets calls for standardization of general procedures and policies for the issuance of government securities. The issuance guidelines therefore attempt to recognize and capture various country aspects that reflect on, amongst others, the interplay between

external and domestic debt; sovereign credit risk rating levels; the degree of information transparency; different tax regimes; and homogeneity or variance in the legal, regulatory and other government policies.

### 1.2 Significance of Domestic Debt Issuance in Eastern and Southern African Countries<sup>1</sup>

The 2008/09 global financial crisis added impetus and urgency to the need to develop domestic capital markets in Africa due to the deteriorating fiscal space. The crisis not only affected the financial sector, but its impact was felt in the broader economy in terms of declining export revenues and sudden reversal in capital flows, which had previously helped finance long-term investments. This has led to deteriorating fiscal space, creating an urgent requirement for governments to mobilize resources from domestic capital markets to help meet their budget shortfalls.

Furthermore, well-functioning and efficient domestic bond markets would guarantee greater diversification of long-term financing and improve resource allocation into domestic investments. This will enable African countries to access long-term debt in local currency thereby providing much-needed financing for the constantly growing housing and infrastructure needs. This is imperative as many of these countries have limited access to international capital markets and are faced with a likely decrease in aid financing in the face of the global financial crisis. It is estimated that Africa will need US\$20 billion of infrastructure investment per year in order to narrow the gap with its developing country peers and show faster progress toward the Millennium Development Goals (World Bank, 2005a). This translates into approximately 5 percent of GDP for initial investment and an additional 4 percent of GDP for operations and maintenance (World Bank, 2005b).

Bond markets, however, which are an integral part of the capital markets, remain largely underdeveloped in Africa with corporate bond markets non-existent or in their infancy. In most African countries the public sector dominates debt issuance, mainly with debt instruments of very short tenor and activities focused on the domestic primary market with limited secondary

Source: African Development Bank – African Financial Markets Initiative (AFMI); Mapping of current projects and ongoing initiatives related to bond market development in Africa – Summary of regional studies



market trading. Although several countries have listed the bonds on the stock exchange, secondary market trading remains virtually non-existent due to the "buy and hold" strategy of domestic banks who hold the bulk (about 70 percent) of the debt, in part due to the limited lending opportunities and prudential requirements like liquid asset ratios in some countries that require banks to hold a certain amount of their assets in government-issued paper. With the exception of South Africa, corporate bonds markets are largely non-existent.

#### 1.3 Objective and Motivation of the Guidelines

The objective is to develop step-by-step guidelines to assist MEFMI member states to improve their current securities issuance programmes, and help those planning to issue government securities for the first time.

The motivation stems from the fact that it is now a widely accepted doctrine that the efficient Government securities market is a catalyst for broader financial market development. It is also a necessary assurance of the availability of infrastructure funding, due to the previously mentioned contraction of donor and other funding sources with the current global economic downturn.

Appropriate and relevant guidelines will enable and assist debt managers with a consistent and predictable approach, as well as become a source of helpful and practical advice drawn from a variety of experiences. Furthermore and importantly, the guidelines will foster business continuity by acting as reference backups in the event of staff turnover and or new staff recruitments.

The secondary outcome of the guidelines will be growth and deepening of the primary and secondary markets, and be considered as a recognised framework for the development of corporate issuance programmes.

#### 1.4 Processes in Government Securities Issuance

These guidelines have been prepared to follow the logical sequence of activities in the issuance of Government securities. It must be borne in mind that the debt issuance procedures may differ substantially from country to country, and the guidelines may be more suitable in certain areas than in others. That being the case, however, the basic principles should be similar, and the guidelines highlight issues that require attention of all MEFMI jurisdictions to foster securities markets development.

These detailed guidelines capture the following processes:

- Legislative and regulatory processes;
- Reasons for securities issuance approval processes;
- Market infrastructure including trading, clearing, custody and settlement systems;
- Issuance strategy;
- · Communication and transparency in market operations; and
- Other aspects of the development of domestic securities markets.



# 2. CURRENT PRACTICES ON SECURITIES ISSUANCE IN THE MEFMI REGION

#### 2.1 Overview

All MEFMI member countries have issued government securities in one form or another. Long dated securities and corporate sector debt remain nascent, with few countries<sup>2</sup> having yet issued any municipal debt instruments. A short synopsis on the current issuance practices of the thirteen MEFMI member states is discussed below. This synopsis is based on the best available information, in the year 2012, from web based sources, personal experiences, selected field interviews, and a questionnaire that was sent to ministries of finance and central banks. MEFMI recognises the fact that by the time of collecting this information a number of reforms were being implemented in some of the countries and therefore some changes were expected thereafter.

#### 2.2 Salient Features

There are a number of common practices that have been observed from current government securities issuance practices in the MEFMI region. These include non-existence of benchmark securities and yield curves in most countries, low secondary market trading, different withholding tax rates across the region, narrow investor base in each country, and inadequate market communication.

#### 2.2.1 Benchmark Securities and Yield Curve Development

The development of a yield curve is vital in guiding market pricing of a wide range of financial instruments. One important observation was the nonexistence of well-defined yield curves in a number of MEFMI member countries. Furthermore, with the exception of Kenya and Zambia, other

<sup>&</sup>lt;sup>2</sup> Only Zimbabwe indicated that it previously issued municipal bonds.

countries do not issue benchmark securities on a periodic basis and therefore lack well-defined yield curves. Without firm commitments by government to periodic benchmark issues, it may be difficult to avoid fragmentation of securities and to develop liquid secondary markets. The problem is compounded by the buy-and-hold strategy of major investors in government securities, mainly due to a limited availability of alternative investment opportunities. In Kenya and Zambia, there is a deliberate policy to issue benchmark Treasury bonds in key maturities (mostly 2, 5, and 10 years) at predetermined intervals. This policy is a critical step towards addressing the problem of bond market fragmentation and thus creating the liquidity necessary for developing a firm and reliable benchmark yield curve. This initiative provided confidence to the private sector, resulting in a number of corporate bond issuances in Kenya.

#### 2.2.2 Secondary Market Trading

A well-functioning secondary market promotes efficient price discovery and provides an exit mechanism for investors in medium-and long-term securities. While a number of countries in the MEFMI region require exchange listing and trading of government securities, in practice most secondary market trading takes place Over-The-Counter (OTC). Thus, secondary market trading has remained dormant in most countries, largely due to the buy-and-hold strategy by major holders of government securities. Furthermore, Zambia is the only country in the MEFMI region with a Bonds and Derivative Exchange (BADEX), although the bulk of the country's observed trades in government securities take place on the OTC market, with the exchange only acting as a platform for reporting trade figures. In other countries, government securities are listed on stock exchanges, with the exception of Angola and Lesotho.

#### 2.2.3 Borrowing Calendar

Publication of an annual borrowing calendar followed by a timely and full disclosure of auction results increases transparency and predictability of government securities issuances. This allows market participants to develop their investment strategies ahead of time and to market the securities to retail investors. While the practice of issuing the borrowing calendars has gained



momentum, the information disclosed in the calendar is not comprehensive in a number of countries. A number of countries in the region establish and publish issuance calendars that only stipulate issue dates, with no indication of amounts or even targeted range of instruments. However, auction results are disclosed in a timely manner and in sufficient detail on websites, print media or in trading platforms such as Reuters.

#### 2.2.4 Withholding Tax

With the exception of Zimbabwe, other countries in the region levy withholding tax on interest income receivable from government securities. Observed withholding tax rates range from 5% to 20%, with some countries encouraging investment in long-dated securities by giving full tax-exemptions (Tanzania) while others charge lower tax rates for long-dated maturities over short-term instruments (Rwanda and Kenya). Some countries also charge different withholding tax rates to different categories of investors, with foreign investors paying more than local investors (Botswana) while other countries levy uniform tax rates for all investors (Angola and Swaziland). In Zimbabwe Government securities are exempted from withholding tax for all categories of investors (local and foreign), while corporate issuances are levied a 15% withholding tax.

While levying tax on interest income is a widely acceptable practice, high withholding tax rates may attract higher yields on government securities, as investors seek to recover part of this cost from the yield payable to them.

#### 2.2.5 Investor Base

A large and diversified investor base with different time horizons, risk preferences, and trading motives is vital for ensuring a stable demand for government securities, stimulating active secondary market trading, facilitating rapid price discovery and lengthening the yield curve. Although institutional investors are well established in some countries (notably Kenya), they are either dominated by public sector institutions (social security funds) or have not yet reached the requisite level of diversity, heterogeneity, maturity and sophistication that facilitate rapid extension of the yield curve. Commercial

banks have largely remained the major investor category in government securities in most countries. While foreign investors have participated freely in government securities markets of some countries (Zambia, Uganda and Rwanda), the extent of their participation has been restricted in other countries by existing exchange control regulations (Zimbabwe and Malawi). To provide a platform for interaction between the market and government, some countries (Kenya and Lesotho) have established the Market Leaders Forum. The Forum is very useful in bridging the communication gap between the investors and the government.

#### 2.2.6 Central Depository System (CSD)

In most countries, government securities are dematerialized and registered in the Central Securities Depository (CSDs) operated by the central banks. Very few countries, notably Mozambique and Swaziland, do not have CSDs for government securities. In Swaziland, settlement of securities in the secondary market is done through Transfer Secretaries, who are members of the stock exchange.

#### 2.2.7 Primary Market Structure and Primary Dealers

The primary dealership system exists in few countries, particularly Botswana, Swaziland and Uganda. Other countries do not use primary dealership systems, preferring direct primary market access by a wide range of investors. The main reasons for the absence of primary dealer systems relate to concerns about the potential for collusive behavior among a small number of eligible institutions, the need to promote competition and secondary market trading. Auctions are the common method for the sale of government securities in all countries, although there are differences in pricing methodologies. While most countries use uniform pricing methodologies, others use the multiple pricing mechanism. The difference between uniform pricing methodology and the multiple pricing mechanism is discussed in detail in sections 6.4.1 and 6.4.2.

A notable development in some MEFMI member countries, particularly Kenya, Tanzania and Namibia, is the existence of electronic bidding systems.



#### 2.3 Challenges in the Current Practices

Numerous challenges still exist in the government securities market and these have hampered meaningful market development. A number of these challenges can be influenced by good policy, but others are due to circumstances that may take time to address. The key challenges include the following.

#### 2.3.1 Limited Secondary Trading

The region is generally characterized by underdeveloped financial markets with little secondary market trading, caused by among other factors manual auction processing, illiquidity and limited types and number of instruments. While Treasury bonds are listed on securities exchanges in most MEFMI member countries very little, if any, are traded in the secondary market as investors are opting for a buy and hold strategy. One of the major constraints to secondary market trading is the structure of the markets. Most are dominated by commercial banks who lack trading skills and who hold paper to satisfy liquidity requirements. In markets dominated by pension funds and insurance companies with active fund managers, trade tends to take place (Kenya, Namibia, Zambia, and formerly Zimbabwe)

The region largely lacks electronic settlement platforms and has fragmented infrastructure/systems that compound settlement risks. For instance, settlement of Treasury and Corporate bonds can extend to as long as T+5. These rigidities hinder sophisticated market operations such as natural hedging products or derivative markets with liquid repo market and scrip lending facilities.

#### 2.3.2 Underdeveloped Yield Curve

There is no reliable yield curve in the region (except for Kenya) as in some countries the published curve is derived from daily quoted yields obtained from primary dealers. The secondary markets are illiquid, leading to lack of reliable yield curves and mark-to-market prices that would guide pricing.

The markets are dominated by short end securities mainly Treasury bills with maturities ranging from 14 to 364 days. In many countries, Treasury

bills account for as much as three quarters of domestic debt instruments. Likewise, Treasury bonds issuance is concentrated in the lower maturities. For example, with exception of Zambia, Angola and Kenya that have Treasury bonds extending to 15, 20 and 30 years of maturity, respectively, the rest of the countries have maximum maturity of 10 years. Consequently, Government borrowing is vulnerable to refinancing risks.

#### 2.3.3 Inadequate Market Communication

Weak communication and co-ordination between the MOF (principal entity), the central banks (fiscal agent) on one side and the market (participants) on the other side has been observed. Furthermore, in most countries of the region, there is no issuance calendar that is available to investors and this makes the market unpredictable from demand side. Even in the few countries where issuance calendars are published, they are occasionally not followed, and had limited information as most of them indicate the issuance dates without stating the respective amounts. This in turn, reduces efficiency of the market as investors cannot align their investments with Government debt issuance. Countries need to embrace the practice of publicizing issuance calendars.

#### 2.3.4 Narrow Domestic Markets

The domestic debt markets in the region are generally characterized by narrow investor base dominated by commercial banks and supply base dominated by Government. In Rwanda, for instance, commercial banks hold up to 83 per cent of all financial sector assets. The dominance of commercial banks is partly due to lack of large non-bank financial institutional players. This points to the need to develop both the pensions industry and insurance sector. The dominance of Government on the supply side is partly attributable to absence of pricing benchmark that would encourage issuance of corporate bonds. Only few countries, notably Kenya and Zambia are issuing corporate bonds.

#### 2.3.5 Limited Foreign Investor Participation

The regional debt markets are dominated by local investors partly due to capital and foreign exchange controls and yields distorted by withholding taxes and other levies that discourage foreign investors. With the exception



of Zimbabwe<sup>3</sup>, interest on Government securities attracts withholding tax that ranges between 5 percent and 20 percent. These taxes in some instances are in addition to the transaction costs such handling fees (e.g. 2% for Zambia charged in advance at issue on both the nominal and coupon amounts) and brokerage fees (e.g. 1.7% for Rwanda charged on the value of transaction). Foreign investor participation also affected by capital and foreign exchange controls that still exist in a few countries including Tanzania and Malawi.

In the more liquid African markets such as South Africa, the majority of the constraints mentioned above have been overcome, and this has resulted in massive liquidity. The liquidity in both the primary and secondary markets has reduced the cost of government's borrowing over the years, and has provided a stable and efficient market for corporate issuance. It has also aided the development of a thriving interest rate derivative market, which has added considerably to capital market development.

<sup>3</sup> Although interest income on other securities is not taxed in Zimbabwe, the Corporate bonds attracts 15 percent withholding tax.

# 3. REASONS FOR GOVERNMENT SECURITIES ISSUANCE

The survey in MEFMI member countries revealed the key reasons why countries, especially in the region issue domestic debt securities. These include funding of budget deficits, monetary policy operations, and capital markets development. This is consistent with purposes of issuance worldwide. The development of capital markets is important as it ensures success of future debt issuance, existence of liquid markets, a more consistent funding for government and effective transmission of the impact of monetary policy operations.

#### 3.1 Borrowing for National Budget Support

The national budget is the starting point from which the Government's expected capital and operating expenditure are drawn up and how these are to be financed. The budgets are drawn up to meet the government's declared economic policy objectives. It is at this point that the implementation of government's macroeconomic and fiscal policies kicks in.

The budgets are drawn in accordance with those policies and this is where potential investors are able to assess in detail how these policies translate into proposed actions. This is critical in investment planning and pricing expectations by potential investors.

National budgets or development plans should be drawn up to cover the short term (the next year); the medium term (two - five years) and the long term (beyond five years). Normally these budgets are in greater detail for the short term, with lesser details as the periods beyond the next financial year are addressed. This is particularly true of the operating budget.

Government's capital budgets are focussed, in the main, on developing, improving and building infrastructure in order to ensure that the economy can be more effective and efficient and in turn generate higher growth. They are generally medium to long term by their very nature.



It is seldom that there is a budget surplus after taxation, and thus Governments generally have two options of dealing with deficits. These are either changing the taxes or borrowing or a combination of both. Borrowing can be through issuance of Treasury securities, external loans, direct borrowing from commercial banks and in some cases direct borrowing from the central bank through overdraft. The first two borrowing channels are more sustainable and less detrimental to the overall economy. To borrow through Treasury securities, it is essential to observe a number of considerations to ensure that overall objectives of the borrowing strategy are met.

#### 3.1.1 Prerequisites for securities issuance

To ensure investor confidence in the securities, it is critical that legislation is in place that allows for parliament to approve the proposed budget, with the proposed new borrowing, including borrowing instruments and debt management strategy. Importantly it should allow for an accumulated gross national debt figure that will accommodate the loans already raised together with the increased proposed borrowing for the current budget.

Whilst this may be an obvious statement, its inclusion is a salutary reminder of the US government that ran into this problem in 2011 when the Treasury wished to issue new debt and was prevented from doing so since the already approved debt ceiling by Congress would have been breached, making the new debt illegal.

In planning any new issue for budget financing, the time frame that the above approval process takes, should be factored into the issuance programme. This is because:

- All government issuances are assumed to form part of the government's borrowing programme flowing from an approved national budget, and as such there is no requirement to produce a prospectus or financial projections of the government's results.
- The listing requirements of the exchange should be followed; however, as these are government bonds, the requirements are completely different from corporate issuances where a full prospectus would be the norm.
- Government bonds would fall into the "exempt securities" section of the exchange's listing rules, whereby the approval or publishing of a prospectus for each issue would not be required.

- Generally, the government bonds would be listed on the local securities or separate bond exchange irrespective of whether the bonds are traded there or not. Each bond will be allocated an individual International Securities Identification Number (ISIN). This number is internationally registered and is particularly important where foreign investors are involved.
- The exchange listing also ensures (or should ensure) that independent price discovery is made available to investors, as is required in terms of most international securities regulators.

Governments will usually consider the following points in establishing how it wishes to proceed with its debt issuance:

### 3.1.1.1 <u>Establishing the authority to borrow (in both domestic and foreign markets)</u>

Parliament will usually have the ultimate power to borrow on behalf of central government, and this is usually entrusted to the Minister of Finance. The Treasury will almost always appoint the country's central bank<sup>4</sup> as its agent for the debt issuance. However, the central government remains the ultimate borrower.

#### 3.1.1.2 Specify borrowing purposes

To guard against the risk of abuse, the delegation of the borrowing power is often restricted by a statement of the purposes for which the executive can borrow or by a limit on the annual net borrowing or the outstanding debt or both.

#### 3.1.1.3 <u>Set clear debt management objectives</u>

For accountability purposes, it is important to ensure that there is a formal objective against which the government's performance can be assessed.

#### 3.1.1.4 <u>Prepare and implement a debt management strategy</u>

This should include the development financing needs, as the practical expression of the high-level objectives, as well as listing the borrowing instruments to be used. This will assist with debt strategy formulation, and the design of the borrowing programme. For credibility purposes, particularly from the investors' side, the Government has to implement the medium term debt management strategy and the annual borrowing plans.

While this is the case, there are few exceptions for instance the Mozambique Stock Exchange issues Treasury bonds on behalf of the Government.



#### 3.1.1.5 Specify mandatory reporting to parliament

At a minimum annual reporting on debt management activities, including an evaluation of outcomes against stated objectives and the determined strategy is necessary.

#### 3.1.1.6 Determine audit requirements

The audit will usually be the responsibility of the Auditor General's office and the requirement can be fulfilled through the annual audit.

#### 3.1.2 Cash Flow Projections and Scenario Analysis

The budget has to incorporate comprehensive cash flow projections and they have to be subjected to a stringent scenario analysis process whereby the assumptions on expenditures and revenue flows are tested against different growth and revenue scenarios. Cashflow analysis of these budgets should show the expected cashflow shortfalls and thus borrowing needs. This cash flow analysis should also take into account existing debt maturities, interest payments and capital repayments.

The analysis should include proposed borrowing levels in terms of volume, duration and approximate cost, as well as a stress analysis of the cash flows undertaken at various rates, to establish the effect under differing market conditions. It should also consider seasonality in liquidity cycles as this has an impact on interest rate levels and success of auction performance.

At this stage, the issuer must also consider its debt management strategy that takes into consideration the debt sustainability analysis. This would provide information on the type of instruments to issue, amount to offer, expected funding rates, redemption structure and likely auction success.

#### 3.2 Non- budget deficit related issuance

Government securities are also issued for reasons other than budget deficit financing. Key among the non-budget deficit related reasons for issuances include domestic market development and monetary policy purposes. Regardless of the reasons, consistent and disciplined government issuance

of securities across the maturity spectrum will foster development of domestic debt markets, such that:

- A well developed, liquid government securities market will facilitate the pricing of other financial assets for both quasi-government and corporate entities.
- Assists with the promotion and maintenance of a properly defined benchmark yield curve, which has many useful benefits, including pricing of long term financial contracts. The benchmark yield curve can be further maintained, developed and managed through consolidation issues or switch auctions, where maturity profiles can be adjusted.
- A well-defined liquid securities market facilitates the development of derivative markets (forward and futures markets, including foreign exchange hedging) which in turn will support necessary risk management functions.
- It assists in efficient cash management control of surplus markets.
- Provides a wider range of investment assets that will aid risk management and asset-liability matching for financial sector players such as pension funds and insurance companies.
- The attraction of foreign investors is an important by product of a liquid, well managed capital market, introducing much needed skills development and FDI to a country.



# 4. LEGISLATIVE AND REGULATORY PROCESSES

#### 4.1 Overview

This section covers the legislative processes to be followed to seek formal parliamentary approval for a proposed budget and the associated borrowing programme. It also addresses the formal legal processes that may need to be in place if the central bank or any other agency acts as treasury's agent when issuing the bonds. Thereafter, it addresses the market regulations that may be in place.

It is imperative in the development of any government debt market to establish the necessary regulatory and legislative framework that will enable the relative ease of entry and exit into the country's capital markets by local investors and speculators, as well as foreign participants. If the rules are not clearly laid out from inception, any uncertainty will lead to withdrawal by potential investors, or a creation of undesirable informal practices that may be difficult to eradicate at a later stage.

#### 4.2 Legislative Process

All MEFMI member countries reported to have an Act of Parliament in place that allows government borrowing either externally or domestically.

Parliamentary approval of borrowing requirements is essential in assuring potential investors that government will not default on either capital repayments or interest payments when due. Since parliament approves taxes, it is assumed that all government borrowing is backed by future taxes, and therefore the legislative process helps instil investor confidence, which in turn helps to shape investor planning and pricing expectations.

Legislative process may also approve the debt management strategy that defines borrowing objectives, risk management framework, and debt

sustainability analysis. In some instances, including a number of MEFMI member countries, the legislative process would put a ceiling on domestic and external borrowing by the government. It may also specify borrowing instruments and limits of each instrument and circumstances under which different instrument should be used. All of these have immense impact on market development.

Legislative process is also important in passing market friendly laws and regulatory frameworks that will allow faster and more efficient securities market development. Conversely, weak and disjointed laws governing the securities markets have a detrimental effect in terms of perceived risks, safety of investments and success of transaction processes.

#### 4.3 Legal and Regulatory Framework

The legal framework outlines the financial market landscape and is a critical component to market development in the following facets:

- A credible legislative and regulatory framework for financial markets enables an effective securities market regulation;
- The regulatory environment should foster market development and enable sound supervisory practices to be enforced;
- The implementation of international accounting and auditing standards; disclosure and reporting practices for the financial sector;
- Implementation of appropriate rules and regulatory regime including those affecting participation by foreign investors in the domestic market;
- The development of sound, credible and enforceable bankruptcy laws;5
- Credible regulatory and legal frameworks for payment, clearing, settlement and custodial systems.

#### 4.4 Regulation of the Government Securities Market

There are specific regulatory requirements for government debt markets that must be put in place to govern operations in both primary and secondary

<sup>5</sup> This should apply equally to all other laws; however, this document focuses on the financial markets, and as such the bankruptcy laws are highlighted.



markets. The allocation of regulatory and supervisory powers between the Ministry of Finance, the central bank and securities regulator(s) varies quite significantly. In assessing the allocation of regulatory and supervisory powers, it is important to put the emphasis on functional performance of rules rather than on formal (organisational) issues. For effective functioning of primary market for government securities, regulations in the form of auction rules for investors, primary dealership if it exists, payment and settlement, and CDS operations are essential to ensure good relations between the investors and the issuer. Between the Central Bank (if it is the agent) and Ministry of Finance as the principal, there is a need for operational regulation between them in form of an Agency Agreement or Memorandum of Understanding, detailing responsibilities and obligations of either party, including any charges involved. There is also need for regulatory framework between the agent or issuer and other regulators in the securities markets as well as appointed primary dealers or market makers.

#### 4.4.1 Scope of regulation of the securities markets

In most countries, government securities trade in the secondary market along with all other securities and are, therefore, subject to secondary market regulation. Effective secondary market regulation is necessary to support a viable secondary market. Since government securities are often defined as "exempt securities," that is, exempt from regular prospectus requirements, it is important to make sure that this status does not undermine the integrity of the secondary market. Regulation in the secondary market would easily fall into the following categories;

- Regulation of market intermediaries
- Market conduct regulation (including trading rules, custody, clearing and settlement rules or conventions) and market surveillance
- Transparency requirements, which will vary according to the choice of market structure.

The regulatory structure of securities markets is often built around self-regulating organisations (SROs), such as exchanges and securities dealers associations, as a supplement to the government regulatory authorities. For MEFMI countries however, SROs may not be effective in regulating securities

markets due to capacity constraints, less transparency among dealers and other vested interests. Securities markets regulators therefore need to be in place to ensure ethical market practices, and smooth market development.

The regulatory responsibilities of government securities markets are often assigned to more than one government agency. It can be reasoned then, that in some countries the supervision over a primary dealers' arrangement and the issuance process (auctions, for example) is handled by the Treasury or jointly by the Treasury and the central bank. The regulation of the secondary market would be through a securities regulator or authority (which often is a separate government agency), or the exchange if that is where the trades occur, and the oversight of the final settlement arrangements by the central bank.

#### 4.4.2 Market Oversight

Market oversight and regulation can be provided directly by the securities market regulator, the central bank, or, in cases where primary dealers are used, by the Minister of Finance or the public debt management agency, which may be a part of the Treasury. The allocation of these responsibilities is clearly dependent on how a particular market is structured.

The authorities may also regulate the relationship between intermediaries and their clients, mainly to ensure best execution of trades; however this practice can often lead to over regulation, which has the effect of suppressing free market trade.

### 4.5 Agency Agreement on the roles and responsibilities of the Agent and Principal

This is a critical component of the issue process, as it can either be managed by the Ministry or Treasury itself, by the central bank, or any other agency as the Treasury's agent. Generally, the central bank is used because it is closer to market participants and is more familiar with the market mechanisms through which bonds are issued and traded. It is also the regulator and



supervisor of the banks, and is thus better placed to control or monitor the cash flows through the system. However, the issuer would be responsible for the appointment of any primary dealers (PDs), and would manage that on-going relationship, as well the relationship with the larger local and international investors.

In some markets, the Ministry of Finance/Treasury may take the decision to appoint a Lead Arranger, or an independent advisor to assist in the issuance process. This offers impartial advice and feedback from the market as to the nature of their requirements, as well as indicative pricing of the securities.

In the event that the central bank or any other agency is Treasury's agent then this relationship should be clearly documented by way of an agency agreement or Memorandum of Understanding which should address the roles and responsibilities of both parties with respect to, inter alia;

- · Issuance of securities on behalf of the government or principal issuer
- Setting up the borrowing performance measures, including auction performance, costs and risk management, market development and other agreed debt management objectives
- Management of the auction process, including the announcement of results and the allotment of successful bids
- On-going relationship between the agent, principal and the market (investors)
- Where primary dealership (PDs) exist, setting the required performance measures of the PDs, including auction participation minimum requirements; management responsibility of the PD panel, regular assessment and at least quarterly feedback sessions
- Agreed fees and commissions to the agent, primary dealers and payment modalities

Most of the above points have been dealt with in some detail in the following sections covering "Issuance Strategy", as well as "Communication and Transparency".

#### 5. MARKET INFRASTRUCTURE

#### 5.1 Overview

Whilst markets do operate without electronic trading, safe custody and settlement infrastructure, the on-going development will be stunted without their use.

This certainly does not mean that each market should have its own systems as there are considerable economies of scale to be gained from using the systems operating in the other markets or neighbouring countries. These systems are dependent on large volumes in order to deliver low transaction costs, but individual MEFMI countries may not process sufficient volumes to justify each having their own expensive stand-alone systems.

Smaller countries and markets often voice their concerns of the perceived significant risks that arise from "allowing" such an important component of their market to be handled by utilities based in neighbouring countries. These risks are often couched in market terminology but in reality have their foundation in far wider regional political issues. However, the risks can be managed and mitigated through the implementation of regional governance structures and shareholding, combined with trusted skilled professional management.

Ironically being a late starter in moving to electronic trading, clearing, safe custody and settlements systems is now an advantage as their implementation is far less painful and problematic than being an early user with all the teething problems of old and cumbersome systems. In addition, the newer systems have lower operating costs than the older systems.

#### **Box 1: A Cautionary Note**

In many countries, the safe custody, clearing and settlement system in government bonds is performed at the central bank. However, this is often predicated on the misconceived notion that government bonds are somehow a special class of debt instrument that require their own stand-alone clearing, safe custody and settlement system. The reality is that government bonds are merely another debt instrument, issued by the government, and in clearing, custody and settlement terms are no different to corporate bonds or even equities.



In the same national securities market, there are often then two clearing, custody and settlement systems which require market participants to have two different electronic interfaces.

Where the Treasury or the central bank has concerns over the efficacy of this second clearing, custody and settlement operation, it should preferably exert its influence to improve the existing operation, rather than establish its own. In this way all concerns are addressed and government should then have an approved plan to migrate the settlement of its issues to that utility.

#### 5.2 Trading and Trading Infrastructure

Trading of securities in the secondary market is extremely important to overall market development. With the exception of Kenya (and to some extent Namibia), the rest of MEFMI member countries have inefficient, underdeveloped and illiquid secondary markets. A well-functioning, liquid secondary market is critical in supporting primary markets as well as the corporate debt market. Among the issues cited for low trading activity include, amongst others:

- · narrow product range
- · narrow investor and issuer base
- buy-and-hold strategy by dominant banks
- flawed primary dealership system
- · uncertain issuance calendar
- · high fragmentation in the bond market
- · Poor trading infrastructure.

Trading infrastructure starts from the Central Depository System to the trading platform and finally settlement system. Trading platform can either be Over-the-Counter (OTC), Exchange Traded or the parallel existence of the two platforms. Most of the MEFMI countries' trading platforms are exchange traded but actual trades are conducted via OTC. Globally, bonds are traded OTC but post-trade information is reported to either a Bond or Securities Exchange. Trading platforms can also be manual or automated as is the case in Kenya. It is important to interface trading platform, post-

trade reporting platform and settlement system to achieve Delivery versus Payment (DvP) for safe and secure transactions. Trading infrastructure should also accommodate the International Securities Identification Number (ISIN) for ease of foreign investor participation. All MEFMI member countries have not yet reached this level of market development.

#### 5.3 Clearing and Settlement System

Most economies in the MEFMI region seem to follow a book entry (electronic) system of clearing and have thus achieved an acceptable "Delivery versus Payment" system ("DvP") process. Countries implementing electronic clearing, custody and settlement systems linked to the commercial banks have enabled the secure settlement of funds and securities in accordance with accepted international conventions and so enhanced the attractiveness of their markets. In so doing the settlement risks and costs have decreased significantly.

There are three recognised settlement conventions that are used in securities markets, under which secure and final DvP can be achieved:

### 5.3.1 Trade for trade settlement: Gross for both funds and securities (Gross/ gross)

This means that for each and every trade there has to be sufficient funds and securities available for settlement. Whilst theoretically and practically it is considered to be the safest form of settlement, its use severely impacts the liquidity of the market and requires market participants to be able to access intraday or overnight credit facilities from the central bank. This raises the issue whether central banks should be responsible for providing a credit facility to the participants for clearing and settlement in government securities and what consequences this might have for their liquidity management operations. Its use also implies the presence of securities lending or borrowing facilities, as presented in section 5.4.



#### 5.3.2 Gross for securities and net for funds (Gross /net)

This convention implies that for each and every trade there should be sufficient securities available for settlement whilst for the settlement of funds, the net of all the purchases and sales is computed and that amount is required for settlement.

#### 5.3.3 Net for both securities and funds (net/net)

Under this convention, net purchases and sales of all the trades in a specific security are computed and that accumulated balance of the securities should be available for settlement. The net balance of the funds required / received for all the trades are computed and it is that balance which is required for settlement.

In reality the latter is the more effective settlement methodology, as it provides for the most liquidity of the three recognised settlement methodologies of the Bank for International Settlements.

MEFMI is of the view that it would be inappropriate to recommend a particular method for settlement in these guidelines. Suffice it to say that the advantages, disadvantages, impacts and implications of the three methods should be carefully researched and understood before a method is adopted. In particular, the impact on market liquidity of each method should be analysed as it would be counter-productive to implement a method which acts as an impediment to enhanced liquidity. It may be of interest to note that the South African bond market has used the net/net method of settlement from the inception of its electronic settlement system in 1994.

The following documents (listed in Box 2) are pertinent to any discussion on market infrastructure in the securities markets. An understanding of their content and, in particular, the implications of the BIS CPSS document –"Principles of financial market infrastructure", is relevant to the development of financial markets

### Box 2: Documents on Securities Market Infrastructure

### G30 (Group of Thirty) Global and Settlement – Final Monitoring Report – 2006

This document, whilst dated, is an important report in the context of global clearing and settlement systems.

#### Bank of International Settlement (BIS) - Committee on Payments & Settlement systems (CPSS) – Technical Committee of the International organisation of Securities Commissions – "Principles for Financial Market Infrastructures (FMIs) - April 2012

This document articulates the principles under which present, and future, financial market infrastructure operators will be defined. It addresses the principles and responsibilities of the various entities in that space; discusses the major risks faced by the FMI operators. It articulates the twenty four (24) principles to which FMI operators should adhere to, in order to fulfil their roles in the market. Serious consideration should be given to amending legislation and regulation to be aligned with this document.

### Financial Stability Board (FSB) - OTC Derivatives Market Reforms -

Third Progress Report on Implementation – June 2012 This progress report, being published with just over six months to go to the end-2012 deadline, provides an update on progress in international policy development, national and regional legislation and regulations and a more detailed assessment of progress in practical implementation measures to meet the G20 commitments relating to central clearing, exchange and electronic platform trading, reporting to trade repositories, capital requirements, and standardisation.

Whilst OTC derivatives are outside the brief of these guidelines this report is important in the context of market development.



# 5.4 Securities Lending and Borrowing Operations

Many economists have pointed out the importance of securities lending and borrowing transactions in boosting market liquidity.

This requires permitting market participants to short sell a security and, at the same time, enabling them to borrow the shorted security temporarily from its owner with a contractual obligation to redeliver at a later date. Securities lending operations promote liquidity by preventing settlement failures and increasing arbitrage opportunities. Another potential benefit of securities lending transactions is that they provide opportunities for fund managers and institutional investors to earn additional income from their idle security holdings.

In most MEFMI countries, short selling is prohibited in law, either under the Capital Markets Regulations or the act governing securities markets. Some countries do not have any legal provisions on securities lending, making it difficult to deduce whether it is allowed or not. While it is a market practice common in more mature markets, MEFMI countries could cautiously adopt it, subject to strict market regulation and surveillance. Short selling might be initially allowed among primary dealers or large institutional investors where the central bank or regulators have direct supervision or surveillance to monitor all the transactions to ensure good practice. Countries intending to allow short selling must also have proper regulatory framework as well as reporting of transactions statistics to monitor and clean up market abuse. Box 3 highlights impediments for effective and efficient securities lending in most developing countries.

### **Box 3: Issues to Note**

- Underdeveloped market infrastructure, particularly the payment and settlement system, could restrict the potential use of securities lending transactions as they involve complex settlement procedures, including a shorter settlement cycle and the need for settlement at both ends of the operation;
- Lack of an adequate legal system to ensure strict enforceability
  of financial contracts and bankruptcy laws could restrict the
  use of securities lending transactions to boost bond market
  liquidity;
- Systemic implications of securities lending transactions could be a concern. Since such transactions encourage high leveraging by market participants and provide additional channels by which shocks can be transmitted through the securities market, they pose systemic risks especially to weak and under supervised financial systems;
- A major risk could also arise from the possibility of speculators using the securities lending facility to short the domestic currency.

# 5.5 Repurchase Agreements (Repos) and Swap Markets

Vertical Repos (between central bank and commercial banks) are the most common in the region, but generally the Interbank or Horizontal Repo market is generally inactive, with the exception of Kenya. The repo market is simply another money market product whereby an investor can improve investment yields, and the counterparty to the transaction can fund his asset purchase at a better rate. There are other uses of the repo transaction, where short selling of market securities is allowed, however, this is not common in the MEFMI countries.

The interest rate swap (IRS) market is crucial for overall securities markets development. It is a fact that the prime use of bonds worldwide is by banks



using the fixed income market to hedge up their net written corporate swap book. This also plays a huge role in the interest rate management by corporates switching their borrowings between fixed and floating. In the MEFMI region, the necessary legal and regulatory framework is available, and Foreign Exchange Swaps are generally the most common, with only one or two countries that have some activity in IRS market. MEFMI countries should therefore strive to promote and encourage the swap market to have a positive influence on the securities market development.

# 6. ISSUANCE STRATEGY

As a consequence of the national budgeting process, a proposed borrowing programme will be presented to parliament for approval, as discussed previously.

This programme should identify the borrowing requirements for the forthcoming financial year, (up to 1 year), the medium term (1-5 years) and the long term (longer than 5 years). It will identify the amounts required in the domestic currency and may also include those in foreign currencies. It may be explicit in setting out targets for desired debt portfolio composition such as short to long term ratio, fixed to floating rate debt, etc.

Amongst others, the issuance strategy should take into account the following:

- a. The creation of secure and efficient channels for the distribution of securities which should be targeted to investor needs, and with the aim of lowering the overall borrowing costs. This could include:
  - Possible use of a primary dealer system
  - Auctions
  - Possible syndication
- b. Development of a predictable and transparent debt management operation, with pre-announced issuance calendars, and greater disclosure of funding needs and auction outcomes
- c. Consolidating existing debt into a number of larger debt issues and creating standardized securities with conventional maturities with a view to eventually providing market benchmarks
- d. Progressively extending the maturity of government securities, thereby enabling the development of a reliable yield curve to assist both secondary market development and corporate issuance.

# 6.1 Debt instruments to be issued

There are a number of different instruments that can be issued depending on specific requirements and cash flow profiles, both on issue and at redemption.



- a. The choice of instrument can be influenced by market demand for a specific security (Particular demand for a specific profile of security can benefit the pricing on such an instrument)
- b. It may be important to sequence securities, especially for first time issuers so as to create price discovery and market appetite
- c. Initially, short dated Treasury bill issuance would naturally precede Treasury bonds which are longer term
- d. More complex bonds such as index linked or those with embedded options could be issued when markets have matured and a reliable yield curve exists to guide pricing.
- e. Short dated instruments can effectively be used as cash flow management tools between the longer term maturities. There are also many variations in the structure of these instruments, regarding coupon rates, or even other index linked variables such as inflation. The interest rates applicable to the under mentioned instruments can be of a floating or a fixed nature, depending on the shape of the yield curve, or the stage of the interest rate cycle.
  - Floating rate issuance is more beneficial to the issuer in a period where interest rates are declining
  - Fixed rates are preferred by the issuer when rates are rising.
- f. The more common instruments would be:
  - Treasury Bills (usually 3 months to 12 months) issued at a discount to PAR, and maturing at face value. For countries intending to begin the issuance of securities for the first time or to revive dormant market, treasury bills should be considered as a first step to establish a pricing benchmark and promote investment in such instruments without undue risk
  - Central Bank bills same profile as treasury bills, but the issuer would be the central bank, and the bills would be issued for monetary policy purposes (as opposed to fiscal needs)
  - Coupon bonds Generally carrying a semi-annual coupon, and issued either at a discount, PAR or a premium. They are preferred by pension funds that require a predictable stream of income from assets they would generally hold to maturity. Valuation issues stemming from irregular mark to market pricings can present problems, however accrual accounting will overcome these issues
  - Infrastructure bonds linked to a specific project that provide significant economic and social benefits

- Diaspora bonds targeting inflows from citizens living abroad and relying on their consciousness to assist their home country and its inhabitants
- Index linked bonds Linked to either inflation, currency, GDP or any other commodity
- Retail bonds issued as an alternative savings instrument specifically to retail investors. These retail bonds will carry very different terms and conditions to normal coupon bonds, but can be an effective (and cheaper) form of borrowing.

MEFMI member countries would be well advised to consider adopting the regular issuance of Treasury bills with maturities of 91, 182 and 364 days, through consistent weekly auctions to reduce market fragmentation, and support the development of a reliable money market pricing benchmark.

Development of bond markets is also essential, and pure vanilla (normal) issues would be ideal to start with in order to create necessary demand and development of reliable benchmark yield curve.

The region should also consider encouraging its members to issue infrastructure-specific bonds to provide the much needed financial resources to support key projects.

# 6.2 Pricing Process and Strategy

It is essential that an issuer has a good understanding of where the market will price any debt being offered on auction. This is when the value of a quality benchmark yield curve can never be underestimated, as this curve will show where existing issues should be trading, and where new debt is likely to be bought by the market.

It should be noted that the issuer needs to be realistic about the price to market, or accept the fact that the issue may fail.

It becomes more challenging in illiquid markets where issuers and investors differ in their opinion of the correct price, and the subsequent pricing of a new issue may have an adverse effect on the values of existing issues already in the market.



The following should be taken into consideration in establishing the initial issue price:

- Analysis of where the issue will be compared with any existing benchmark curve
- Review and compare debt issuances in countries with similar economies
- Interaction with potential investors, whereby they indicate their specific requirements
- Effective use of the primary dealer panel (if any)
- Effective use of a debt arranger, especially if the issuer is not a regular issuer. The arranger will offer price guidance to both the issuer and the market and should the yields be out of range for the issuer, a non-deal will be declared without causing disfavour amongst market participants
- Estimating where corporate loans are being offered by the banking sector
- Conducting market surveys among dealers and leading institutional investors, chartists and analysts. Any form of market intelligence would be useful, as would the development of a market forum.

## 6.3 Determination of Investor Preferences

An important input to the process in the above section is the appetite of investors for different bonds and maturities. Whilst the government is not always able to exactly match those needs with its own requirements, it is clearly in its interest to meet those needs as closely as possible.

Investors can be roughly divided into the following categories:

- Local banks both for investment purposes as well as compliance with any mandated statutory requirements or proprietary trading
- Fund managers, mutual funds (collective investments), pension funds, and insurance companies
- Offshore investors (banks as well as fund managers)
- · Retail investors.

Investor "Road shows" to both local and offshore investors is an important tool for the issuer, and will afford the Government the opportunity to:

- Present the current economic and financial situation
- · Discuss and confirm the macro economic and fiscal policies

- Describe proposed or already approved changes and implications
- Consider expected economic outlook going forward and the current and future anticipated financing requirements
- Establish seasonality in liquidity cycles as this has a bearing on pricing and auction performance. Seasonality arises from tax cycles, festive seasons or holidays, and other market events.

This process will enable the issuer to answer questions, as well as obtain the views and concerns of investors in order that they might address any unforeseen problems that could limit potential investment in the country.

### 6.4 Issuance and Auction Process

The most commonly accepted form of optimal issuance process is by regular auctions, generally managed by the central bank and overseen by the debt management office. In many countries, the auction is open to all market participants, and may be split into competitive and non-competitive amounts.

In non–competitive auctions, participants bid for volume only and not on price – they are price-takers who are allocated the weighted average rate of the auction corresponding to the cut-off rate. This method should be restricted to a small percentage of the total auction and should ideally be restricted to non-professional participants where the public or corporates are also allowed to participate in government debt auctions.

The non-competitive bids will generally be limited to a small portion of the total nominal on offer (10% -20%), and these applicants will be allotted at the weighted average rate / price of the competitive bids at the cut-off. In addition, there may be restrictions on the maximum amount or percentage allotted to any single bidder.

In every country, the strategy around the limitations of the percentage competitive to non-competitive amounts, as well as the limits per individual is different. So too are the reasons for such arrangements. They have been designed to avoid the over dominance of the bigger players in the auction process, and to afford some allocation of assets to the smaller participants.



This allows a wider distribution of securities, which has the effect of deepening the number of market participants, and encouraging the promotion of the secondary market.

Competitive bidders nominate both a nominal amount and a bid price/yield. It is this window that will reflect the true wholesale market, and can be dominated by one or two large aggressive players. In smaller markets there can also be a certain amount of collusion between these players, and this can adversely affect the pricing. This is where the management of the auction comes into play, and the issuer must decide where to draw the balance between meeting the borrowing target and overpaying for the funds at the auction.

There are many different auction methodologies that are employed worldwide, the most common of which are the Uniform or Single price auction, and the Multiple Price auction. Most other methods are a derivative of either of these two. Each method has both advantages and disadvantages, depending on the level of market development.

# 6.4.1 Uniform or Single Price Auction

In a Uniform Price auction, all the successful bidders are required to pay for the allotted quantity of securities at the same rate, i.e., at the auction cutoff rate, irrespective of the rate quoted by them. Advantages of single price auction include:

- More conducive to post auction secondary market activity
- No "buyer's remorse" or "winners' curse" as all bonds are issued at the same price
- · Encourages aggressive bidding which tends to favour the issuer
- No confusing signals to the market regarding the "mark-to-market" pricing, assisting the accuracy of institutional valuations.

The disadvantages of single price auction might include:

- Allows for collusive activity in less liquid and smaller markets making it costly to the issuer
- Encourages the outside bids (particularly in smaller markets) which will set the cut-off rate at a higher level, benefitting the participants at the expense of the issuer

- The clearing price may be set by single marginal bid which may be in excess of the current market level on similar issues
- It might be possible for one large player to dominate the market, and although this might suit the issuer due to the aggressive nature of the bid, it might send the wrong signal to the market, by creating artificially low mark-to-market (MTM) yield rates

This auction methodology works best in highly liquid markets, where large volumes are traded daily in the secondary market, and there is a vibrant two way trade in securities. There is a tendency for auction participants to be more aggressive in their bidding, which will favour the issuer in the longer term. Most of the MEFMI member countries may not find this auction method suitable given their narrow investor base and generally underdeveloped markets.

### 6.4.2 Multiple Price (Discriminatory) Auction

In a Multiple Price auction, the successful bidders are required to pay for the allotted quantity of securities at the respective price / yield at which they have bid.

- · This methodology eliminates possible collusion in smaller markets
- Market players tend to insert "fliers" (high yield bids on the off chance of an allocation) which can be costly and affect accurate price discovery
- Can have a negative effect on post auction secondary market trading, as the results could have been skewed by a single bid
- · Difficult to estimate the true market price or spread

The biggest detractor from this method of allocation is that "buyer's remorse" is very often experienced by bidders that bid too aggressively. The effect of this is that the buyer has an immediate mark to market loss on his purchase and this has the effect that he would be unwilling to sell the stock until the price reaches a breakeven point or better. The benefit of this methodology is however that it forces the participants to correctly determine realistic bid levels. Collusion between market participants can however not be ruled out entirely, especially as this methodology seems to be the preferred method in smaller, less liquid markets.



Experience has shown that uniform price auctions work best in more highly developed, liquid markets and the less liquid, smaller markets adopt the multiple price allocation methodology. A number of countries however use both methodologies, but for different segments of the market. For example, single price for Treasury bills and multiple-price for bond auctions.

Given the current nascent level of markets development in the majority of MEFMI countries, we would encourage the adoption of the multiple price auction methodology.

Interestingly, many corporate issues in the MEFMI region are auctioned using the more modern "Euro" style book-building methods that usually culminate in a uniform price issuance that will set the coupon of the bond, and issue at PAR (100% consideration value).

## 6.4.3 Hybrid Auctions

There are many other hybrid allocation arrangements that have been customised for individual markets, mainly to ensure a fair distribution of assets, and to avoid over dominance by any single large player. Common among these hybrid auction methods is that used by the Spanish Ministry of Finance which combines both Uniform and Multiple price methodologies in an attempt to make the auction process fairer.

Bids are allocated in ascending order from the lowest yield to where the total auction will be filled, and a weighted average yield obtained. All bids between the minimum and the weighted average are allocated at the weighted average yield (Uniform price); thereafter the remainder are allotted under the multiple price method. This ensures that the aggressive bidders are rewarded, but not unfairly penalised, and those bidders that conducted a thorough market research prior to the auction (and bid slightly higher) are also rewarded.

# 6.4.4 Illustration of Auction Methodologies

In Table 1, a practical example of an auction has been illustrated whereby the allotment is done using the three methodologies mentioned, so that these differences can be clearly seen.

Table 1: Auction Allotment Methodology

Bids:	Rate:	Nominal	Allocation	Multiple:	Uniform:	Hybrid:
Α	5.45%	25.00	25.00	5.45%	5.60%	5.5048%
В	5.46%	10.00	10.00	5.46%	5.60%	5.5048%
С	5.47%	60.00	60.00	5.47%	5.60%	5.5048%
D	5.48%	10.00	10.00	5.48%	5.60%	5.5048%
Е	5.50%	80.00	80.00	5.50%	5.60%	5.5048%
F	5.55%	25.00	25.00	5.55%	5.60%	5.55%
G	5.58%	15.00	15.00	5.58%	5.60%	5.58%
Н	5.59%	10.00	10.00	5.59%	5.60%	5.59%
1	5.60%	50.00	15.00	5.60%	5.60%	5.60%
J	5.65%	60.00				
K	5.70%	40.00				
		385.00	250.00			
Weighted Avera		age Issue rate:	5.5048%	5.6000%	5.5230%	
Nominal amt of auction bond : Millions				250.00		
Market Spot rate:				5.55%		

- 1. Multiple price auction allocates bonds up to the nominal amount offered at the actual bid rates, giving a weighted average rate to the issuer of 5.5048%.
- 2. The uniform price method allots all bonds at the same rate (in the above example 5.60%)
- 3. The hybrid method adopted by the Spanish MOF allots all bids at or below the weighted average rate for winning/cut-off bid at the corresponding weighted average rate, and the balance of bids using the multiple price method. So in the above example, the weighted average rate is 5.5048%, thus all bids at or below this rate are allocated at 5.5048%, and all bids above the weighted average are allotted at the individual bid rates.

The multiple price method is the least expensive to the issuer, but tends to distort the pricing in the secondary market, whereas the uniform method can prove expensive for the issuer. The hybrid method offers some reward for aggression without undue penalties for being overly aggressive.



Experience has shown that in more developed markets; the uniform price allocation method encourages more aggressive bidding, and will provide clearer price discovery and transparency in the secondary market. In a market where there is a working PD system, and the PD's are expected to make constant two way prices, then the uniform price allocation method would be preferable.

It should also be borne in mind that the issuer has the right to under-allocate the auction, should the outside bid push the issue rate beyond acceptable levels

### 6.5 Distribution Channels

There are various methods that government can choose to assist with the distribution of debt instruments, and this will vary according to the level and sophistication of the particular market.

In a market with a full and vibrant infrastructure containing various levels of commercial banks, investment banks, broker / dealer operations, and a deep investor market, it will be possible to have any number of working solutions, however, most MEFMI countries struggle with illiquid markets, and a less than optimum infrastructure.

# 6.5.1 Primary Dealer Panels

Some debt management offices have elected to form primary dealer ("PD") panels to assist with the distribution of their domestic debt, and in the hope of stimulating secondary market trade. This has not always had the desired effect, and in some instances has even been responsible for a decrease in secondary market liquidity. This is particularly true in the MEFMI region countries, where there is a tendency to "buy and hold" government debt, stemming from a critical shortage of alternative quality assets for investment.

The functions performed by primary dealers may include:

 Acting as a channel between debt manager and investor in the primary market

- Performing as bookmakers and distributors by having dealers that canvass investors' interest
- Acting as providers of immediacy of liquidity to primary and secondary markets
- Acting as providers of asset transformation and market making services by being willing to hold inventories of government securities.

In order to fully comply with the above functions, there must be certain obligations assigned to these primary dealers. Primary Market Obligations:

- Bid in auctions
- Minimum underwriting obligation
- Providing authority with market information and analysis
- · Participation in money market operations
- Compliance to prudential regulation, i.e. a Code of Conduct
- Participation in research
- Position reporting to supervisory authorities

### Secondary Market Obligations:

- Market making;
- Promotion of debt among a wide spread of local and offshore investors
- Assisting in the development of the government securities market
- · Providing government securities closing prices and volumes

In addition to the previously mentioned functions, there are certain rights or privileges that may be bestowed on such primary dealers in return for their distribution and trading skills. These may include:

- Exclusive or privileged access to primary auctions
- Exclusive or privileged counterparty for central bank's open market operations
- Exclusive or preferential access to noncompetitive bids
- Information and consultation with the government debt management agency
- Borrowing privileges with central bank, including repurchase agreements
- Exclusive or privileged counterparty for operations with public debt manager
- · Underwriting commissions
- Usage of the title "primary dealer"



It may be necessary to offer incentives to Primary Dealers although this is not ideal in the long term. Incentives may include:

- · Access to non-competitive bids
- Securities lending
- Access to buybacks or switches
- · Carefully designed Backstop facilities
- · Cash remuneration for Market making
- Overnight call options to take up a further percentage at the auction level

There are a number of challenges encountered in the selection and use of a primary dealer panel, and the ground rules need to be set out succinctly through formal agreements and codes of conduct.

Primary dealers also need to understand clearly that they risk losing their status if they do not take up the required stock levels, and / or provide continuous support to government issuance.

The primary dealers need to be closely monitored and performance targets maintained in order to ensure continuous competitive pricing. If the process is not tightly controlled, then collusive arrangements can push up the cost of government borrowing. It is not essential that each market adopt the system of appointing primary dealers to assist with their debt distribution, and it is certainly not a panacea for thinly traded illiquid markets, as many of the MEFMI countries can attest to. It does however, have its merits if the correct ground rules and performance measures are established, and all the participants have a "buy-in" to the process.

Globally, the primary dealer model exists in France, Ireland, Italy, Spain, Sweden, South Africa and UK. The open participation model exists in Australia, Germany, Japan, New Zealand, and USA. In Japan and USA, the primary dealer model exists for open market operations conducted for monetary policy implementation, but not for issuance of government securities. The primary dealer model and the open participation model for primary issuance are not specific to small or large countries.

#### 6.5.2 Other distribution methods

There are other efficient distribution methods that can be employed by the issuer to ensure a wide network of investors. Some of these methods are addressed below:

### Central Bank Dealing Desks:

In markets where there are liquidity issues, it may be beneficial for a central bank to create and maintain its own trading desk that makes continuous bid and offer prices to the market participants. In this way, prices can be stabilized, or be biased one way or another to encourage trade. This method tends to bring the authorities closer to the market.

### The use of inter-dealer brokers:

It is ironic that in most markets the dealer broker participants have a better distribution capability than the banks. They tend to be better mobilised, have deeper networks and see more secondary market trade. They are often starved of securities by the bigger players, who bully the market by holding these assets for their own account. Unfortunately, these dealer brokers are short on capital, and are not generally suited to the role of primary dealing. That being said, however, they make excellent syndication partners, and if a suitable reward structure can be implemented, they can play a much needed role in the development of the local debt securities markets.

# Syndications:

Another method of distribution is by way of syndications, where any combination of fund managers, life assurance funds, banks and brokers are brought together in order to underwrite or ensure the success of a particular debt issue. This method has been proven useful where the product is more complex, like with inflation or index linked products, where more actuarial understanding may be required.



# 6.6 Common Risks in Issuance and Proposed Mitigation Mechanisms

In the course of developing government securities market, there are a number of risks likely to emerge that the issuers and agents must pay attention to for effective management. These include:

### 6.6.1 Auction failures and cancellations

This may occur when the offer is heavily undersubscribed and / or tendered bid yields are much higher than market (or expectations), resulting in borrowing targets not being met. This may be driven by a liquidity crunch in the market following seasonal factors, monetary policy tightening, or other offered issues like corporate bonds or Initial Public Offering (IPOs) that promise a better return. It could simply be due to a narrow investor base dominated by few investors. Speculators can also cause auction cancellations by driving up yields sharply amid constrained supply. Any perceived high demand for borrowing from government reflected in high budget deficits or supplementary budget to meet unforeseen expenditure amid falling tax revenues can also lead to auction failures.

Care should be taken on how such auction failures and cancellations are communicated to the market to ensure any existing confidence is not eroded.

# 6.6.2 Interest Rates Spiral

This might occur after a period where interest rates have experienced a continued and persistent decline to unsustainably low levels, and a sudden spiked reversal takes place. This may be in response to a relatively loose monetary policy regime or other macroeconomic factors. This sharp increase in interest rates raises the cost of borrowing to unsustainable levels, and can have the effect of crowding out corporate issues, as investors will prefer risk-free instruments with high returns. In turn this will encourage market speculation, thus undermining the stability of secondary markets.

Sharp rises in interest rates will also impact negatively on secondary market trading, where large mark-to-market losses will be incurred. This seriously

compounds market illiquidity, both in the secondary as well as the primary markets. The issuer may be able to manage this by use of the uniform pricing auction method, as well as reducing the amount on offer at each auction to evidence a relaxed need for funding. There is also the moral suasion route where the issuer can influence both investors and primary dealers to moderate their demand for higher returns in the national interest.

### 6.6.3 Reputational Risks

This may emanate from failures in settlement systems, mispricing of instruments or adverse information on the issuer or agent. Loss of securities and macroeconomic mismanagement on the part of the issuer or agent also impacts reputational risk. The re-pricing of these risks by investors or reduced demand in the primary market may lead to failure in meeting required borrowing targets. Strengthening regulatory framework, having in place robust infrastructure, and regular communication to the market can mitigate these risks.

### 6.6.4 Redemption and Rollover risks

There may be times where markets perform poorly when there is a need to issue new debt to redeem or rollover existing maturing issues. This may be as a result of either poor management, or unfortunate worldwide circumstances. However, it is extremely important to understand and employ mitigating techniques for such risks. The issuer or debt manager can have a Sinking Fund to provide funds when the need arises to settle maturing debt obligations. It may also undertake regular buyback operations and switch auctions, or issue more manageable nominal amounts through frequent auctions. The use of primary dealers to underwrite auctions can also help in managing possible redemption risks.

# 6.6.5 Operational Risks

These arise from system failure, especially where bidding, auction and results dissemination are automated. Settlement systems may also fail to transmit transaction messages, therefore exposing traders or investors to losses or settlement risks. Human error can also cause risks, either by dissemination of wrong information or delays in relaying information. These have significant



implications on the securities market development and performance. It is therefore important to have Business Continuity Plans (BCPs) in place, install Back-Up Systems, and introduce audit trails and different approval levels to minimise potential operational risks. Capacity building in relevant technical skills related to securities markets is crucial in managing any potential risks.

# 7. COMMUNICATION AND TRANSPARENCY IN MARKET OPERATIONS

## 7.1 Overview

This is a critical component of the borrowing programme. Without a well thought out and properly executed communication plan to the investor community, the key messages about the country, its progress and its needs will not reach key decision makers.

Policy makers tend to view transaction transparency as a desirable end in itself. The policy arguments in favour of increased transaction transparency fall into three general categories:

- i. Investor protection, mainly in the form of reduced information asymmetries and "best execution" of deals at favourable prices
- ii. Market efficiency, which refers to more informative prices as well as increased liquidity
- iii. Technological development, which suggests that the cost of increased transparency need not be high as electronic trading is already leading to a centralization of information and a reduction in the costs of price dissemination.

# 7.2 Announcement of Proposed Issuance

It is the responsibility of the issuer or agent to market its own proposed debt issuance, by alerting the market with sufficient notice. Participants (both institutional buyers as well as speculators) require time to ascertain their own demand for the proposed instrument, as well as the anticipated pricing and institutional demand. In addition, many external or offshore potential investors need sufficient time for proper credit assessment. On average, auction announcements for Treasury bonds should be communicated at least a minimum of one week beforehand to allow investors sufficient



preparation time to check and adjust cash flows, as well as to run through other administrative functions prior to the auction.

### 7.3 Information Dissemination

A number of options are available to the issuer, including print media, electronic vendors such as Reuters and Bloomberg, Central Bank web pages and television. The principle should be to sufficiently and timeously inform potential buyers of the securities. In addition, the issuer may also use its distribution agents (primary dealers) to assist in the dissemination of information.

Road shows have been discussed previously, and form an essential part of the issuer's media information strategy. These can be individual visits to potential large investors, or form part of a press release function where invitations are extended to selected investors and market participants.

These sessions are particularly useful to gauge potential investor interest, and also to gain feedback as to their requirements. A successful issue will always result if the investor is assured of getting the right investment product. In the case of Sovereign Global issues, the contracted debt arranger or advisor will arrange such road shows, as they would understand and be experienced in the protocols of such issues.

## 7.4 Details of the Issue

In order for participants to load new instruments on their systems, the basic details of the instrument should be made available when the bonds are announced. This information is usually incorporated in either a prospectus or in the more simplified form of a bond term sheet. These might include (inter alia):

- Borrower ("Issuer") and purpose of issue
- Nominal issue size and type

<sup>6</sup> It is a natural assumption that in most markets there will be demand for longer dated issues due to the required investment horizon from pension fund managers. The pricing, duration, and maturity profile needs can be assessed for validity.

- Maturity and tenor
- Advice of any paying, settlement, conversion or calculation agent
- Coupon Rate
- Events of Default
- Interest periods, payment dates and base calculation assumptions
- Principal Payment and Principal Payment Date
- Regulatory and listing approvals
- · Trust Deed
- Covenants
- Redemption
- Representation and Warranties
- · Bondholder Decisions
- Condition Precedent to Signing of Transaction Documents
- Governing Law and Courts
- Taxation issues
- · Liquidity status of the instrument
- · Statutory requirements
- · Alternatives such as call and put options or buybacks.

The completed term sheet will obviously be drawn up in terms of the prospectus; however the professional debt arranger or advisor will be best placed to advise on the construction and detail to be contained in such term sheets.

# 7.5 Auction Dates and Calendar

It is particularly important for any sovereign domestic issuer to have a schedule of auction dates, which are pre-planned, regular (at least monthly) and, most importantly, strictly adhered to. This not only provides transparency to the market participants, but enables other corporate, municipal and parastatal borrowers to schedule their own debt issuances around planned government issues, and avoid conflict. It is also of practical assistance to investors that may wish to arrange their cash flows around these dates.



It will not be necessary to be specific about the planned issues either in nominal amounts, or type of debt, as these details can be announced the week prior to the auction.

# 7.6 Securities Issuance Frequency

There is a tendency in lesser developed markets to have less frequent debt auctions. However, this generally results in pricing uncertainty in between the auction dates, which leads to poor secondary market liquidity and price discovery.

When securities, and Treasury bonds in particular, are issued too frequently, say, weekly or biweekly, there is less breathing space for adequate development of secondary market activity as investors tend to "pack" securities from the primary market.

Conversely, when bond auctions are too infrequent, price discovery is adversely affected and periods of secondary market activity tend to occur only around the time of the auctions. Such is the case in Botswana where the Treasury bond and Treasury bill auctions are held every 6 months. Yield curve development is severely constrained in these instances, and asset valuations are distorted.

Regular auctions with a high degree of transparency, establishment and maintenance of benchmark issues, re-opening or "tap" issues, switch auctions, buybacks as well as other common effective mechanisms should be employed by the issuers.

MEFMI countries should consider *consistent* weekly or fortnightly Treasury bill issuance and monthly bond auctions as in order to develop and maintain a healthy and vibrant securities market.

# 7.7 Settlement Conventions

In terms of prudent risk management, the closer that the settlement date is to trade date, the less chance of a settlement default.

Different markets have different conventions with regard to settlement dates, but in most markets Treasury bills settle at T+0 (same day settlement) and bonds settle T+2 working days or even T+3. The advantages of settling T+2 are that this settlement period coincides with the international currency settlement period, making it easier for international investors to purchase bonds.<sup>7</sup>

It is also interesting to note that some countries have fixed auction and settlement days. Kenya and Zambia for example, always settle bonds on Mondays, with money market assets (Treasury bills) settling on the same day that trade takes place. Where there is a rolling settlement and a standard spot trade convention of T+2 or T+3, any other settlement agreements can be negotiated by the trading parties, however the price should be adjusted from the standard spot rate, and priced as a forward transaction. MEFMI region should consider developing their systems so that settlement should range from DvP up to T+3, both for primary and secondary market. Primary markets should ideally be settled on DvP up to T+2 basis while secondary market transactions up to T+3.

### 7.8 Auction Results

Auction results should be made available as soon as possible in order to mitigate the potential risk of adverse market movements.

Understandably, in less advanced markets, the risk of market movements prior to the announcement of the auction results is significantly reduced, however, in the case of a foreign participant that may need to effect a currency hedge in a much more volatile foreign exchange market, this risk is magnified considerably.

Investors are also inclined to be less aggressive buyers in markets where the allotments are not timeously announced.

Manual allotment procedures tend to take a lot longer than modern electronic

Foreign investors would generally prefer to trade the bond and currency for the same value date, or would ideally wish to fund their account in local currency the day prior to settling the bond trade. Hence the standard settlement of T+3 was adopted by the South African market.



auction platforms such as Bloomberg or Reuters, however, the latter can be expensive in under developed markets. Electronic systems are increasingly used in primary markets. Automation of auction procedures increases their efficiency vis-à-vis the use of manual procedures, as it enhances speed, reliability and cost-effectiveness. Improved electronic auction systems are therefore important for streamlining the process of submitting bids so that auction results can be faster processed and disseminated. More sophisticated systems are also needed to allow institutions to bid directly in auctions. The issuer may also develop an in-house electronic system that may be cheaper and just as efficient.

# 7.9 Market Transparency

Market transparency has to do with the amount of information about the market that is available to market participants. Broadly speaking, "market transparency" can be broken down into two categories:

- Pre-trade transparency refers to information about the prices at which trades can be executed- i.e. the bid and offer prices and volumes in which market participants are willing to trade. Pre-trade prices can be indicative or firm.
- ii. **Post-trade transparency** refers to information about the prices and volumes of trades that have already taken place.

The amount of pre-trade and post-trade transparency available to market participants can vary significantly from market to market, both in terms of:

- The kind of information available there tends to be greater transparency in retail markets than in wholesale markets. Additionally, some markets such as equity markets tend to have much greater levels of both preand post-trade transparency than other markets such as bond markets and over the counter ("OTC") derivative markets.
- How frequently it is made available information can be made available on a real-time basis (i.e. it updates as dealing interest changes) or it can be made available on a delayed basis (i.e. sometime after the trade has been executed).

In considering the appropriate level of transparency, regulatory authorities should take into account factors including:

- Size of the market
- Frequency of trading of particular bonds or groups of bonds
- Participants in the market
- · Credit ratings of the issuer, or individual issues
- Trading methodology.

All markets need a certain degree of trade transparency to function effectively and efficiently. Trade transparency allows market participants to make better, informed decisions. From an academic perspective, transparency can increase the efficiency of the price discovery process, stimulate more competitively priced quotes and possibly reduce transaction costs. However, markets can suffer if there is too much trade transparency and in some cases, even reduce participation in the market. The FSA has said, "transparency should be viewed as a facilitator of market efficiency and investor protection, not an end in itself. 'Maximum' transparency is not necessarily optimal."There can be trade-offs between transparency and liquidity, and that in some cases access to liquidity pools may be at least as important as what is published and when.<sup>8</sup>

## 7.10 Bond Market Forums

Communication and the feedback of communication in the capital markets can also be enhanced by the establishment of a domestic Bond Market Association. This generally takes the shape of an independent forum where market participants can highlight pertinent issues that impede development. The forum can also be used for interaction with the Ministry or Central Bank and obtaining collective support on issues from market participants. Care should be taken with the composition and mandate of the Bond Market Forum; otherwise it may lead to information asymmetry in the market.

Eliquidity can be defined as "the ability to quickly trade large size at low cost." Alternatively, liquidity characterizes "a market where participants can rapidly execute large-volume transactions with a small impact on prices." Most would agree that liquidity is a positive attribute of markets and that public policy should encourage conditions that will contribute to high liquidity.



# 8. FURTHER DEVELOPMENT OF DOMESTIC SECURITIES MARKETS

# 8.1 Secondary Market Trading Structures

A vital part of secondary market liquidity is provided by intermediaries or brokers. These are not only the exchange based stock brokers but also includes "agent" and "principal" broking firms that generally operate through a combination of dealing and communication platforms (Reuters and Bloomberg, as well as the telephone and "voice boxes"). This method of broking is common in high volume overseas markets, and started in the foreign exchange markets.

In South Africa in the early 1990's these brokers were instrumental in providing increased liquidity and more efficient price discovery in the bond markets.

An important advantage of such a "dealer-based" Inter Dealer Broker(IDB) or "quote-driven" market is that it provides greater immediacy to traders and guarantees them liquidity even under uncertain market conditions. A dealer based market might also reduce the clearing and settlement burden by reducing the number of players among whom cash and securities transactions have to be netted off.

In some of the smaller markets, brokers can provide some level of anonymity to market participants that may not wish to have their presence in the market made public. Transactions that are particularly large in size can generally be executed more efficiently in this manner.

# 8.2 Encouragement of long term investors

One of the most important aspects of market development is the attraction of long term investors to the market. These would include pension funds, life assurance companies or collective investment schemes that offer long term guaranteed returns. Most of the MEFMI region countries have already

embarked on programmes of pension fund reforms, where pension monies were previously lying in "defined benefit" funds. Many of these funds have now been changed into "defined contribution" funds and handed over to professional asset managers. The main differences between the two are explained below:

### 8.2.1 Defined Benefit (DB) Plan

With a Defined Benefit (DB) plan, employers provide employees a specific retirement benefit based on salary and years of service. Defined benefit plans can be funded exclusively by employer contributions, or require employee contributions. These monies are pooled together and professionally managed to increase efficiency and remove financial risk for the participant. These plans provide a stream of income for life which makes it predictable and allows participants to plan for retirement and feel a sense of financial security. The most common formula to calculate benefits is based on the employee's earnings at the end of the worker's career. The employer or government bears funding and investment risk.

## 8.2.2 Defined Contribution (DC) Plan

Defined Contribution (DC) plans provide a means for both employees and employers to contribute a steady stream of revenue into the participant's retirement account. A DC plan with a fixed annuity option, can also supply guaranteed lifetime income. Adding a variable annuity option allows the participant to invest in equities, bonds, real estate and other types of asset classes potentially to earn additional income.

DC plans generally allow participant-directed investments and allow employees to receive benefits sooner than DB plans. DC benefits are also portable, which is becoming more important for workers in today's evolving marketplace where the average worker may switch jobs and even careers multiple times over the course of a lifetime. Such pension fund reform, where professional asset managers are empowered by Trustee mandates to invest in other asset classes such as bonds, is vitally important to the development of debt markets. It follows then, that Government needs to pass sufficient enabling legislation for the development of the pension fund and life



assurance industry, thus encouraging longer term investment in these funds, and creating a vibrant "buy-side" for regular absorption of debt issues by both Government and other issuers.

## 8.3 Transaction Costs

It is a fact that the lower the volumes in a market the higher the transaction cost per trade. There are a number of separate points, operations or activities in the transaction cycle, from trade through to final settlement, where costs are incurred. Some of the points in this cycle are a function of the historical development of a market and have been continued without change due to differing circumstances and conditions, some of which may be a function of, inter alia; the old established trading methodologies/rules whereby equity brokers have to be a part of each trade and add little to no value and charge fees; physical settlement procedures; taxes (both old and new) and surcharges on transactions.

Whatever the reason these activities add unnecessary costs to the trade, which in turn contribute to the cycle of unattractive markets resulting in low volumes. Taxes and their impact on pricing are discussed in Section 8.4

In some markets brokerage fees or commissions are set by the regulators whilst in others they are negotiated between the brokers or banks and their clients. In more liquid markets, these fees have reduced significantly in recent years and are negotiated between the broker and its client. Some traders earn revenue by making two-way prices, but this necessitates the bid and offer prices to be market related.

It is true to say that electronic market infrastructure is only cost effective when there are large volumes of transactions being moved through them. The cost burdens on market participants are exacerbated where each country has its own stand-alone system and significant economies of scale, and thus low costs, cannot be achieved. The reasons for having these low volume systems differ and it is not the brief of these guidelines to discuss the

rationale behind those decisions. Suffice it to say that the costs are higher than they could be as a result.

### 8.4 Taxation Issues

As a general rule, direct taxes on securities at source are a deterrent to free flowing, liquid trading interest rate markets. The taxes levied by revenue authorities or central banks or ministries are an attractive source of revenue for fiscal purposes. However, the increased cost of state borrowing will more than offset the revenue generated, as these costs are always priced in by traders, thus distorting the true cost of state borrowing.

In terms of the effect on secondary market trading, these taxes make the determination of the true market price difficult, particularly where certain taxes apply only to foreign participants. Price determination becomes even more difficult where there is a withholding tax applied to the primary issuance when the bond is issued at a discount. Withholding taxes on coupons are difficult to administer if certain parties are exempt, and will result in the unfavourable practice of "coupon washing".

Other levies and handling fees are further complications. These generally arise where the central bank (as the agent of the issuer) needs to develop and maintain the additional infrastructure to perform these tasks, but is not compensated by government.

Unfortunately, the practice of applying these taxes seems well entrenched in the MEFMI countries capital markets, and is a regular feature of the income of most regional revenue authorities. There is, unfortunately, a strong reluctance to change.

Prescription has been avoided in this regard, however, experience has shown that if liquidity is a desired trait in individual markets, together with quality foreign participation, then this thorny issue must be addressed in order to improve the chances of developing free flowing, liquid markets.



### 8.5 Benchmark Curves

In order to efficiently price new issues with different maturities, new products, or to value less frequently traded bonds and interest rate instruments, it is essential to have a clearly defined government benchmark yield curve. This will also enable corporate issuers to ascertain the base rate from which their own debt issues should be priced.

The information used to populate this yield curve must be as accurate as possible to avoid price distortions.

Some of the market qualities assisting the development of such a curve would be:

- Regular and reliable "mark-to-market" prices
- · A liquid and frequently traded secondary market
- · Tight bid / offer spreads
- The availability of hedging mechanisms in the derivative markets
- · Frequent government primary issuance
- Liquid repo market
- Efficient settlement systems and DvP
- · Removal of price distortions caused by taxes and levies

# 9. CONCLUSION

Ultimately, the objective of securities market development in any country is twofold:

- 1. To lower the cost of Government borrowing; and
- 2. To smoothen the process of debt issuance for Government, as well as other quasi–government, municipal, and corporate borrowers.

Therefore, highlighted below are practical steps that are necessary to create, develop and maintain healthy debt markets. Most of these steps can be taken or adapted to suit the different markets in some form or another, and should add significant value to the functioning of the market. The governments or the relevant institutions need to:

- Establish a programme of issuance to provide predictability and planning to investors
- Continuously extend the maturity of the bonds to create a longer dated yield curve
- Issue larger benchmark issues. Continuously tap or re-open a particular bond until it achieves a significant size. This will improve price discovery on the issue, provide participants with the ability to obtain stock should they require investments, and increase participation from foreign investors reluctant to trade or invest in smaller, illiquid issues
- Pay close attention to investor needs as they are more likely to bid aggressively for investments that conform to their requirements
- Assist in the formation of a Primary Dealer and Market Association forum to encourage collective communication
- Should a Primary Dealer system be implemented, the panel should have both incentives and penalties based on performance
- Taxation should be clear, concise, with no differentiation between investors. Withholding tax should preferably be eliminated or phased out, as this tax directly affects the government and corporate debt issuance rates
- Daily Market prices and trading statistics should be published in the public domain, providing accurate and regular market information to investors and market participants



- Auctions should be conducted in a format best suited to the particular market, but should take into consideration the post auction effect of the results on other portfolio holdings
- Auction results should be made available within minutes of the auction closing. By delaying the results, significant risk may be assumed by the bidders
- Provide enabling facilities such as script lending and Repos in order to provide depth and certainty to the market participants
- Ensure that healthy infrastructure and settlement procedures offering DvP are in place
- Ensure that a secure and effective market environment is in place, which will consequently reduce systemic risks, which in turn can lead to more favourable pricing
- Market education and awareness.9

These steps are in no particular ranking or order, and are listed as practical suggestions in the development of securities markets. It is clear that there is no set formula or series of progression that can be followed, and each individual country will have its own priorities. However, the importance of the consultative process on these issues between the legislators and market participants cannot be underestimated.

Some countries e.g. Zimbabwe, Kenya, Uganda, Mozambique and Tanzania have embarked on a National Financial Literacy Programme that is guided by a National Financial Literacy strategy.

# **GLOSSARY**

- Buybacks The issuer makes provision to purchase a specific amount or all the outstanding security either to manage cash flows or support market development by withdrawing illiquid bonds
- Call option A call option is a financial instrument that gives the owner the right to purchase an underlying good at a specified price for a specified time OR an option whose owner has purchased the right to buy a set number of shares of common stock at a set price from a specified person (writer) any time prior to a specified date. The holder of the option has the right (but not the obligation) to purchase the security from the holder on a certain future date
- Covenants/Restrictive Covenants agreements that restrict
  the security issuer from doing things that would make the
  security less creditworthy, which would lower the bond price in
  the secondary market or increase changes of default e.g. running
  high inflation
- **Conversion** part of the outstanding nominal value of the bond is rolled over into a new issue at pre-agreed yield or price
- Coupon Rate fixed interest rate investors earn over life of the bond
- Delivery versus Payments (DvP) simultaneous exchange of the security and cash between the seller and buyer.
- *Maturity/tenor* lifespan of the security
- Nominal issue size total volume at face value of the bond issued
- Over-the-Counter Trading (OTC) securities are traded off-the exchange using telephone, facsimile or other electronic networks
- Prospectus disclosure document that describes material facts about the security to potential investors
- Trust Deed/indenture is a legal contract between the issuer and trustee that specifies the responsibilities of the borrower, the trustee and the lender e.g. interest rate, payment dates, maturity dates, other features
- Redemption Return of the investor's principal amount in a fixed income security



- Repurchase Agreements (Repos) Temporary sell of a security with a promise to buy it back at an agreed date at specified interest rate/price. Repurchase of the same security is Reverse Repo
- Settlement Delivery of the security to the investor upon receipt of cash
- **Sinking Fund** A special trustee fund set to retire certain number of bonds on future dates at par value. This helps in avoiding defaults or exposing the issuer to high interest rates
- **Syndication** issuer approaches one or several institutional investors to underwrite the security
- Underwriting An issuer uses one or several companies/ intermediaries to place specific amount of the issue at guaranteed price until the offer is fully taken up

# REFERENCES

- Abbink K, Brandts. J, Pezanis-Christou (2006), Auctions for government securities: A laboratory comparison of uniform, discriminatory and Spanish designs, Journal of Economic Behaviour and Organization
- IMF & World Bank (2001), Guidelines for Public Debt Management,
- World Bank Reports 2005
- Sareen Samita (2004), Cross-Country Comparison of Models for Issuance of Government Securities, Duke University
- Malaysia Bond Market Guide, 2012, https://wpqr1.adb.org/.../ABMF%20Vol1%20Sec%207\_MAL.pdf



