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An Examination of GOJ Debt Raising Strategy: *Some Perspectives on Capital Market Development and Monetary Policy Management*

Donna Hamilton Smith
Merrick Plummer

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An Examination of the GOJ Debt Raising Strategy:
Some Perspectives on Capital Market Development and Monetary Policy Management

Donna Hamilton-Smith and Merrick Plummer[1]
Financial Markets Sub-Division
Bank of Jamaica

Abstract

The Government of Jamaica introduced the Medium-term Debt Management Strategy at the start of Fiscal Year 1998/99 to minimize costs and reduce the debt to sustainable levels. Since then, several mechanisms outlined to achieve the identified objectives have been implemented with modifications being introduced mainly to achieve the optimal cost/risk trade-off.

The main finding is that prudent debt management practices, which foster the creation of more deep and liquid markets, need to be in place in a context where there is a desire to improve debt indicators in the medium-term. Also while pursuing different underlying objectives, there needs to be harmonious monetary-fiscal co-ordination despite the existence of a separate debt management agency from the Central Bank.

JEL Classification: H63

Key Words: debt; debt management; monetary policy

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Introduction

In light of a sustained high debt burden over several years, the Government of Jamaica embarked on a path to better manage its debt dynamics via the implementation of a medium-term debt management strategy at the start of Fiscal Year (FY) 1998/99. This strategy incorporated debt reduction and prudent debt management practices while also facilitating the development of the local capital market. This is in a context where high levels of public debt and debt service costs greatly hamper the Government's ability to invest in physical and social infrastructure required to promote economic growth and investment.

Consequently, this research was undertaken to determine the extent to which the Government has achieved the outlined debt strategy objectives and to determine specifically the impact this has had on the development of a more deep and liquid domestic capital market. This is particularly germane from the perspective of the Market Operations Analysis Department of the Bank of Jamaica (BOJ), which is challenged to remain knowledgeable of financial market developments as these ultimately have implications for monetary policy management. Further, challenges posed to monetary policy management in response to debt management initiatives will be examined with a view to defining a means of enhancing monetary fiscal co-ordination in the going forward.

Progress has been made in achieving some of the outlined objectives of the strategy such as: use of an auction mechanism for pricing medium to long-term debt; portfolio diversification, promoting and building liquid and efficient markets; and establishing a more prudent debt structure; and transfer of debt management functions from the BOJ to the Ministry of Finance and Planning (MOFP).

However, while the transfer of the debt management functions proved advantageous in some regards, challenges were also presented which could be partly resolved through greater levels of communication between the debt managers and the Central Bank. Also, in response to debt management initiatives particularly with regard to approaching the international capital market, the need for sterilization has resulted in high Net International Reserves (NIR) and correspondingly high open market liabilities. However, there is a trade-off between the cost of holding reserves and the benefits of maintaining low inflation.

The paper is developed as follows. Section I examines the macroeconomic context in which the strategy was defined and implemented. In Section II the centralization of debt management functions within the Ministry of Finance and Planning (MOFP) is discussed. Section III is dedicated to outlining the Medium-Term Debt Management Strategy and how it has evolved since implementation at the start of (FY) 1998/1999. A critical assessment of the impact of the new debt initiative on capital market development and monetary policy management is presented in Section IV, followed by recommendations and concluding comment in Sections V and VI, respectively.

Section I: The Macroeconomic Context

In the early 1990's, Jamaica accelerated its structural reform programme, which included the trade liberalization and tariff reform, the removal of price subsidies and controls, and the liberalization of exchange controls. The focus of the 1992 macroeconomic stabilization progamme was the containment of inflation and the maintenance of stability in the foreign exchange market, which was to be achieved through a combination of tight monetary and fiscal policies. This became a matter of urgency following the sharp depreciation in the Jamaica dollar contributed to the 12-month point-to-point inflation rate peaking at 108 percent in April 1992 (*Figure 1, Panel A*).

The Bank of Jamaica succeeded in reducing inflation to single digits and maintaining relative stability in the money and foreign exchange markets (*Figure 1, Panels B & C*). In this regard, the rate of depreciation in the exchange rate slowed and the interest rates have trended downward. However, an attendant cost of stabilization was a significant growth in the domestic debt stock between 1992 and 1998, which moved from $115.83 million at end March 1992 to $219.18 million at end March 1998, reflecting growth of 89.2 per cent. (*Figure 1, Panel D and Figure A*). Concurrently, the fiscal deficit also moved from $3.2 at end March 1993 to $28.8 billion at end March 1998.

The growth in the domestic debt stock was attributed to several factors. Firstly, the liquidity management that was necessary to contain inflation resulted in the BOJ sustaining significant losses on open market operations in the early to mid 1990s. As part of the GOJ's efforts to eliminate these losses, GOJ instruments (LRS and Treasury bills) replaced maturing certificates of deposits (CDs) issued by the BOJ. Additionally, as a part of an IMF agreement negotiated in October 1992, the government issued marketable securities to the institution to offset its losses and improve its income earning capacity.

In addition to the financing requirements to support budgetary expenses, the increase in domestic debt between 1992 and 1998 was also attributed to: *the assumption of debt obligations of public sector entities*; *and the on lending of financial support to the financial institutions following the emergence of the financial sector crisis* in 1996.

Over the years, the Government has sought to give support to parastatal bodies of particular significance to economic development (for example, tourism and agriculture)[2]. In this regard, the

[2] Budget Memorandum FY 2000/01

GOJ assumed $6.9 billion of parastatal debt between end March 1992 and and end March 1998 with some of the benefiting agencies being Air Jamaica[3], University of the West Indies /University Hospital of the West Indies and the National Water Commission.

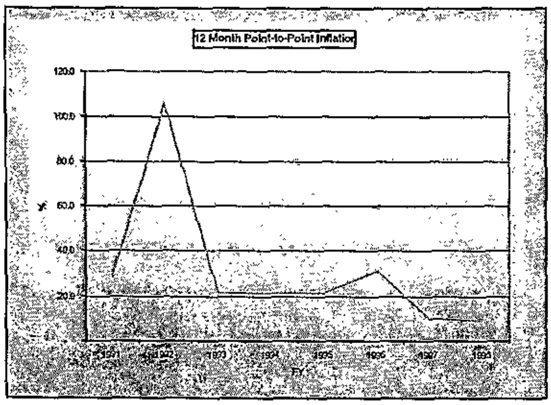
The financial sector crisis, which emerged in 1996, was a major contributing factor to the increase in the domestic debt stock as the GOJ eventually absorbed 100 per cent of the fall-out in the sector. In an effort to rehabilitate and restructure the financial sector, the GOJ provided credit to financial institutions as part of its thrust to stabilize and restructure the financial sector. Of the new domestic debt undertaken in that FY 1996/97, $2.7 billion was for on-lending to these institutions. Of note, the Government at the start of FY 2001/02, assumed all liabilities emanating from the restructuring and rehabilitation of the financial sector.

Recognizing the need to return the debt to sustainable levels, the Government sought to incorporate more prudent debt practices to achieve that objective. As a precursor to the Medium Term Debt Strategy, the debt management functions were transferred from the Central Bank and centralized in the Ministry of Finance and Planning (MOFP) at the start of FY 1998/99. This was largely in keeping with the debt management guidelines outlined by the IMF and the World Bank (2002), which states, "*Where the level of financial development allows, there should be a separation of debt management and monetary policy objectives and accountabilities*".

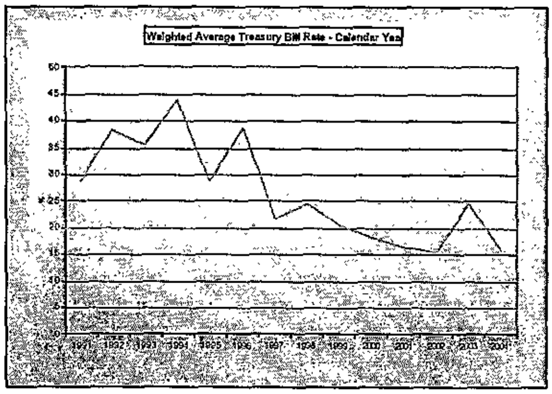
[3] In FY 1997/98, $1.4 billion in new GOJ debt was issued to support this institution

Figure 1. Jamaica: Macroeconomic Fundamentals: 1991-1998

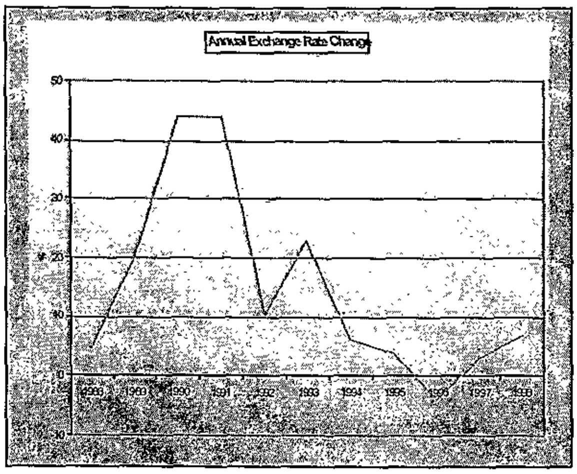
Panel A.



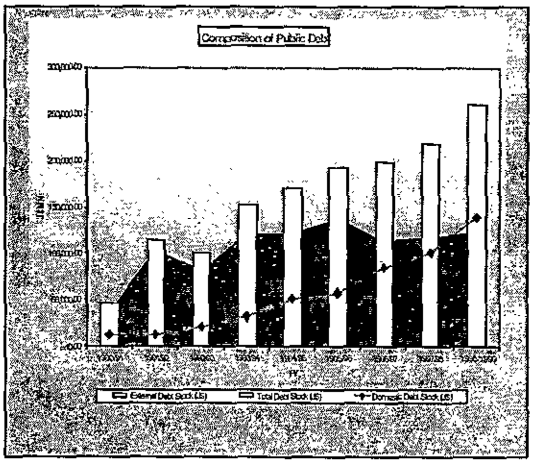
Panel B.



Panel C.



Panel D.

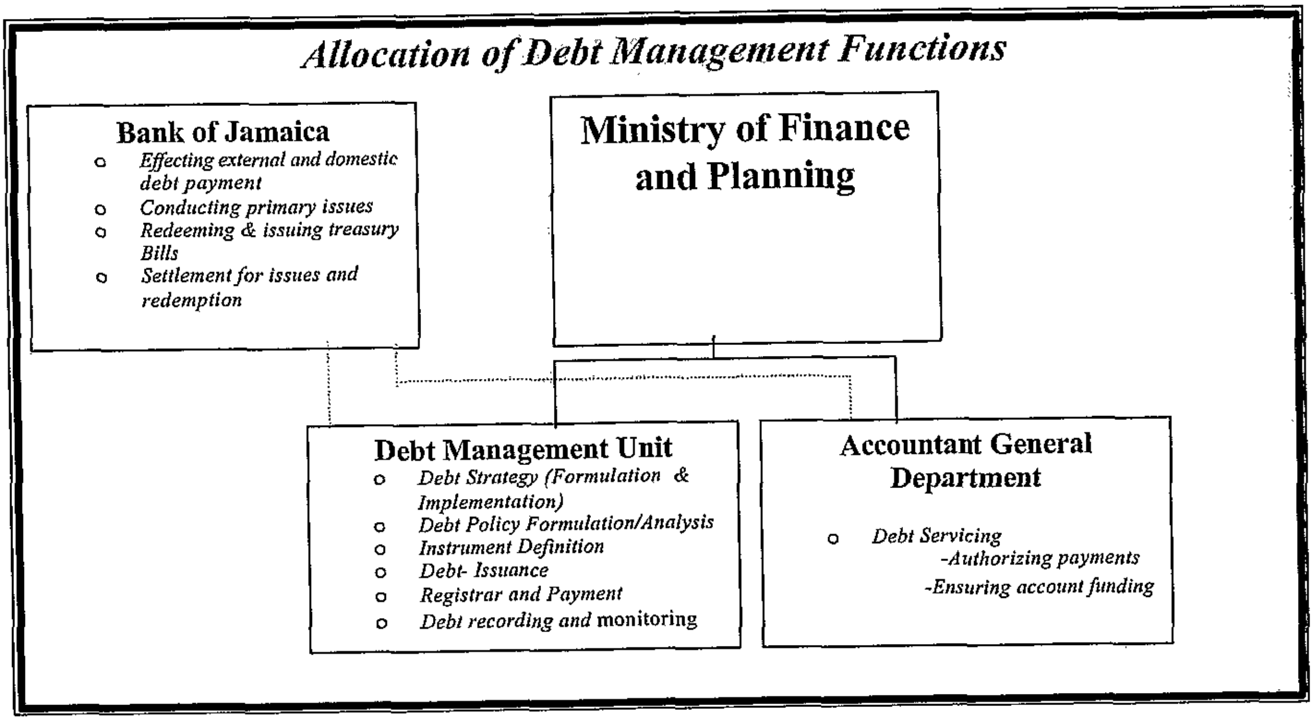


Section II: Centralization of Debt Management Functions in the Ministry of Finance and Planning: Separation of Debt Management Responsibilities from the Monetary Authority

In April 1998, the debt management functions were transferred from the BOJ to the MOFP and a Debt Management Unit (DMU) was established. The transfer allowed the debt management functions to be centralized within the MOFP and also enabled the Central Bank to return to its core function of maintaining its focus on price stability.

In Jamaica, the debt management functions from design, issuance, registration and repayment are spread across two agencies – the BOJ and the MOFP. Within the MOFP, the DMU is now fully responsible for the core debt management functions, which include formulating debt policy and strategy, analyses and announcements for debt-raising activities, and providing registrar function for outstanding debt. The Accountant General's Department, a department of the MOFP, has responsibility for ensuring that accounts are adequately funded to facilitate timely debt servicing. The Central Bank acts as agent for the Government, and is responsible for effecting debt payments upon receipt of the requisite funding, conducting primary issues and facilitating settlement for issues and redemptions. (*See chart 1*).

Chart 1:



: not a direct line of reporting, but interfaces through information sharing and coordination

Research conducted by the International Monetary Fund and the World Bank reveals that other countries apart from Jamaica have centralized their debt management functions. For example, Poland centralized its debt management activities in the Public Debt Department of the Ministry of Finance in 1998[4]. Other countries such as Portugal, Ireland, Sweden and the United Kingdom, established separate debt management agencies from the Ministry of Finance. In the majority of countries, central banks are in operational charge of managing assets, while ministries of finance (treasuries) maintain operational authority over liabilities management. This structure is viewed as optimal to avoid the potential conflicts of interest between monetary policy and debt management, which might otherwise compromise the independence of the central bank (Cassard et al, 1997).

While this preserves the integrity of the central bank, it is noted that only close coordination between both agencies can ensure that the debt management policy is consistent with monetary policy. Against this background, it is underscored in the literature that the central bank needs to be fully informed of the daily transactions of the debt management agency, so that appropriate adjustments can be made to liquidity management and intervention policies to offset the impact of these transactions on the market. Full coordination also demands that the central bank inform the debt manager of the composition and maturity of its reserves portfolio, and update this regularly so that the debt manager can factor this into debt management policy.

The adoption of the structure to separate the agencies has the additional advantage of facilitating a better-defined set of debt management objectives and enhances the implementation of the debt strategy within the defined limits. This is against the background of consolidation of debt management expertise and the improved consolidation of debt management data. Given that it is of paramount importance to countries to implement debt strategies that minimize the country's exposure to market risk, Cassard et al (1997) argue that debt management requires an *organizational structure independent from political influence.* In that regard, it is noted that this would promote the development of debt management policies that would reflect transparency and efficiency through the establishment of clearly defined objectives, performance criteria, and sound risk management principles, with the strategy being implemented by qualified staff. A further observation was that the ability of the debt management unit to employ adequately trained staff

[4] In 1998, the domestics and foreign debt management was concentrated in the Public Debt Department (PDD)

would be defined by the nature of the organization's relationship with treasury and the rest of the public sector. The literature outlines the role for an independently run and autonomous debt agency, whose medium term strategy would be defined by the Ministry of Finance (based on its objectives and risk preferences, and the macroeconomic and institutional constraints of the country). Under this arrangement, the debt management agency implements the strategy and administers the issuance of the debt. Of course, a critical pillar for the efficient implementation of this framework is that the agency operates in a highly developed public sector with the requisite channels to facilitate accountability.

Some practitioners argue that keeping the responsibility of debt management with the central bank may facilitate better co-ordination (Mohanty, 2001). One such example is India, where the Central Bank has had to address the twin responsibility of funding a large deficit and restricting monetary growth. Nevertheless, the Reserve Bank of India has proposed separation of debt management from monetary policy operations in the medium term. This would be facilitated by the development of the financial markets, better control of the fiscal deficit as well as the required legislative framework.

In Jamaica's case, co-ordination between the Bank of Jamaica (BOJ) and the MOFP is maintained through continued interface with the BOJ performing agency functions in GOJ primary debt issues. With the Government being a significant borrower within the domestic market, mechanisms are in place to ensure that the Central Bank has information required to assess Government cash flow and hence both institutions can more effectively manage the liquidity in the financial system. At the start of each month, the MOFP furnishes the Fiscal and Economic Programme Monitoring Unit in the BOJ with a cash flow. Concurrently, data on payments regarding open market maturities is provided to the debt managers by the Financial Market Sub-Division (FMS) to assist the debt-raising process of timing issues in GOJ instruments to meet liquidity impulses, particularly in the absence of corresponding GOJ maturities. Where there is a financing gap, the DMU utilizes the information received *inter alia*, to determine the terms of its offers to coincide with either GOJ or OMO maturities. The Central Bank is subsequently advised of the terms of GOJ instruments, which allows the BOJ to conduct issues, and advise of results. Settlement on primary issues and maturity payments regarding debt are conducted through the Banking Department (*Appendix 2*).

Where accounts are to be funded for debt domestic or external payments, the Accountant General Department (AGD) informs the FMS and Banking of the source and timing of such transfers into the Bank or from accounts at the BOJ.

Despite the clarity in co-ordination channels, it is noted that there are some shortcomings to the removal of the debt management function from the central bank. These shortcomings are manifested primarily in the area of communication and policy co-ordination, which at times, undermines the extent to which debt costs are minimized or the effectiveness of central bank policy. Specifically, there have been instances where the market indicates a preference for a particular instrument type yet another is offered. The result being that the take-up falls short of the financing requirement and the government subsequently re-issues other instruments to meet the requirement. The frequency of offers can potentially adversely influence the interest rate path in a direction that runs counter to the central bank's programme or desired path. On the other hand, given the conservative nature of central banks, interest rate reductions may be effected at a slower rate than is consistent macro-economic developments or even the price at which the Treasury wishes to contract its debt.

Section III: Medium-Term Debt Management Strategy

The Government of Jamaica has defined a medium-term debt strategy, with the reiteration of objectives at the beginning of each fiscal year. The primary objective of the medium term debt management strategy is:

"To raise adequate levels of financing on behalf of the Government of Jamaica at minimum costs, while pursuing strategies to ensure that the national public debt progresses to and is maintained at sustainable levels over the medium term."

This strategy was introduced in FY 1998/99 but has since been modified to broaden the focus from solely minimizing costs to also include risk management. This is consistent with the established surveys of the debt management objectives as detailed in the *World Bank and IMF's Guidelines for public debt management: Accompanying document* (2002). In achieving its objective, the following strategies are being employed:

1. Maintaining a Prudent Debt Structure
2. Diversifying the debt portfolio
3. Promoting and building a liquid and efficient market for Government Securities
4. Using an auction mechanism for market issuance
5. Ensuring continued or wider access to both domestic and international markets

6. Increasing transparency and predictability of primary market debt issuance

1.0 Maintaining a Prudent Debt Structure

This process involves, *inter alia*, incorporating a debt strategy in which the composition and maturity of the debt stock accommodates the optimal trade off between cost and risk management. All the countries surveyed by the IMF and World Bank focused on the need to borrow at the lowest cost over the medium to long term. Several countries including Brazil, New Zealand and Colombia, made reference to the need to manage risks prudently. In managing the cost/risk trade-off over the medium-term, there was a general acknowledgement of the need to avoid taking on debt structures that might have lower costs in the short run but could lead to higher debt service costs in the long run.

In striving to maintain a prudent debt structure the Government has recognized that it is important to encompass the management of the following components:

1.1 Interest Rate Risk – Increasing the Share of Fixed Rate Instruments in the Domestic Debt Portfolio

With the implementation of the new debt strategy, a priority has been to reduce the sensitivity of the domestic debt to increases in short-term interest rates by increasing the share of fixed-rate debt in the portfolio. While there has been a downward trend in interest rates, since the late 1990's intermittent shocks have temporarily increased interest rates, thereby confirming the vulnerability of the debt portfolio to this form of risk. This was evident in FY 2003/04 when a decline in market confidence resulted in instability in the foreign exchange market and the BOJ temporarily increased interest rates to restore stability. Debt was raised at over 30.0 per cent during the period of instability.

Villar et al (2001) et al, in reviewing trends in the development of debt markets in emerging economies, stated that the debt management strategies of the largest borrowers (usually governments) have included an emphasis on increasing the share of fixed rate debt. He noted that fixed rate securities are most common in central Europe, Asia and the Middle East[5] and the smallest share of these securities is in Latin America.

[5] Israel is an exception

In Jamaica, significant progress has been made in achieving this redistribution of debt. The share of fixed rate debt to total domestic debt has increased from **7.0** per cent in FY1999/2000 to **58.0** per cent in FY2003/2004 (*Figure B*). According to the Debt Management Strategy (2003/04), the aim is to achieve a **60.0** per cent fixed rate component in line with international best practice.

1.2 Refinancing Risk – Extending and Smoothing the Maturity Profile

Refinancing risk is the probability that large maturing portions of debt will have to be reissued in unfavourable conditions such as high interest rates and or tight liquidity. The maturity structure of the debt stock is of paramount importance for the development of domestic bond markets in emerging economies in a context where a significant proportion of short-term debt usually adds to macroeconomic instability and increases the refinancing risk (Villar et al, 2001).

In light of the above-mentioned factors, the Government of Jamaica has also sought to extend and smooth the maturity profile of its debt and thus limit the concentration of maturities in the near-term in order to manage the risks associated with refinancing. According to the 2000/2001 Budget Memorandum, " *the aim is to lengthen the maturity profile of the debt to have a larger proportion of domestic debt obligations with an average maturity of five years or more*". With regard to the smoothing of the maturity profile, this is envisioned to involve a limited programme of exchange offers where Government offers investors the opportunity to exchange securities nearing maturity for new securities with longer maturities. This will potentially reduce constraints on the budget.

In keeping with the objective of lengthening its maturity profile of its Eurobonds, the Government has been successful in issuing such instruments for tenors up to 20 years (see Table A). This has contributed to a 45.9 per cent of the total external debt being in the category 10 years and over at end August 2004. On the domestic side, at end July 2004, 12.45 per cent of instruments are scheduled to mature in more than 10 years (*Tables B and* C). It should be noted that some measure of success had been achieved in elongating the maturity profile of domestic instruments since the implementation of the strategy but this was temporarily halted by the instability which surfaced in early 2003, resulting in a preference for mainly shorter-term instruments thereafter.

1.3 Exchange Rate Risk

According to Cassard et al (1997), the exposure of developing countries to currency risk can be broadly gauged by the amount of the external public debt incurred. Following on this argument, Jamaica's public debt portfolio is exposed to exchange rate risk in a context where the country's outstanding foreign currency denominated and indexed debt represents 53.8 per cent of the public debt.[6] This has been exacerbated by the flexible exchange rate regime and the currency composition of the debt has changed to include a higher share of non-US dollar instruments.

There has been a change in the composition of the external debt portfolio following Jamaica's access to the European market in 2000. At March 2004, the Euro denominated debt accounted for 17.0 per cent of the external debt stock compared to US denominated debt of 73.0 per cent (see figures C and D). In this regard, there is the exposure to currency risk to the extent that the Jamaica dollar weakens relative to these currencies and the risk is exacerbated in a context where the Government has limited capacity in its earnings in these currencies.

The country's external debt ratio GDP ratio declined, showing steady improvement from the 100.0 per cent in FY 1990/91to 45 per cent by FY 1997/98. Coinciding with access to the international capital markets, the ratio has increased to 54 per cent at the end of FY 2002/03 (*Table D*). In that regard, the country's external debt indicators exceeds the objective outline din the strategy to achieve a ratio of 30.0 per cent, in line with established international benchmarks.

On the domestic side, the strategy was to offer a wide range of debt instruments to the market as well as offer risk-averse investors protection against depreciation of the Jamaica dollar. Against this background, US Dollar Indexed Bonds were introduced in July 1999 with the strategy being to offer a limited amount of this instrument[7] in order to minimize the exposure of the debt portfolio to risk. Since then, the stock of US denominated debt has grown significantly partly due to investors' desire to retain their assets in United States Dollar. The strong demand for these instruments is understandable given that they allow investments in Jamaica dollars, converted at a US$ exchange rate usually below existing spot rates and have repayment terms attracting a premium to the spot rate at the time of payment. This provides the investor with hedged assets in the portfolio mix of Jamaica dollar instruments, while allowing the Government to service debt at a cheaper cost

[6] This includes external debt of $276.3 million and domestic US$ denominated and linked of $96.8 million, relative to total debt of $693.9 million at end March 2004

[7] Target proportion of domestic currency denominated in or linked to US$ is 10 per cent

providing the rate of depreciation in the exchange rate remains below the interest differential. Alternatively, the Government's exposure to risk would increase should there be adverse movement in the exchange rate.

In this context, the debt managers have sought to restrict the issuance of such securities and thereby reduce their vulnerability to currency risk. According to Ministry paper (FY 2003/2004) *"the Government will restrict the use of US$-denominated and US$-indexed bonds to facilitate the gradual reduction of the foreign currency exposure of the domestic debt portfolio over the medium-term"*. Of course, this position has been underscored by the fact that rating agencies have often identified that a major risk to Jamaica achieving and maintaining a sustainable debt position relates to *"the high level of foreign currency debt."* (Standard & Poor's Research Summary: Jamaica, dated 23 July 2003)

2.0 Diversifying the Debt Portfolio

An important objective of the government's debt issuance programme has been to offer new instruments, which are tailored to meet the needs of various segments in the market. This is in keeping with the *IMF and World Bank's Guidelines for Public Debt Management,* which states that *"The Government should strive to achieve a broad investor base for its domestic and foreign obligations, with due regard to cost and risk, and should treat investors equitably"*. The IMF handbook entitled *Developing a Government Bond Market* (2001) also notes that *"a diversified investor base for fixed-income securities is important for ensuring high liquidity and stable demand in the market. A heterogeneous investor base with different time horizons, risk preferences, and trading motives ensures active trading, creating high liquidity"*.

In an effort to meet the needs of different segments of the market the Government introduced new instruments subsequent to the introduction of the new strategy. As outlined in the Debt Management Strategy presented at the start of FY 1999/2000[8], the recommendation was to offer bonds indexed either to inflation[9] or the exchange rate [10]. The objective was to meet the needs of institutional and retail investors that were uncertain about future movements in currency and inflation and prefer to maintain the value of their assets even at the expense of incremental earnings

[8] Ministry Paper no.10
[9] The principal amount would be adjusted for changes in inflation
[10] Payments of principal and interest made in the Jamaica dollar equivalent

from the domestic market. In this context, the first US dollar indexed bond was offered in 1999 and a 30-year inflation linked bond has since been floated to finance the island's first the toll road.[11]

Since the initial offer of indexed bonds, its share of the domestic debt stock increased from 6.9 per cent in FY 2001/02 to 12.3 per cent in FY2003/04. Concurrently, US dollar denominated issues in the domestic market increased from a share of the domestic debt stock from 8.5 per cent by end FY 2001/02 to 10.9 per cent by end FY 2003/04[12] (*Figure D*). As noted above, use of these instruments have been restricted in recent times.

With regard to the external debt, the Government has sought to broaden its investor base by geographic distribution and has successfully accomplished this since floating the first international bond in 1997. The policy has been to approach the international capital market to the extent of gross amortization[13]. Subsequent to issuing Eurobonds mainly to US Investors, Jamaica successfully accessed the European market in February 2000. In October 2003 and March 2004, the regional market was accessed, thus widening the investor base to include the Caribbean.

The ability to further broaden Jamaica's investor base increased during FY 2001/02, as the Government filed a Schedule 'B' Registration Statement with the United States Securities and Exchange Commission (SEC) for US dollar bonds to be issued in the international capital markets[14], giving the island greater access to citizens of the United States. An additional benefit is that Jamaica will be able to issue securities in the international capital market at short notice, thus taking advantage of favourable market conditions.

While seeking to broaden its investor base, the debt managers need to be cognizant that efforts to boost liquidity in Government bond markets may be restricted based on the holder profile of Government debt, particularly where institutional investors adopt a 'buy and hold' policy (Mohanty 2001 and Inoue 1999). This is where securities are held by market participants who do not sell

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[11] More recently, variable rate investment bonds were reintroduced in July 2003. The other instruments such as Treasury bills, LRS, and Debentures continued to be offered to investors in the market.

[12] Indexed bonds are reflected in the 'other' category
[13] Source: 2003/04 Jamaica Budget Memorandum , Chapter 5 - Debt and Capital Market Developments
[14] Source: The case study on Jamaica in the IMF and World Bank's Guidelines for Public Debt Management: Accompanying Document, 2002, (Washington D.C)

securities once they are acquired. In effect, the total trading would not reflect the total volumes issued in that instrument.

Inoue (1999) indicates that one example applies to holdings by the government agencies and or the central bank of marketable securities. He suggests that where either institutions' holding is significant, the market becomes fragmented assuming that these securities are not sold once acquired and this may lead to a reduction in the volume of securities that are actually traded. Further, he posits *"this is not the only effect of holding by government (agencies) and /or central bank. Because they usually do not reveal their holding volume of securities issue by issue, market participants are unable to know the exact volume available in the private sector for a certain issue. This makes it difficult for market participants to precisely value securities...dealers may be inclined to stop quoting to protect themselves from being squeezed, because they do not know the volume of available securities".*

Liquidity in Jamaica can be constrained in two ways, namely: where the BOJ, other parastatal agencies as well as pension and insurance companies hold securities to maturity; and where the market is unaware of the holding of a security by such entities. At the end of March 2004, the BOJ held 19.0 per cent of domestic debt up from 18.0 per cent at the end of the previous year and a similar amount at end March 2003[15]. Other public sector entities accounted for 6.9 per cent of domestic debt at end March 2004 relative to 2.6 per cent at end March 2003. Further, superannuaion and pension funds and insurance companies accounted for 14.1 per cent at end March 2004 up from 11.3 per cent at the end of the previous fiscal year.

The main holders of the domestic debt are Merchant Banks, Trust Companies and brokers, which account for 29.5 per cent of that stock at end March 2004 relative to 30.5 per cent at end March 2003 (see Figure E). These institutions generally buy with the intention of trading in the market.

3. Increasing the Transparency and Predictability of Primary Market Debt Issuance

Within the context of debt management practices, market transparency may be seen as a characteristic of a bond market whereby debt management strategies and operations are known and

[15] Holdings by Government entities was minimal -below 10.0 per cent at the end of both periods

well understood by market participants. [16] The IMF and World Bank Guidelines relating to transparency and accountability address three main issues. These are:

- Disclosing the allocation of responsibilities among those responsible for executing different aspects of debt management, the objectives for debt management and the measures of cost and risk that are employed;
- Disclosing materially important aspects of debt management operations and information on the Government's financial condition and its financial assets and liabilities;
- Ensuring that debt management activities are audited to promote accountability.

This is further supported by the Bank for International Settlement's Committee on Global Financial System (1999) which indicated that transparency is relevant to market liquidity in three different contexts: the transparency of the issue schedule; the transparency of issuers; and the transparency of market information.[17]

In Jamaica significant efforts have been made to increase the transparency and predictability of debt management operations as previously outlined. In this regard, the Government's debt management strategy is presented to Parliament at the start of the fiscal year and since FY 1999/2000 this has been published in the form of a Ministry Paper. This and other comprehensive data on external and domestic debt are available on the MOFP's website (www.mof.gov. jm/dmu).

Information on the Government's debt operations is also publicly disclosed in advance. An annual calendar of Treasury bill auctions is published at the start of the fiscal year. Dialogue is maintained with local and international investors and market players through meetings, market surveys, investor presentations and non-deal road shows. With regard to accountability, the Auditor General's Department conducts audits on an annual basis.

In maintaining a transparent relationship with the market, there was an expansion in the coverage and medium through which information is circulated. In January 2003, the GOJ began subscribing economic and financial data to the IMF's General Data Dissemination System (GDSS). The GDDS was established to guide participating countries with in the provision of timely, comprehensive, accessible and reliable economic, financial and socio-demographic data to the public.

[16] Source : India's External Debt - A Status Report (2001)
[17] For further information see, BIS (October 1999). How should we design deep and liquid markets? The case of Government securities.

Based on the general recommendations of the IMF/World Bank and the BIS, transparency and predictability is being fostered in Jamaica.

4. Increasing Reliance on the Use of Market-Determined Instruments for Debt Issuance

Another key objective of the Government's debt strategy is to increase the use of the market mechanism for the sale of its securities in the domestic market with a view to realizing lower borrowing costs. This was outlined by the Minister of Finance, in the Debt Management Strategy at the start of FY 1999/2000[18]. He stated "*unlike Treasury bills which are auctioned*[19]*, the Government and not the market determines the price at which Local Registered Stocks are sold. The market has responded by determining the volume of securities it will purchase at that price. This approach has not provided the budget with any certainty that its domestic financing requirement in any one month will be met. Based on the pricing, funds raised through LRS issues are invariably well below or above the targeted borrowing requirement. The implication of funding over and above the amounts targeted is that too high a price may have to be paid to obtain these funds incurring unnecessary debt costs. Conversely, if the Local Registered Stock issues are unattractively priced, requirements may not be met and the issue described as failed. Such circumstances impose severe stress on the budget when funds are insufficient*".

Following this statement, LRS auctions were introduced in October 1999. Jamaica is not unique in seeking to increase its reliance on the auction mechanism as noted by Castellanos (1998). He stated, "*governments have come to rely on auctions to place their bonds, rather than on syndicated issues. There are many ways to conduct such auctions but the most common are the bid and uniform price mechanism*". In this regard, in the pricing of GOJ LRS, a bid price mechanism was implemented with allocation done using the Dutch method. Of course, apart from the superiority of the price discovery process, and the potential savings from individual pricing, the introduction of an auction has contributed to increased transparency of government bond issuance.

[18] Documented in Ministry paper no. 10

[19] These have been auctioned since 1958 - Source: Bank of Jamaica: The First Forty Years

The Government intended to broaden the instruments offered via this medium in FY 2002/03. However, this has not yet been achieved and the main reason posited was the instability in the financial markets during that period.[20]

5. Promoting and Building a Liquid and Efficient Market for Government Securities

As a part of the strategy to develop capital markets, the Government committed to promoting a more liquid secondary market through building benchmark securities. This will be achieved by re-opening a limited number of larger issues in key maturities of existing stock of LRS.

Several other countries have already established benchmark securities as indicated in a study of the Government securities market in eleven G10 countries[21] (Inoue, 1999). It was revealed that the general purpose of re-openings was to increase the fungibility of benchmark issues. In eighteen countries surveyed by the IMF and World Bank, sixteen countries reported issuing benchmark securities. Castellanos (1998) posits that in industrial countries, national debt offices usually concentrate their funding on a few large volume issues, which become the benchmark or the standard for all other fixed income securities of similar maturity, thereby creating unparallel liquidity in the secondary markets for government securities.

Limited progress has been made in establishing benchmark issues as a means of enhancing market liquidity. Nevertheless, there are several other measures, which the debt managers will have to consider in the medium to long term once this initial goal is achieved.

One such measure is the broadening of the Central Depository to include the trading of fixed income securities[22]. This would also be a welcome feature to enhance market liquidity in Government securities. Preliminary work has already been undertaken to dematerialize and thereby enhance the efficiency of secondary market trading as well as reduce the risks associated with holding, trading and settlement of securities.

Another area of concern with regard to its potential negative impact on market liquidity is the area of taxation. The IMF handbook, Developing Government Bond Markets noted that in developing countries tax authorities usually skew the tax regime in order to take advantage of a relatively well

[20] Source: Ministry paper - Debt Management Strategy 2003/04

[21] These are Canada, Italy, the UK, Belgium, France, Germany, Switzerland, Sweden, Switzerland, Japan and the United States of America

[22] The Jamaica Central Securities Depository began operation in 1998 but at present only trades in equities are conducted

institutionalized financial sector from which revenue can be easily generated from. However, it was highlighted that on the other hand, those entrusted with the developments of a deep and liquid capital market, are often in support of tax incentives for financial instruments as a way of encouraging market development. Further, it was noted that while tax incentives have been criticized for distorting relative prices, if they are used with care incentives could be effective in achieving certain economic goals such as promotion of the long-term bond market. Of course, this has particular significance for developing countries such as Jamaica where the time horizon of investors tends to favour short-term instruments.

Castellanos (1998) indicated that governments of industrial countries have tended to eliminate withholding taxes. On the contrary, the Jamaican Government increased the number of financial institutions that were required to withhold taxes on interest as well as the range of financial instruments covered. Withholding tax[23] on interest was increased from 15.0 per cent in 1999 to 25.0 percent in 2000 on all financial instruments. However, tax-free status was given to long-term saving accounts, which are deposits where principal amounts are held for at least 5 years.

Section IV: Impact on Capital Market Development and Implications for Monetary Policy Management

1. Impact on Capital Market Development

Consistent with the objectives of minimizing risk in debt financing, the Government in conjunction with the Central Bank has sought to improve the efficiency of the financial sector in mobilizing and allocating financial resources in the economy. In addition, steps have been taken to ensure the existence of a proper risk management framework in the systemically important financial institutions. Specific policies focused on strengthening the legal and regulatory framework, enhancing the dissemination of pricing information and improving settlement systems to ensure the development of a deep and efficient secondary market for Government debt.

[23] Prior to 1999, taxes were only withheld on savings deposits, See IMF and World Bank Guidelines for Public Debt Management: Accompanying Document, page 159.

1.1 Strengthening the Regulatory Framework and Improving the Financial Infrastructure

Gray and Hoggarth (1996) opine that critical to the successful implementation of monetary policy is the existence of a secondary market for open market instruments. An environment for the effective implementation of monetary policy is necessary, since the success of the debt strategy hinges on maintaining stability in the financial markets. To the extent that secondary markets are poorly developed and lack liquidity and transparency, domestic investors, correctly perceiving the higher level of risk, will be reluctant to participate in secondary trading. In fact, Mishkin (1997) notes that capital market participants are hesitant to engage in underwriting, trading or asset management activities in the absence of a secure legal and regulatory environment. Since 1997, a series of amendments to the laws governing the financial sector in Jamaica have been passed to strengthen the regulatory framework. The most recent is the Financial Services Commission Act passed in April 2001. The Financial Services Commission (FSC) was established under this Act and was granted broader regulatory powers (particularly as it relates to disclosure requirements) than the Securities Exchange Commission, which prior to the FSC had responsibility for regulating securities dealers. The FSC is responsible for the regulation and supervision of entities dealing in securities, collective investment funds, (unit trusts, mutual funds), investment advisors, the insurance industry, and pension funds.

The integrity of the secondary market and its participants is an important element in creating investor confidence in the market. The FSC have introduced strict requirements for the dissemination of pricing information and other relevant financial information about the issuer. The Government's thrust has been enhanced by the implementation of minimum standards for financial reporting as well as proper mark-to-market rules[24]. Consequently, as an interim measure the

[24] Financial institutions regulated by the BOJ and the FSC were required to be IAS 39 compliant by June 2002. – This is an International Accounting Standard concerning the recognition, measurement and disclosure requirements about financial instruments. It requires the recognition of all financial assets and liabilities on the balance sheet. That includes derivatives. The standard also requires that purchases and sales of each broad category of financial assets be accounted for consistently using either trade date or settlement date accounting. If settlement date accounting is used, certain value changes between trade and settlement dates must be accounted for. All recognised financial assets fall into one of four IAS 39 categories:

- Originated loans and receivables
- Held to maturity investments
- Financial assets held for trading
- Available-for-sale financial assets

Central Bank in collaboration with major market players have begun the process of developing a yield curve for GOJ securities. This is to assist in determining current bond prices, a process to be enhanced when the Jamaica Central Securities Depository (JCSD) is established[25]. These new financial legislation and standards governing the sector improve transparency and bolsters investor confidence in the viability of financial institutions.

To further facilitate the development of a secondary market for Government bonds, priority has been given to strengthening the financial infrastructure to increase efficiency and minimize operational risk. Progress in this area has been achieved with the active participation of the Central Bank, which piloted the introduction and establishment of the Electronic Gateway to Auctions and Trade of Foreign Exchange (e-GATE). e-GATE provides the medium for auctioning public issues of GOJ securities. Since the start of e-GATE there has been a noticeable increase in the efficiency with which applications are processed and the subsequent publishing of results.

As the volume of transactions increases so does the importance of a more sophisticated infrastructure for securities settlement. In that regard, the secondary trading of securities is expected to become less cumbersome when the Jamaica Central Securities Depository Limited (JCSD) established in 1998 becomes fully operational, with dematerialized instruments being settled on a delivery versus payment basis·

Generally, bond markets link issuers having long-term financing needs with investors willing to place funds in long-term interest bearing securities. Continued developments in the domestic bond market offers a range of opportunities for funding the Government and the private sector, with Government issues creating opportunities for other market participants. To the extent that the Government has successfully improved the structure of the secondary market and as built credibility in the domestic and international capital markets, the resultant positive investor confidence in the economy may stimulate corporate bond market development. Providing potential

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Source: www.iasplus.com

[25] The Jamaica Central Securities Depository (JCSD), a wholly owned subsidiary of the Jamaica Stock Exchange, is a facility for holding securities which enables share transactions to be processed by book entry. A book entry system is an accounting system, which facilitates the change of ownership of securities electronically between parties, without the need for the movement of physical documents. In short, the JCSD is an electronic means of recording the ownership of shares and securities.

Source: www.firstglobalstockbrokers.com

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Source: www.firstglobalstockbrokers.com

issuers of corporate debt satisfy standard risk levels, investors may be encouraged to invest in corporate bond issues, which would allow these institutions an alternative to equity financing.

The evolution and composition of Government debt has had important implications for portfolio diversification and market depth in Jamaica.

1.2 Portfolio diversification

In keeping with the debt strategy, the Government has increased the mix of instruments offered, which has provided investors with opportunities to satisfy varying risk and maturity preferences through increased access to a wider array of tenors and instrument types. The strategy of offering instruments indexed either to prices, currency, or short-term interest rates has allowed investors to hedge against interest rate and exchange rate risks. Furthermore, the terms of the instruments have been diversified to include features such as a higher frequency of coupon payments as well as partial payment of principal before maturity, thereby improving the cash flow from these instruments and minimizing reinvestment risk.

Once a solid basis for a well functioning, short-term market had been laid the Government increased efforts to elongate its maturity profile by moving from short to long-term funding instruments with the average maturity of Government fixed rate public issues increasing from 2.0 years in 1999 to 8.54 in 2002 when two 30-year bonds were issued[26] (*Table E*). As noted in Davis (2000), a frequent problem encountered with efforts to elongate entails unrealistic expectations regarding the pricing of longer-term bonds. Against that background, the Government's effort to further extend its maturity profile is constrained by higher premiums required on its long-term debt resulting from deterioration in investor confidence in the long-term outlook on the economy.

Portfolio diversification is also aided by the creation of derivative instruments. This as institutions with a longer investment horizon can warehouse Government securities and sell them at a shorter maturity (via repurchase agreements) to facilitate clients who cannot tie up their money for such long periods. Repurchase facilities (repos) also allow those clients, such as pensioners, who need a monthly or quarterly cheque for living expenses. For instance, the stock of Securities Sold Under Repurchase Agreement from \$1.79 billion as at end December 2001 to \$11.71 billion as at end

[26] The average tenors are determined using the simple average method.

December 2003 and evidences the improved access to domestic funds mobilized through this avenue[27].

The strategy of maintaining a 60:40 ratio between fixed and variable rate instruments (*Figure B*) has limited the flexibility of investors in diversifying portfolios. Despite the trend decline in interest rates, a relative mix of fixed and variable rate instruments is desired to mitigate against external shocks to which small open economies such as Jamaica are exposed. In addition, to the extent that institutions fund long-term assets using short-term liabilities, the liabilities side of the balance sheet is susceptible to temporary increases in short-term interest rates, which is exacerbated when financing costs are matched against revenues that are accruing at lower fixed interest rates. Table *E* indicates a significant increase in the weighted average coupon rate on GOJ fixed rate public issues from 16.84 per cent in 2002 to 29.24 per cent in 2003 following a deterioration in investor confidence during the first half of that year.

1.3 Market depth

The wider variety of instruments offered has encouraged participation from a wider cross-section of investors. Additionally, the increased availability of market information facilitated by disclosure guidelines has improved investor awareness. This has resulted in a general convergence in market rates, which augurs well for the definition of yields on Government securities. Improvements in the regulations governing secondary trading coupled with expansion in the offering of instruments has attracted external investors to the extent that the returns sufficiently outweigh the risk of investing in the domestic capital market.

Market depth has been improved through greater price discovery, which has been attributed to the elongation of the portfolio, the higher volume of Government instruments along with the frequency and number of fixed rate offers. The greater volume on debt instruments commensurate with a wider investor base has significantly improved the liquidity of Government debt thereby improving the relative balance between demand and supply. By providing a relatively risk-free asset, a Government bond establishes a reference for pricing private bond issues. Given that instruments are issued at various points on the yield curve, the GOJ offers render themselves the most suitable providers of a benchmark yield in the domestic capital market. It should be noted that the strategy

[27] The stock of Securities Sold Under Repurchase Agreement represents the cumulative total for institutions licensed under the Financial Institutions Act (FIAs) and includes Merchant Banks, Trust Companies and Securities Dealers.
Source: www.boj.org.jm

of increasing the ratio of fixed to variable rate instruments has served to reduce price distortions in the secondary market since variations in coupon payments on variable rate instruments inhibits the determination of a current market price on these bonds. Continued increases in the volume and number of transactions in the secondary market should provide the basis for a further standardization of the bonds on the market. Issues with the same maturity would then be fully fungible, and a further increase in the maturity of the securities would become feasible. Creating a number of benchmark bonds across the yield curve should then become the goal since as the Government increases the maturity of its bonds; it lowers the interest rate risk on its debt portfolio.

2. Monetary Policy Management

The implementation of the debt management strategy over the last seven years has had the effect of enhancing the effectiveness of a market-based monetary policy. The establishment of a coherent framework for debt management has enhanced the benefits of the auction system for selling Government debt and the maintenance of a floating exchange rate. However, adherence to this framework relies heavily on the best practice of fully funding the deficit by borrowing from the public at market interest rates, which is best achieved through the separation of debt management from monetary policy.

While debt management and the administration of monetary policy can be effectively separated, the impact of each on market variables is often indistinguishable from a 'cause and effect' viewpoint. The need to meet the Government's financing requirements imposes a constraint on the successful pursuit of appropriate monetary policies. This would not be possible unless the Government can successfully raise the required financing. In particular, once the budget deficit is fully funded by loans from the public, the government would not be required to borrow from the central bank, and thereby reduce the government's reliance on money creation for funding. Monetary policy can then concentrate on its central task, without being diverted by debt management issues.

The 1998/99 debt strategy has enhanced developments in the capital market including the increased liquidity of Government debt, the diversification of marketable instruments in the secondary market and an expansion in the investor-base. In addition, the strategy has had implications for monetary policy design and implementation. These implications were of three main types:

- Challenges arising from insufficient monetary-fiscal coordination
- Implications of the expansion in foreign currency debt on liquidity and reserve management

- Enhancements in the conduct of open market operations

2.1 Challenges Arising from Insufficient Monetary-Fiscal Coordination

Ali et al (2001) argue that a lack of monetary-fiscal coordination adversely affects the central bank's forecasting of liquidity impulses and weakens the Treasury's ability to define instruments that reflect current market conditions as well as the central bank's monetary policy stance. Essentially, in small open economies, monetary strategy may fail to achieve the desired objective in instances where the central bank is not fully aware of government actions. For this reason, Worrell (1999) argues that the institutional arrangements for achieving low inflation in small open economies must make provision for effective monetary-fiscal coordination. This is based on the fact that the conduct of monetary policy through open market operations ultimately affects the supply of funds available in the system for investment in Government securities. Where accurate and timely information on the magnitude of expected government payments and financing requirements is not readily available to the central bank, liquidity projections occur without the incorporation of all necessary information. Ali *et al* (2001) argue that a requirement of the liquidity management process should be the Treasury's obligatory provision of daily estimates of expected movements in government deposits to the central bank. This level of information sharing is necessary to ensure that debt management and monetary policy are consistent.

It has been noted that there are deficiencies in the sharing of information between state agencies in Jamaica. This is manifested in the unpredictability of changes in liquidity conditions arising from spontaneous actions by the Treasury, which inhibits the Central Bank's ability to compute reliable estimates of liquidity in the short-term. There have been increases in domestic liquidity resulting from unprogrammed use of Government deposits at the BOJ; on the other hand there has been unprogrammed absorption through premature funding of accounts at the BOJ. The Central Bank, without sufficient notice, would be called on to effect an involuntary expansion or contraction of money supply, which may impact negatively on the desired interest rate path.

Where there could have been stronger coordination between the debt managers and the central bank on the appropriate definition of the terms on instruments to be offered, subscriptions tend to differ from the amount required to meet the Government's financing need. If the Treasury does not sell sufficient debt to finance its deficit, there could be increased reliance on the Central Bank to offset the shortfall. Alternatively, when subscriptions exceed expectations, it results in accumulated cash balances at the Central Bank, which lend support albeit temporarily, to monetary policy initiatives. In both situations, the likely result is a flow of cash to or from the money market which was outside the control of, and sometimes inconsistent with the monetary policy stance of the Bank. In the Jamaican experience, a case in point, the Government's decision as a part of the debt strategy opted not to reissue US dollar indexed bonds in June 2004. To maintain the desired composition of their portfolios investors heightened their demand for foreign currency in that month, which contributed to the exchange rate depreciating by 0.46 per cent relative to 0.29 per cent in the previous month. The subsequent need for the Central Bank to augment foreign exchange supplies emerged as it sought to maintain the stability in the foreign exchange market, a critical underpinning of the articulated debt strategy.

2.2 Implications of the Expansion in Foreign Currency Debt on Liquidity and Reserve Management

Consistent with the objective of lowering domestic interest rates, the Government's debt strategy includes a greater reliance on foreign financing[28]. Since gaining access to the international capital market in 1997, at end-October 2004 Jamaica has issued US$2.57 billion in sovereign bonds. In keeping with its objective of maintaining order in foreign exchange market, the Bank of Jamaica purchased these inflows and the monetary effects of the accumulation in net international reserves (NIR) were sterilised. This resulted in increased open market operations to keep the monetary base in line with the programmed path[29] (*Figure F*), in pursuit of its inflation objective.

The increased frequency of US dollar denominated issues has initiated bouts of instability in the foreign exchange market, placing additional demand on Central Bank resources and in some instances has necessitated deviations from the programmed interest rate path. Strong and sustained domestic demand generally accompanying Eurobond issues is manifested in an increased rate of depreciation in the domestic currency. For example, efforts by investors to obtain (via the secondary market) access to Eurobond issues in the December 2001 and June 2002 quarters largely contributed to depreciation of 3.08 per cent and 1.86 per cent respectively, relative to 0.27 per cent and 0.45 per cent in the September 2001 and March 2002 quarters, respectively. In its ongoing effort to alleviate significant declines in the value of the domestic currency, the BOJ augmented the supply of foreign currency in the market.

[28] Ministry Paper No. 10, FY 1999/2000

[29] See Box 2: "Macroeconomic Implications of Cross-Border Capital Flows – Some Scenarios," in *Quarterly Monetary Policy Report*, April – June 2002, Vol. 3, No. 1, Bank of Jamaica, pp. 21-25.
Source: www.boj.org.jm

The strategy of amortizing foreign debt through further borrowing in the international capital market assumes the existence of favourable market conditions for Government sovereign issues when these funds are required. However, in light of the already significant currency exposure, refinancing and rollover risks as well as a deteriorating Total Debt/GDP ratio, access to the international capital market in a timely manner may not always be guaranteed. In that regard, foreign currency reserves at the Central Bank represent a contingent plan for foreign debt payment. Central Bank reserves therefore serves two critical purposes: firstly, serving as a supplementary pool of resources from which the Government can satisfy its foreign currency obligations and secondly, providing intermittent flows to the domestic financial market where necessary.

The Central Bank is therefore challenged to maintain an adequate level of reserves complemented by an informed NIR budgeting function that includes the tracking of expected foreign currency flows across Government accounts. Given the Government's stated strategy of borrowing in the international capital market only for amortization purposes, the foreign currency required to finance interest costs on the foreign denominated component of the debt represents a likely demand to be met from Central Bank resources. Where there is limited general availability of foreign currency, in the event that the BOJ does not fill the demand, the interest rate channel may be relied on to restore stability in the foreign exchange market possibly diverting monetary policy from its programmed objectives.

2.3 Enhancements in the Conduct of Open Market Operations

In recognition of the benefits of having a developed financial market including access to a wider investor-base and possible reduced debt-servicing costs in the long run, the Government has sought to improve the secondary market for Government debt. From the monetary policy perspective, a well-developed financial market will result in more effective transmission of policy. Additionally, the increased liquidity and wider trading of Government securities augurs well for the conduct of open market operations as with relative ease the Central Bank can trade its holdings of Government securities consistent with its liquidity management objective.

Section V: Recommendations

In light of the Government's objective of reducing the debt to sustainable levels, recommendations are presented to achieve that objective and enhance the debt management process overall.

Improving the Risk Management Framework

A key responsibility of the debt managers is to **define risk tolerance for a country** taking into account the size of the debt stock and the Government's vulnerability to economic and financial shocks. Once the level of tolerance has been identified, the Government should **set strategic benchmarks** and **stringent limits on debt issuance** should be implemented and enforced to mitigate exposure to risk. It should be noted that **fiscal discipline** should support these debt management initiatives. Establishing a benchmark is important in debt management as it identifies the objectives of the policy maker over a specified time period and it is a yard stick by which the performance of debt managers can be evaluated. Consistent with the World Bank and IMF proposals, it is recommended that strategic benchmarks include identifying a numerical target for key portfolio risk indicators such as:

- Share of short term to long term debt
- Fixed versus floating ratio of the domestic debt
- Maturity Structure of foreign and domestic debt
- Currency composition of external debt

The World Bank and IMF researchers note that despite the challenges of establishing benchmarks, *"For those governments that frequently adjust their debt stock, strategic portfolio benchmarks can be powerful tools because they represent the portfolio structure that the Government would prefer to have, based on its preference with respect to cost and risk. As such, they can help guide sovereign debt managers in their portfolio and risk management decisions, for example, by requiring that debt management decisions move the actual portfolio closer to the strategic benchmark portfolio".*

In Jamaica's context, given that the Government is burdened with a large debt service cost component of expenditure, it is desirable that once the benchmarks have been established guidelines be imposed regarding the maximum deviation allowed from the benchmark. Further, to enhance transparency and accountability, Jamaica's debt managers should ensure that the strategic benchmarks are clear and consistent with objectives the overall fiscal objectives and are made publicly disclosed.

With regard to the domestic and foreign currency components of the debt, there are specific prudent debt strategies, which should be employed.

- Domestic Debt

With regard to the management of the domestic debt stock, it is imperative that the debt managers seek to **resume the extension of the maturity profile** of debt, to avoid heavy bunching of maturing debt, redemption repayments and refunding operations at particular periods. The longer the average life of the debt and the more balanced the distribution of maturities, the smaller the refunding needs in a particular period.

This could be achieved by targeting periods of high liquidity and introduce small tranches of longer maturities along with shorter ones to meet the needs of different market segments.

In a context of stability in interest rates and expectations of a decline it is suggested that the debt managers **revisit the fixed/variable mix** in the portfolio as it is currently more prudent to offer more variable rate instruments. This would help to reduce short-term costs.

Capital Market Development

- Promote the Derivatives Market

The development of **forward and futures markets in Government bonds** constitutes a strategy for enhancing liquidity in the secondary market as acknowledged by Mohanty (2001) as they promote risk management techniques. He posits that in a context where "*cash and futures markets are closely linked by the flow of information and expectation, the overall liquidity effects of futures markets in government bonds could be substantial*". He noted that several countries including Korea have already begun to see this impact as in that country the relaxation of restrictions on futures trading in government bonds has resulted in significant increases in futures contracts. Cassard (1997) also points out that where derivatives markets in the domestic currency are readily available, governments can immediately hedge their foreign currency risk and thus limit exposure to foreign exchange and interest rate movements.

In the case of Jamaica, this is a more medium to long-term goal as the derivatives market is fairly underdeveloped. Research conducted by Headlam (2003) has shown that the forward market exists but this financial product is only offered upon request.

In its quest to foster development in the domestic capital market, it is imperative that the Central Bank and the MOFP encourage a forward market for government securities in the medium to long-term by indicating the benefits of such transactions to market makers and ensuring that the requisite operational guidelines and monitoring framework for such a market be developed and implemented. This must however be underpinned by stability in interest rates and general confidence in the economy.

The revision of the tax policy on financial investments in June 1999 had negative implications for market liquidity as it resulted in portfolio shifts to foreign currency assets from as early as March 1999 when the Jamaica dollar depreciated by 1.3 per cent. The Government and private sector interests had been in dialogue on the issue prior to the announcement and in that regard, the instability was also fuelled by fears of the introduction of a new tax package in April that year.[30] The possibility of a shift in holdings based on currency denomination due to taxation is supported by the CGFS, which indicated that if transaction taxes are set high enough, they may drive trading offshore to such an extent that the total revenues decline.

- Disclosure of Holding of a Security

In building more deep and liquid markets, it is further suggested that the **BOJ's holdings of each security be publicly disclosed** at the end of each auction. This would increase transparency and also liquidity as those buying securities for the purpose of trading and thus creating a market, would have more information about the amounts of securities available for trading purposes. This is also in keeping with the recommendation of the Financial Sector Assessment Programme (FSAP)[31].

[30] BOJ: The First 40 years

[31] Regarding the public availability of information on monetary policy, it states " Information on central bank's monetary operations, including aggregate amounts and terms of refinance or other facilities (subject to the maintenance of commercial confidentiality) should be publicly disclosed on a pre-announced schedule".

- Enhancements to e-Gate

In seeking to reduce fragmentation, the debt managers have indicated a desire to reopen issues at key maturities. However, the deterrent has been the unavailability of the required **enhancement to e-Gate**. For deep and liquid markets to be promoted, this needs to be implemented in the near-term.

Move Towards an Autonomous Debt Management Unit?

Having identified a separate debt management agency, the aim could be to consider ultimately **provide the Debt Management Unit with some level of autonomy** from the political sphere as proposed by Cassard et al (1997). Consideration could be given to this in a context where this would facilitate greater level of transparency and remove any basis for concern about political decision-making.

The literature also indicates that an autonomous debt agency can be charged with a well defined objective and organize it accordingly without being hampered by either the management structure or the pay scale of the of the public sector. With an autonomous Debt management Unit, a more flexible management and career path structure can be implemented and the **pay scale could be linked to that of the private sector**. In addition, incentives would be provided for lowering borrowing costs. One likely advantage here is that the retention of highly trained staff equipped with specialized risk management skills could enhance the achievement of the cost-minimization objectives.

Monetary-Fiscal Co-ordination

Here, it is suggested that the **dialogue between the BOJ and the MOFP** continue and the communication gaps identified be narrowed over the near-term as this will benefit the economy as a whole.

With regard to short comings related to the definition of the terms of instruments at specific periods, which have resulted in monetary levers (interest rate change or foreign exchange market intervention) responding to correct imbalances in the system, dialogue with the BOJ as well as the employment of proper risk management techniques, should reduce such occurrences.

Section VI: Conclusion

Since the implementation of the Medium Term Debt Management Strategy seven years ago it has not remained static but has evolved not just to take account of minimizing costs but to prudently assess risk, which is essential to the definition and achievement of any debt management objectives. The căpital market has also experienced greater depth and the monetary policy managers and the debt agency have sought to effectively co-ordinate their activities to achieve macro-economic stability.

Despite these positives, significant challenges remain as the public debt to GDP ratio remains high, largely influenced by the onerous domestic counterpart of the debt stock. To sustain a capacity to attract and retain highly qualified professionals, it is therefore recommended that the debt management unit be given some amount of autonomy. In addition, the strategic benchmarks outlined, would have to be adhered to as part of fulfilling this process.

The benefits from establishing these benchmarks would serve as useful performance targets and once published would greatly assist in transparency and predictability of GOJ debt operations. In this regard, the limitations of information sharing would be minimized. Of course, it cannot be overstated that within the proposed framework of autonomy and benchmarking, the appropriate structures for accountability is critical.

With regard to the depth of the capital market, one limitation was the lack of an empirical assessment of capital market development. It is envisioned that future work would involve the use of secondary market data to generate standard measurement parameters (liquidity and turnover ratios). This data may soon be more readily available since the BOJ is embarking on a project to collect data on secondary market trade and thus develop a yield curve. Nonetheless, the recommendations to enhance market depth include revision of taxation policies and the development of a sound derivates market. The latter would require further research to determine the role of the BOJ in facilitating this process.

In closing, it is evident that the implementation of a strategy has posed challenges, but the development of the domestic capital market has also been enhanced. With the continued implementation of various mechanisms to enhance market liquidity and closer co-ordination between the monetary and fiscal authorities going forward, the debt objectives will be more readily attained and overall macroeconomic benefits will be reaped in the medium to long-term.

Appendix*

Figure A.

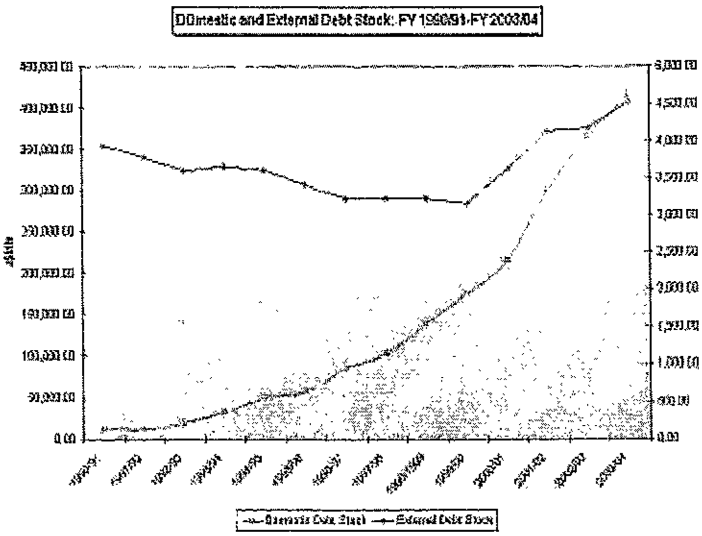


Figure B.

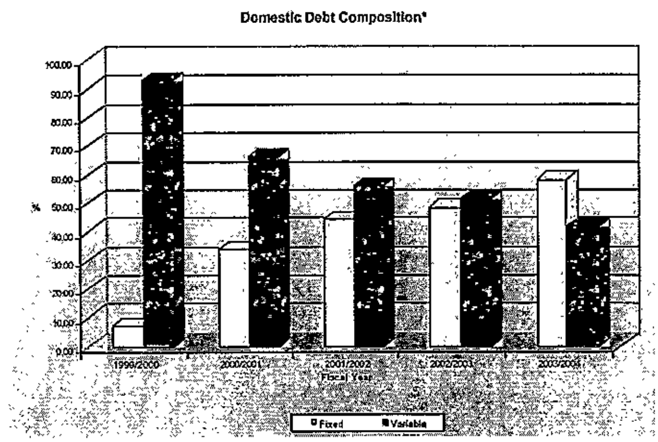


Figure C.

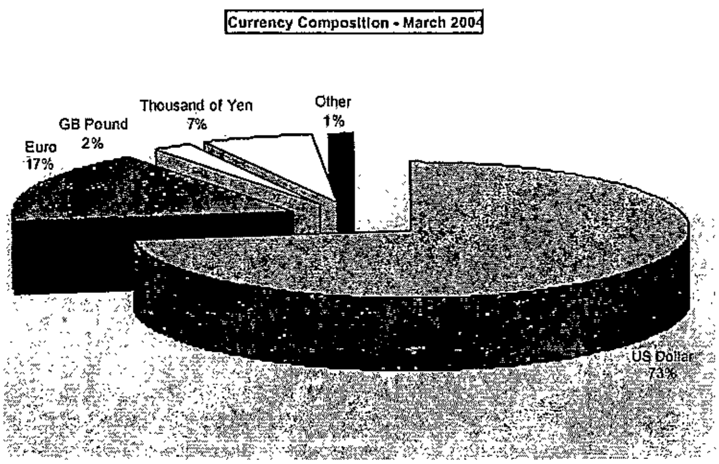
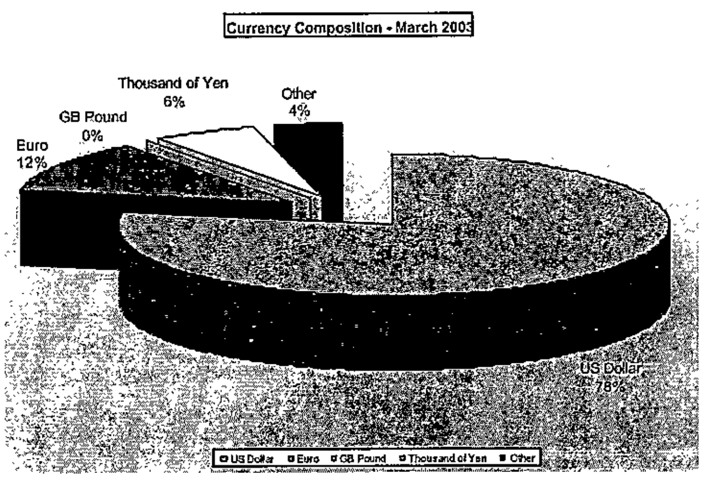


Figure D.



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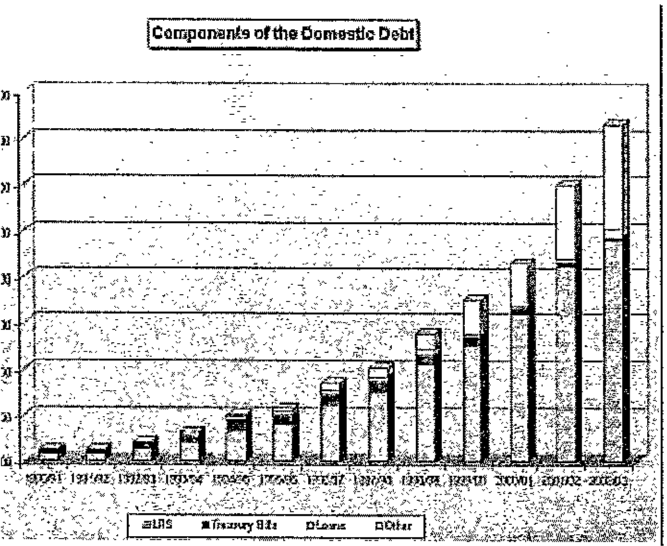


Figure E.

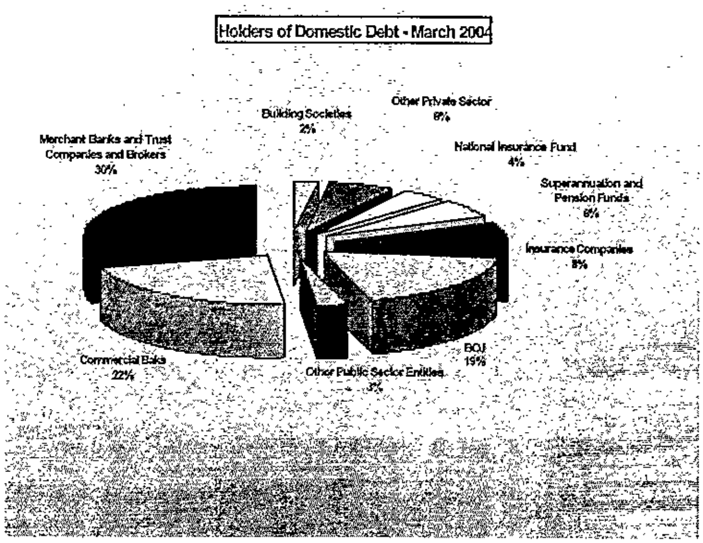


Figure F.

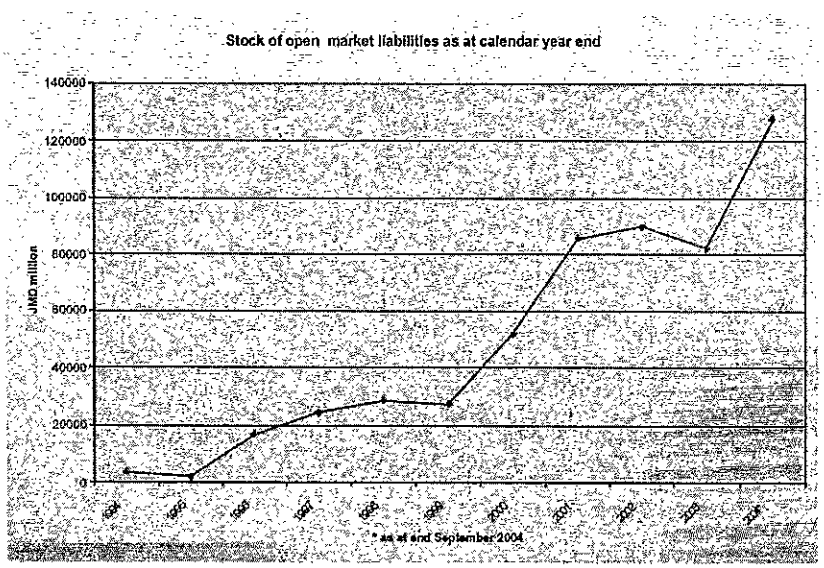


Table A.

GOVERNMENT OF JAMAICA EUROBONDS			
ISSUE YEAR	*BOND*	*MATURITY DATE*	*COUPON (%)*
28-Jun-97	*US$200mn*	*2-Jul-02*	*9.625*
5-Jun-98	*US$250mn*	*10-Jun-05*	*10.875*
24-Feb-00	*Eur200mn*	*24-Feb-03*	*10.000*
31-Aug-00	*US$225mn*	*1-Sep-07*	*12.750*
9-Feb-01	*Eur175mn*	*9-Aug-04*	*10.500*
10-May-01	*US$400mn*	*15-May-11*	*11.750*
19-Dec-01	*US$250mn*	*15-Jan-22*	*11.625*
20-Jun-02	*US$300MN*	*20-Jun-17*	*10.625*
14-Oct-03	*US$50MN**	*14-Oct-08*	*9.000*
11-Feb-04	*Euro 200MN*	*11-Feb-09*	*10.500*
5-Mar-04	*US$50MN**	*5-Sep-08*	*9.500*
30-Apr-04	*US$125MN*	*20-Jun-17*	*10.625*
27-Jul-04	*Euro 200MN*	*27-Jul-12*	*11.000*
** Issued in the Caribbean*			

Table B.

Domestic Debt Maturity Structure as at 31 July 2004 J$MN					
	Up to 1 year	>1-5 years	>5-10 years	10 years and over	Total
LRS	28,059.54	85,925.27	59,249.42	53,601.21	226,835.44
Treasury Bills	3,750.00	0.00	0.00	0.00	3,750.00
Land Bonds	0.00	0.00	0.00	546.51	546.51
Debentures	21,302.50	78,955.47	597.50	0.00	100,855.47
US$ Indexed Bonds	7,987.32	32,923.53	0.00	0.00	40,910.85
US$ Denominated Bonds	6,143.84	41,943.67	1,031.72	618.02	49,737.25
Loans	280.80	9,071.07	8,166.27	100.34	17,618.48
Other	0.00	0.00	0.00	0.15	0.15
Total	**67,524.00**	**248,819.01**	**69,044.91**	**54,866.23**	**440,254.15**
Percentage	**15.34**	**56.52**	**15.68**	**12.46**	

Table C.

External Debt Maturity Structure as at August 2004- J$MN					
	<1 year	1-5 years	>5-10 years	>10 years and over	Total
Bilateral	0.80	163.50	278.30	511.50	954.10
Mulitlateral	3.90	82.80	274.60	916.10	1,277.40
Commercial Bank	0.00	13.20	129.60	79.90	222.70
Other Commercial	46.60	34.9	131.7	34.5	247.60
Bonds	250.10	568.1	643.00	675.00	2,136.20
Total	301.40	862.46	1,457.15	2,216.99	4,838.00
Percentage	6.2	17.80	30.10	45.90	100.00

Table D.

DEBT AND DEBT SERVICE INDICATORS

US$MN

	1990*	1991*	1992*	1993*	1994*	1995*	1996*	1997*	1998*	1999*	2000*	2001**	2002*	2003
Total External Debt Service (accrued)	861.03	776.87	756.69	651.05	637.27	661.00	573.47	525.07	635.60	605.45	477.9	591.48	798.16	1,125.10
Total External Debt Service (actual)	663.54	620.57	637.88	542.12	536.04	592.56	579.47	525.07	635.60	605.45	477.20	591.48	798.16	1,125.10
Principal	371.24	364.67	393.42	340.55	349.55	400.39	332.28	344.57	430.32	418.05	308.16	319.65	506.91	812.76
Interest	292.30	255.90	245.46	201.57	186.49	192.17	207.19	170.50	135.67	187.40	169.04	271.73	291.25	312.34
Gross Exports of Goods & Services	2359.20	2970.80	2953.50	2538.50	5183.60	3555.40	4053.70	4120.60	4189.30	4,125.00	4,557.70	4,417.80	4,058.50	4,950.30
(PERCENTAGE)														
External Debt Service Ratio (accrued)	36.51	32.46	32.14	27.31	20.07	18.59	14.23	12.63	15.19	14.69	10.47	13.39	18.01	14.82
External Debt Service Ratio (actual)	28.50	27.38	27.10	22.64	17.02	16.67	14.23	12.69	15.39	14.65	10.47	13.39	18.01	16.82
External Interest/Exports of Goods & Services	12.55	11.97	10.53	8.42	5.92	5.41	4.42	4.35	4.76	4.50	3.71	6.15	6.57	4.91
External Debt Outstanding/Exports of Goods & Services	179.51	170.66	126.20	154.00	115.35	97.05	81.00	79.54	80.06	75.85	74.06	93.05	90.10	84.67
External Debt/GDP*	100.76	159.04	58.21	100.05	75.60	67.60	47.64	45.62	43.50	41.62	45.37	52.80	54.56	54.02
Domestic Debt/GDP	57.70	19.90	21.10	19.50	45.60	29.30	32.20	38.60	40.50	58.40	55.40	79.30	86.10	46.70
Total Debt/GDP	120.40	178.90	115.90	119.68	101.20	96.90	79.90	84.20	46.00	100.00	107.70	132.10	140.50	119.40

(*) Revised

Source: Debt Management Unit
Ministry of Finance

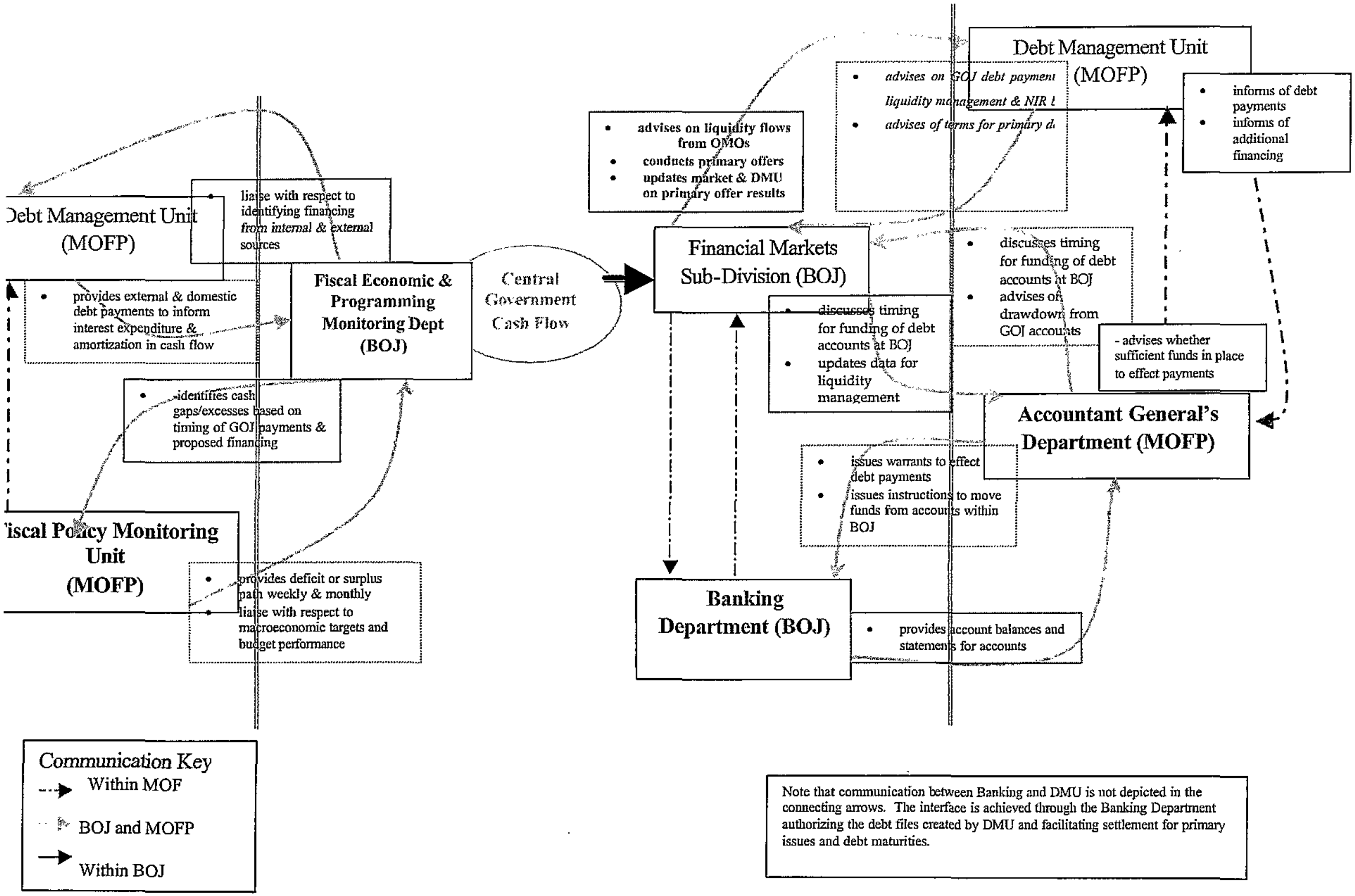
* *Source: Debt Management Unit, Ministry of Finance and Planning*

Table E.

	Average Tenors[1]			Weighted Average Coupon			Outstanding Nominal		
	Variable[2] (yrs)	Fixed[3] (yrs)	Indexed[4] (yrs)	Variable (%)	Fixed (%)	Indexed (%)	Variable (J$mn)	Fixed (J$mn)	Indexed (J$mn)
1998	1.89	2.00	n/a	27.23	26.50	n/a	n/a	n/a	n/a
1999	3.41	2.00	5.67	22.12	22.81	11.90	23,037.66	14,374.06	2,375.96
2000	n/a	4.67	3.33	n/a	19.94	11.16	n/a	5,950.00	613.27
2001	n/a	7.02	3.75	n/a	16.80	11.78	n/a	15,411.82	1,127.78
2002	n/a	8.54	4.78	n/a	16.84	10.91	n/a	40,927.58	10,904.83
2003	2.89	2.36	3.20	26.85	29.24	10.89	5,123.35	47,052.16	15,492.87
2004[5]	3.33	3.39	n/a	18.16	17.44	n/a	8,524.56	43,715.61	n/a
							36,685.57	167,431.22	30,514.71

[1] Indicates the simple average of tenors issued
[2] Instruments with variable coupon rates
[3] Instruments with fixed coupon rates - excluding indexed bonds
[4] Instruments indexed to the US dollar - all with fixed coupon rates
[5] as at end October 2004
[n/a] there were no issues or outstanding amounts remaining from the respective year

**Source: Bank of Jamaica*



Note that communication between Banking and DMU is not depicted in the connecting arrows. The interface is achieved through the Banking Department authorizing the debt files created by DMU and facilitating settlement for primary issues and debt maturities.

Glossary

Benchmark bond: Specific issue outstanding within each class of bond maturity. It is considered by the market to be the standard against which all other bonds issued in that class are evaluated.

Capital Market: Financial market where corporations and governments raise funds by selling stocks, bonds, and other kinds of investments, mostly to long term savers and investor.

Debt to GDP Ratio: A measure of the debt as a percentage of Jamaica's gross domestic product as a measure of the debt in relation to the economy and the country's capacity to repay debt.

Derivative: Financial contract whose value is determined from publicly traded securities, interest rates, currency exchange rates or market indexes. They are usually used to protect assets against changes in value.

Forward Market: A market where dealers agree to deliver currency, commodities or financial instruments at a fixed price at a specified future date.

Fungible Bond: A bond that has the same financial attributes as another. Fungible bonds are interchangeable.

Immobilization: Any instance where an individual does no receive a physical certificate upon purchase of a security or is required to physically deliver a certificate upon sale of a security.

Market Liquidity: A market is thought to be liquid based on particular characteristics, namely tightness, depth and resilience. Tightness is measured by the bid-ask spread and provides an idea of the costs incurred by market participants in conducting transactions. The more narrow the spread, the higher is the market liquidity. Depth measures the extent to which large transactions can be handled without causing significant changes in prices and resilience determines the speed with which price fluctuates dissipate.

Primary market: The market in which securities are initially sold or offered

Secondary Market: Market in which previously traded securities are issued, as distinguished from the new issue or primary market.

Transparency: Within the context of debt management, market transparency may be seen as a characteristic of a bond market whereby debt management strategies and operations are known and well understood by market participants.

Turnover ratio: Volume of securities traded as a percentage of total securities outstanding.

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[C1] What is this? I'm not so sure this is true! This might be a spin-off, but I'm sure this reflects more investor preference to retain investments in USD denom.