

**AN EXAMINATION OF THE  
GOVERNMENT OF  
JAMAICA DEBT RAISING STRATEGY:  
SOME PERSPECTIVES ON  
CAPITAL MARKET DEVELOPMENT  
AND MONETARY POLICY MANAGEMENT**

**DONNA HAMILTON-SMITH  
AND  
MERRICK PLUMMER**

*ABSTRACT*

*The Government of Jamaica introduced a Medium Term Debt Management Strategy at the start of Fiscal Year 1998/99 to minimise costs and to reduce its 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 or risk trade-off. This study recommends the implementation of debt management practices, which foster the creation of deeper and more liquid markets, 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 in the Central Bank.*

**Introduction**

In light of a sustained high debt burden over several years, the Government of Jamaica (GOJ) endeavoured 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 facilitating the development of the local capital market.

This study examines the extent to which the GOJ has achieved the outlined debt strategy objectives and attempts to determine specifically the impact on the development of a deeper and more liquid domestic capital market. This is particularly germane from the perspective of the Market Operations Analysis Department of the Bank of Jamaica, as these objectives ultimately have implications for monetary policy management and for enhancing monetary fiscal co-ordination going forward.

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

However, while the transfer of the debt management functions was advantageous in some respects, challenges emerged that could be partly resolved through greater levels of communication between the debt managers and the BOJ. Also, in response to debt management initiatives, particularly with regard to approaching the international capital market, the need for sterilisation 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 2 examines the macroeconomic context in which the strategy was defined and implemented. In Section 3, the centralisation of debt management functions within the Ministry of Finance and Planning (MOFP) is discussed. Section 4 describes the Medium-Term Debt Management Strategy and outlines 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 5, followed by recommendations and concluding comments in Sections 6 and 7, respectively.

## **2. The Macroeconomic Context**

In the early 1990s, Jamaica accelerated its structural reform programme, which included trade liberalisation and tariff reform, the removal of price subsidies and controls, and the liberalisation of exchange controls. The focus of the 1992 macroeconomic stabilisation programme 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 of the Jamaican dollar.

The BOJ succeeded in reducing inflation to single digits and maintaining relative stability in the money and foreign exchange markets; the rate of depreciation in the exchange rate slowed and interest rates trended downward. However, an attendant cost of stabilisation was significant growth in domestic debt between 1992 and 1998, which moved from US\$115.8 million at end March 1992 to US\$219.2 million at end March 1998. Concurrently, the fiscal deficit expanded from J\$3.2 billion at end March 1993 to J\$28.8 billion at end March 1998.

The growth in domestic debt 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 Government's efforts to eliminate these losses, local registered stocks (LRS) and treasury bills replaced maturing certificates of deposits (CDs) issued by the BOJ. Additionally, as a part of an International Monetary Fund (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 can also be attributed to the Government's taking over of debt obligations of public sector entities and the on-lending of financial support to the affected financial institutions following 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).<sup>1</sup> In this regard, the Government assumed J\$6.9 billion of parastatal debt between end March 1992 and the end of March 1998, with some of the benefiting agencies being Air Jamaica,<sup>2</sup> The 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, as the GOJ eventually absorbed 100 percent 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 stabilise and restructure the financial sector. Of the new domestic debt undertaken in FY 1996/97, J\$2.7 billion was for on-lending to these institutions. At the start of FY 2001/02, the GOJ assumed all liabilities resulting from the restructuring and rehabilitation of the financial sector.

Recognising 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 BOJ and centralised in the 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).

### **3. Centralisation of the Debt Management Functions in the MOFP**

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

---

1 Budget Memorandum FY 2000/01.

2 In FY 1997/98, J\$1.4 billion in new GOJ debt was issued to support this institution.

the debt management functions to be centralised within the MOFP and also enabled the BOJ to return to its core function of maintaining price stability.

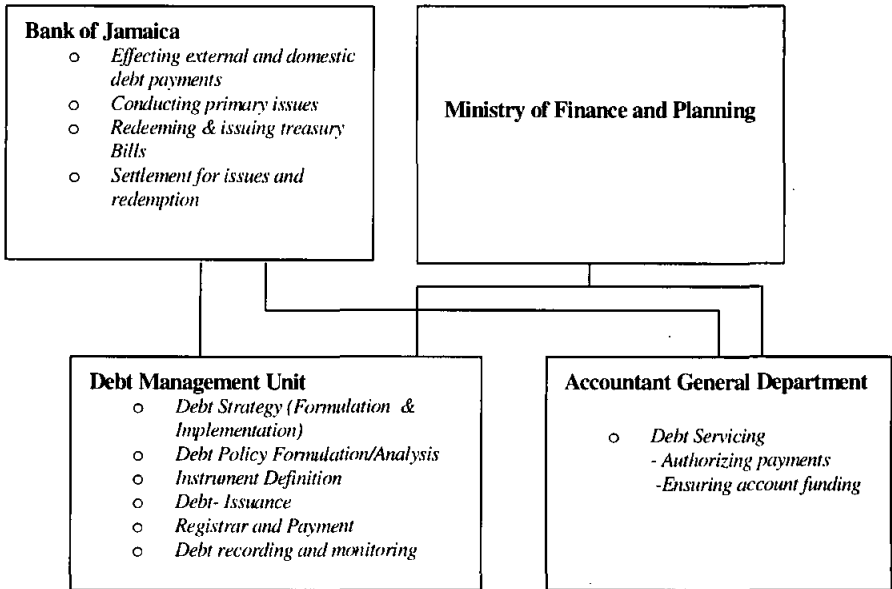
In Jamaica, the debt management functions such as the design, issuance, registration and repayment are spread across the BOJ and the MOFP. Within the MOFP, the DMU is now fully responsible for the core debt management functions, which include formulating debt policy and strategy, analyses and announcements 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, as agent for the GOJ, is responsible for effecting debt payments upon receipt of the requisite funding, conducting primary issues and facilitating settlement for issues and redemptions (see Figure 1).

Research conducted by the IMF and the World Bank reveals that countries, other than Jamaica, have also centralised their debt management functions. For example, Poland centralised its debt management activities in the Public Debt Department of the Ministry of Finance in 1998, while Portugal, Ireland, Sweden and the United Kingdom established separate debt management agencies in 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 since it avoids the potential conflicts of interest between monetary policy and debt management, which might otherwise compromise the independence of the central bank (Cassard and Folkerts-Landau, 1997).

While this preserves the integrity of the central bank, close coordination between both agencies is needed to ensure that the debt management policy is consistent with monetary policy. Against this background, 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 interventionist 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 it into the 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 which enhances the implementation of the debt strategy within the defined limits. Indeed, to minimise a country's exposure to market risk, Cassard and Folkerts-Landau (1997) argue that debt management requires an organisational structure independent from political influence. In that sense, this promotes the development of debt management policies that are transparent and efficient through the establishment of clearly defined objectives, performance criteria and sound risk management principles. A further observation by Cassard and Folkerts-Landau (1997) was that the ability of the debt

**Figure 1**  
**Allocation of Debt Management Functions**



management unit to employ adequately trained staff would be defined by the nature of the organisation's relationship with the 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 BOJ and the MOFP is maintained through continuous interface, with the BOJ performing agency functions in GOJ primary debt issues. With the GOJ being a significant borrower from the domestic market, mechanisms are in place to ensure that the BOJ has information required to assess government's 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 statement. Concurrently, data on payments regarding open market maturities are provided to the debt managers by the Financial Market Sub-Division (FMS) to assist with the debt-raising process of timing issues in the GOJ instruments to meet liquidity impulses, particularly in the absence of corresponding GOJ maturities. Where there is a financing gap, the DMU utilises the information received, *inter alia*, to determine the terms of its offers to coincide with either the GOJ or the open market operations (OMO) maturities. The BOJ is subsequently advised of the terms of the GOJ instruments, which allows the BOJ to conduct issues and advise on results. Settlement on primary issues and maturity payments regarding debt are conducted through the Banking Department of the BOJ. Where accounts are to be funded for domestic debt or external payments, the Accountant General's Department (AGD) informs the FMS and the Banking Department of the BOJ of the source and timing of such transfers into the BOJ.

Despite the clarity in co-ordination channels, there are shortcomings resulting from the removal of the debt management function from the BOJ. These are manifested primarily in the area of communication and policy co-ordination, which at times undermines the minimisation of debt costs or the effectiveness of Central Bank policy. More specifically, there have been instances where the market indicates a preference for a particular type of instrument and another is offered. This results in the amount purchased falling short of the financing requirement and the Government subsequently has to re-issue other instruments to meet its 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 with macroeconomic developments.

#### **4. Medium-Term Debt Management Strategy**

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 minimising costs to risk management. This is consistent with the established surveys of the debt management objectives, as detailed in the *World Bank and IMF (2002) Guidelines for Public Debt Management: Accompanying Document*. To achieve its objective, the following strategies are being employed: (i) maintaining a prudent debt structure; (ii) diversifying the debt portfolio; (iii) promoting and building a liquid and efficient market for government securities; (iv) using an auction mechanism for market issuance; (v) ensuring continued or wider access to both domestic and international markets; and (vi) increasing transparency and predictability of primary market debt issuance.

### ***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 (2002) 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 GOJ has recognised that it is important to embrace the management of interest rate, refinancing and exchange rate risks.

### ***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 expanding the share of fixed-rate debt in the portfolio. While there has been a downward trend in interest rates since the late 1990s, 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 raised interest rates to restore stability. Government's financing needs were met at interest costs exceeding 30 percent during the period of instability.

Mihaljek, Scatigna and Villar (2001), 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 emphasised the need for increasing

the share of fixed rate debt. He noted that fixed-rate securities are most common in Central Europe, Asia and the Middle East<sup>3</sup> and the smallest share of these securities is in Latin America.

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

*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 important 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 (Mihaljek, Scatigna and Villar, 2001).

In light of the above-mentioned factors, the GOJ 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. 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 the maturity profile of its Eurobonds, the GOJ has been successful in issuing such instruments for tenors up to 20 years (see Appendix, Table A). This has contributed to 45.9 percent 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 percent of instruments are scheduled to mature in more than 10 years (Appendix, Tables B and C). It should be noted that some measure of success had been achieved in lengthening 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.

### **Exchange Rate Risk**

The exposure of developing countries to currency risk can be broadly gauged by the amount of external public debt. Following on this argument, Jamaica's public debt portfolio is exposed to exchange rate risk, as the country's outstanding foreign

---

3 Israel is an exception.



currency-denominated debt represents 53.8 percent of the public debt.<sup>4</sup> 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 percent of the external debt stock, compared to US-denominated debt of 73 percent (Appendix, Figures C and D). In this regard, there is exposure to currency risk when the Jamaican dollar weakens relative to these currencies and the risk is exacerbated in a context where the GOJ has limited capacity in these currencies.

The country's external debt-to-GDP ratio declined steadily from 100 percent in FY 1990/91 to 45 percent by FY 1997/98. Coinciding with access to the international capital markets, the ratio increased to 54 percent at the end of FY 2002/03 (Appendix, Table D). In that regard, the country's external debt indicators exceed the objective outlined in the strategy to achieve a ratio of 30 percent, 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 Jamaican 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<sup>5</sup> in order to minimise the risk exposure of the debt portfolio. Since then, the stock of US-denominated debt has grown significantly, partly due to investors' desire to retain their assets in United States dollars. The strong demand for these instruments is understandable, given that they allow investments in Jamaican 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 Jamaican dollar instruments, while allowing the GOJ to service debt at a cheaper cost, provided that the rate of depreciation in the exchange rate remains below the interest differential. Alternatively, the GOJ's exposure to risk would increase should there be adverse movements 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 the Ministry paper of FY 2003/2004, "*the Government will restrict the use of US dollar-*

---

4 This includes external debt of US\$276.3 million and domestic US\$ denominated and linked of US\$96.8 million, relative to total debt of US\$693.9 million at end March 2004.

5 The target proportion of domestic currency denominated in or linked to US dollars is 10 percent.

currency-denominated debt represents 53.8 percent of the public debt.<sup>4</sup> 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 percent of the external debt stock, compared to US-denominated debt of 73 percent (Appendix, Figures C and D). In this regard, there is exposure to currency risk when the Jamaican dollar weakens relative to these currencies and the risk is exacerbated in a context where the GOJ has limited capacity in these currencies.

The country's external debt-to-GDP ratio declined steadily from 100 percent in FY 1990/91 to 45 percent by FY 1997/98. Coinciding with access to the international capital markets, the ratio increased to 54 percent at the end of FY 2002/03 (Appendix, Table D). In that regard, the country's external debt indicators exceed the objective outlined in the strategy to achieve a ratio of 30 percent, 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 Jamaican 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<sup>5</sup> in order to minimise the risk exposure of the debt portfolio. Since then, the stock of US-denominated debt has grown significantly, partly due to investors' desire to retain their assets in United States dollars. The strong demand for these instruments is understandable, given that they allow investments in Jamaican 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 Jamaican dollar instruments, while allowing the GOJ to service debt at a cheaper cost, provided that the rate of depreciation in the exchange rate remains below the interest differential. Alternatively, the GOJ's exposure to risk would increase should there be adverse movements 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 the Ministry paper of FY 2003/2004, *"the Government will restrict the use of US dollar-*

---

4 This includes external debt of US\$276.3 million and domestic US\$ denominated and linked of US\$96.8 million, relative to total debt of US\$693.9 million at end March 2004.

5 The target proportion of domestic currency denominated in or linked to US dollars is 10 percent.

denominated and US dollar-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 and Poors, 2003).

### ***Diversifying the Debt Portfolio***

An important objective of the GOJ's debt issuance programme has been to offer new instruments which are tailored to meet the needs of various market segments.

In an effort to meet these needs the GOJ 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,<sup>6</sup> the recommendation was to offer bonds indexed either to inflation<sup>7</sup> or the exchange rate.<sup>8</sup> The objective was to meet the needs of institutional and retail investors who were uncertain about future movements in currency and inflation and who preferred to maintain the value of their assets even at the expense of incremental earnings 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 toll road.<sup>9</sup>

Since the initial offer of indexed bonds, its share of the domestic debt stock increased from 6.9 percent in FY 2001/02 to 12.3 percent in FY 2003/04. As a result, US dollar-denominated issues in the domestic market increased from a share of the domestic debt stock of 8.5 percent by end FY 2001/02 to 10.9 percent by end FY 2003/04 (Appendix, Figure D).<sup>10</sup> However, as noted previously, the use of these instruments has been restricted in recent times.

With regard to the external debt, the GOJ has sought to broaden its investor base by geographic distribution and has successfully accomplished this since floating the first Eurobond in 1997. The policy has been to approach the international capital

---

6 Ministry Paper No.10.

7 The principal amount would be adjusted for changes in inflation.

8 Payments of principal and interest made in the Jamaican dollar equivalent.

9 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.

10 Indexed bonds are reflected in the 'other' category.

denominated and US dollar-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 and Poors, 2003).

### *Diversifying the Debt Portfolio*

An important objective of the GOJ's debt issuance programme has been to offer new instruments which are tailored to meet the needs of various market segments.

In an effort to meet these needs the GOJ 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,<sup>6</sup> the recommendation was to offer bonds indexed either to inflation<sup>7</sup> or the exchange rate.<sup>8</sup> The objective was to meet the needs of institutional and retail investors who were uncertain about future movements in currency and inflation and who preferred to maintain the value of their assets even at the expense of incremental earnings 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 toll road.<sup>9</sup>

Since the initial offer of indexed bonds, its share of the domestic debt stock increased from 6.9 percent in FY 2001/02 to 12.3 percent in FY2003/04. As a result, US dollar-denominated issues in the domestic market increased from a share of the domestic debt stock of 8.5 percent by end FY 2001/02 to 10.9 percent by end FY 2003/04 (Appendix, Figure D).<sup>10</sup> However, as noted previously, the use of these instruments has been restricted in recent times.

With regard to the external debt, the GOJ has sought to broaden its investor base by geographic distribution and has successfully accomplished this since floating the first Eurobond in 1997. The policy has been to approach the international capital

---

6 Ministry Paper No.10.

7 The principal amount would be adjusted for changes in inflation.

8 Payments of principal and interest made in the Jamaican dollar equivalent.

9 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.

10 Indexed bonds are reflected in the 'other' category.

currency-denominated debt represents 53.8 percent of the public debt.<sup>4</sup> 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 percent of the external debt stock, compared to US-denominated debt of 73 percent (Appendix, Figures C and D). In this regard, there is exposure to currency risk when the Jamaican dollar weakens relative to these currencies and the risk is exacerbated in a context where the GOJ has limited capacity in these currencies.

The country's external debt-to-GDP ratio declined steadily from 100 percent in FY 1990/91 to 45 percent by FY 1997/98. Coinciding with access to the international capital markets, the ratio increased to 54 percent at the end of FY 2002/03 (Appendix, Table D). In that regard, the country's external debt indicators exceed the objective outlined in the strategy to achieve a ratio of 30 percent, 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 Jamaican 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<sup>5</sup> in order to minimise the risk exposure of the debt portfolio. Since then, the stock of US-denominated debt has grown significantly, partly due to investors' desire to retain their assets in United States dollars. The strong demand for these instruments is understandable, given that they allow investments in Jamaican 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 Jamaican dollar instruments, while allowing the GOJ to service debt at a cheaper cost, provided that the rate of depreciation in the exchange rate remains below the interest differential. Alternatively, the GOJ's exposure to risk would increase should there be adverse movements 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 the Ministry paper of FY 2003/2004, "*the Government will restrict the use of US dollar-*

---

4 This includes external debt of US\$276.3 million and domestic US\$ denominated and linked of US\$96.8 million, relative to total debt of US\$693.9 million at end March 2004.

5 The target proportion of domestic currency denominated in or linked to US dollars is 10 percent.

market to the extent of gross amortisation.<sup>11</sup> 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 rose during FY 2001/02, as the GOJ filed a Schedule 'B' Registration Statement with the United States Securities and Exchange Commission for US dollar bonds to be issued in the international capital markets, giving the island greater access to the US market (see IMF and World Bank, 2002).

While seeking to broaden its investor base, the debt managers need to be cognizant of the fact that efforts to boost liquidity in the 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; Inoue, 1999). 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 government agencies and/or the central bank of marketable securities. He suggests that where an institution's 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.

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 percent of domestic debt, up from 18.0 percent at the end of the previous year and at end March 2003.<sup>12</sup> Other public sector entities controlled 6.9 percent of domestic debt at end March 2004, compared to 2.6 percent at end March 2003. Further, superannuation and pension funds and insurance companies accounted for 14.1 percent at end March 2004, somewhat above the 11.3 percent at the end of the previous fiscal year.

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

---

11 See 2003/04 Jamaica Budget Memorandum, Chapter 5 - Debt and Capital Market Developments.

12 Holdings by Government entities were minimal (below 10.0 percent at the end of both periods).

### ***Increasing the Transparency and Predictability of Primary Market Debt Issuance***

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.<sup>13</sup> The IMF and World Bank Guidelines relating to transparency and accountability address three main issues. These are:

- Disclosing the allocation of duties 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; and
- Ensuring that debt management activities are audited to promote accountability.

This is further supported by the Bank for International Settlement (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.

In Jamaica, significant efforts have been made to increase the transparency and predictability of debt management operations. 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](http://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 order to maintain a transparent relationship with the market, there has been an expansion in the coverage and medium through which information is circulated. In

---

13 Source: India's External Debt - A Status Report (2001).

January 2003, the GOJ began subscribing economic and financial data to the IMF's General Data Dissemination System (GDSS). The GDSS was established to help guide participating countries in providing timely, comprehensive, accessible and reliable economic, financial and socio-demographic data to the public.

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

### ***Increasing Reliance on the Use of Market-Determined Instruments for Debt Issuance***

Another key objective of the GOJ'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 realising lower borrowing costs. This was outlined by the Minister of Finance in the Debt Management Strategy at the start of FY 1999/2000.<sup>14</sup>

Auctions in LRS were introduced in October 1999. Jamaica is not unique in seeking to increase its reliance on the auction mechanism, as noted by Castellanos (1998). 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.

The Government intended to broaden the instruments offered via this medium in FY 2002/03. However, this has not yet been done and the main reason posited was the instability in the financial markets during that period.<sup>15</sup>

### ***Promoting and Building a Liquid and Efficient Market for Government Securities***

As a part of the strategy to develop capital markets, the GOJ committed to promoting a more liquid secondary market through building benchmark securities. This is expected to be achieved by re-opening a limited number of larger issues in key maturities of the 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<sup>16</sup>

---

14 Documented in Ministry Paper No. 10.

15 Ministry paper - Debt Management Strategy 2003/04.

16 These are Canada, Italy, the UK, Belgium, France, Germany, Switzerland, Sweden, Japan and the United States of America.



(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 (2002), sixteen 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 fixed income securities.<sup>17</sup> This would also be a welcomed feature to enhance market liquidity in Government securities. Preliminary work has already been undertaken to dematerialise 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 on Developing Government Bond Markets notes that in developing countries tax authorities usually skew the tax regime in order to take advantage of a relatively well-institutionalised financial sector from which revenue can be easily generated. However, it was highlighted that, on the other hand, those entrusted with the development 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 criticised 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. Contrary to this, the GOJ 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<sup>18</sup> on interest was increased from 15 percent in 1999 to 25 percent in 2000 on all financial instruments. However, tax-free status was given to long-term savings accounts, which are deposits where principal amounts are held for at least 5 years.

---

17 The Jamaica Central Securities Depository began operation in 1998, but at present only facilitates settlement and delivery in equities.

18 Prior to 1999, taxes were only withheld on savings deposits, (see IMF and World Bank 2002).

## **5. Impact on Capital Market Development and Monetary Policy Management**

### *Capital Market Development*

Consistent with the objectives of minimising risk in debt financing, the GOJ, in conjunction with the Central Bank, has sought to improve the efficiency of the financial sector in mobilising 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 have 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 GOJ debt.

### *Strengthening the Regulatory Framework and Improving the Financial Infrastructure*

Gray and Hoggarth (1996) opined 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 number 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 has introduced strict requirements for the dissemination of pricing information and other relevant financial information about the issuer. The GOJ's thrust has been enhanced by the implementation of minimum standards for financial reporting as well as proper marked

to market rules.<sup>19</sup> Consequently, as an interim measure the Central Bank in collaboration with major market players has 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.<sup>20</sup> These new financial laws and standards governing the sector improve transparency and bolster 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 minimise 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 JCSD, established in 1998, becomes fully operational, with the dematerialisation of instruments resulting in securities 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 offer a range of opportunities for funding

---

19 Financial institutions regulated by the BOJ and the FSC were required to be IAS 39 compliant by June 2002, an *International Accounting Standard concerning the recognition, measurement and disclosure requirements about financial instruments*. IAS 39 requires the recognition of all financial assets and liabilities on the balance sheet. 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: (i) originated loans and receivables; (ii) held to maturity investments; (iii) financial assets held for trading; and (iv) available-for-sale financial assets. See the website [www.iasplus.com](http://www.iasplus.com)

20 The 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. See : [www.firstglobalstockbrokers.com](http://www.firstglobalstockbrokers.com)

the Government and the private sector, with issues creating opportunities for other market participants. To the extent that the Government has successfully improved the structure of the secondary market and built credibility in the domestic and international capital markets, the resultant positive investor confidence in the economy may stimulate corporate bond market development. Provided that potential 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 the GOJ debt has had important implications for portfolio diversification and market depth in Jamaica.

### **Portfolio diversification**

In keeping with the debt strategy, the GOJ has expanded 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 minimising reinvestment risk.

Once a solid basis for a well-functioning short-term market had been laid, the GOJ increased efforts to lengthen its maturity profile by moving from short to long-term funding instruments with the average maturity of Government fixed rate public issues rising from 2 years in 1999 to 8.54 years in 2002 when two 30-year bonds were issued<sup>21</sup> (Appendix, Table E). As noted in Davis (2001), a frequent problem encountered with efforts to elongate entails unrealistic expectations regarding the pricing of longer-term bonds. Against that background, the GOJ'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 means institutions with a longer investment horizon can warehouse GOJ securities and sell them at a shorter maturity (via repurchase agreements). Repurchase facilities (repos) also incorporate those clients, such as pensioners, who need a monthly or quarterly cheque for living expenses. For instance, the stock of securities sold under

---

21 The average tenors are determined using the simple average method.

repurchase agreement rose from J\$1.79 billion as at end December 2001 to J\$11.7 billion as at end December 2003.<sup>22</sup>

The strategy of maintaining a 60:40 ratio between fixed and variable rate instruments (Appendix, 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 in the Appendix indicates a significant increase in the weighted average coupon rate on the GOJ fixed rate public issues from 16.8 percent in 2002 to 29.2 percent in 2003, following a deterioration in investor confidence during the first half of 2003.

### **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 the GOJ securities. Improvements in the regulations governing secondary trading coupled with expansion in the offering of instruments have 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 lengthening of the portfolio and the higher volume of the GOJ 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 the GOJ debt, thereby improving the relative balance between demand and supply. By providing a relatively risk-free asset, a GOJ bond establishes a reference for pricing private bond issues. Given that instruments are issued at various points on the yield curve, the GOJ offers are the most suitable providers of a benchmark yield in the domestic capital market. It should be noted that the strategy 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

---

22 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 (see: [www.boj.org.jm](http://www.boj.org.jm)).

on variable-rate instruments inhibit 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 standardisation of bonds. Issues with the same maturity would then be fully fungible, and a further expansion 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 raises the maturity of its bonds, it lowers the interest rate risk on its debt portfolio.

### *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 GOJ 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 not contribute to monetary expansion. 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 the GOJ 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 are of three main types:

- Challenges arising from insufficient monetary-fiscal coordination;
- Implications of the expansion in foreign currency debt on liquidity and reserve management; and
- Enhancements in the conduct of open market operations

### ***Challenges Arising from Insufficient Monetary-Fiscal Coordination***

Ali and Jayaraman (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 (2000) 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 and Jayaraman (2001) opine 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 among 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 the GOJ 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 GOJ's financing need. If the Treasury does not sell sufficient debt to finance its deficit, there could be increased reliance on the BOJ 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 was the GOJ's decision,

as a part of the debt strategy, 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 percent relative to 0.29 percent 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.

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

Consistent with the objective of lowering domestic interest rates, the GOJ's debt strategy includes a greater reliance on foreign financing.<sup>23</sup> Since gaining access to the international capital market in 1997, Jamaica has issued US\$2.57 billion in sovereign bonds by the end of October 2004. In keeping with its objective of maintaining order in the foreign exchange market, the BOJ 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<sup>24</sup> (Appendix, 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 the resources of the BOJ, 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 3.1 percent and 1.9 percent respectively, relative to 0.27 percent and 0.5 percent 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 has augmented the supply of foreign currency in the market.

The strategy of amortising 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

---

23 Ministry Paper No. 10, FY 1999/2000.

24 See the *Quarterly Monetary Policy Report*, (2002, pp. 21-25).



at the central bank represents a contingent plan for foreign debt payment. Central Bank reserves therefore serve two critical purposes: firstly, 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 the GOJ accounts. Given the GOJ's stated strategy of borrowing in the international capital market only for amortisation purposes, the foreign currency required to finance interest costs on the foreign denominated component of the debt represents a demand likely 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.

### *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 GOJ has sought to improve the secondary market for public 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 augur well for the conduct of open market operations, as the Central Bank can trade its holdings of Government securities, consistent with its liquidity management objective.

## **6. Recommendations**

In light of the Government's objective of reducing the debt to sustainable levels, some 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 to mitigate exposure to risk. Indeed, 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 is a yardstick by which the performance of debt managers can be evaluated.

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 are imposed regarding the maximum deviation allowed from the benchmark. Furthermore, to enhance transparency and accountability, Jamaica's debt managers should ensure that the strategic benchmarks are clear and consistent with the overall fiscal objectives and are publicly disclosed.

### *Domestic Debt*

With regard to the management of the domestic debt stock, it is imperative that 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 introducing 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 or variable mix in the portfolio, as it is currently more prudent to offer more variable rate instruments. This helps 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 these markets promote risk management techniques. Mohanty (2001) notes that several countries including Korea have already begun to see this impact as they relaxed restrictions on futures trading in government bonds, resulting 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 is developed and implemented. This must, however, be underpinned by stability in interest rates and general confidence in the economy.

### ***Re-examine the Tax Policy on Financial Instruments***

It is imperative that the Government seek to reduce or gradually eliminate withholding tax on financial instruments and thus improve market liquidity. In June 1999, the revision of the tax policy on financial investments had negative implications for market liquidity, as it resulted in portfolio shifts to foreign currency assets from as early as March 1999 when the Jamaican dollar depreciated by 1.3 percent. 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 (BOJ, 2004).

With globalisation, increased sophistication and access to other financial markets, it is therefore imperative that the Government seriously examine this recommendation. It is not expected, however, that this will be implemented immediately, given the Government's current thrust to balance the budget. Nevertheless, a cost benefit analysis needs to be effected to determine the feasibility of the elimination of this tax and the likely impact on Government revenue and capital market development. In the interim, improvements could be made to enhance revenue collection and a 'culture' of tax compliance should be engendered.

### ***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 for the purpose of trading and thus help develop the market. This is also in keeping with the recommendation of the Financial Sector Assessment Programme.<sup>25</sup>

### ***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

---

25 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."

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 should be to ultimately provide the DMU with some level of autonomy from the political sphere as proposed by Cassard and Folkerts-Landau (1997). Consideration could be given to this in a context where a greater level of transparency and the removal of any basis for concern about political decision-making would be facilitated.

The literature also indicates that an autonomous debt agency can be charged with a well-defined objective and organised accordingly without being hampered by either the management structure or the pay scale of the public sector. With an autonomous DMU, 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 specialised risk management skills could enhance the achievement of the cost-minimisation objectives.

### *Monetary-Fiscal Policy Co-ordination*

With regard too this, it is suggested that the dialogue between the BOJ and the MOFP continue, with a view to narrowing the communication gaps identified over the near term.

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 changes 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.

## **7. Conclusion**

The Medium Term Debt Management Strategy has evolved since its introduction seven years ago, not just to minimise costs but also to prudently assess risk. The capital 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 macroeconomic stability.

Despite these positives, significant challenges remain as the public debt/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 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 the GOJ debt operations. In this regard, the limitations of information sharing would be minimised. Of course, it cannot be overstated that within the proposed framework of autonomy and benchmarking, the appropriate structures for accountability are 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 derivatives 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.

### **REFERENCES**

- Ali, F. A. and T.K. Jayaraman, 2001. "Monetary and Fiscal Co-ordination in Fiji" Economics Department, Reserve Bank of Fiji, May, Suva, Fiji.
- Bank of Canada. 1998. "Debt Management Enters New Era" Available at <http://www.fin.gc.ca/news98/98-034e.html>.
- Bank for International Settlements. 1999. "How Should we Design Deep and Liquid Markets? The Case of Government Securities". Basel, Switzerland.
- Bank of Jamaica. 2004. Bank of Jamaica: The First Forty Years (1961-2000). Bank of Jamaica, Kingston, Jamaica.

- Cassard, M. and D. Folkerts-Landau, 1997. "Risk Management of Sovereign Assets and Liabilities". *International Monetary Fund Working Paper*, WP/97/166, Washington D.C.
- Castellanos, J. 1998. *Developing Government Bond Markets*, World Bank, Washington D.C.
- Davis, K. 2001. "Capital Market Developments and Financial Restructuring." Centre of Financial Studies, University of Melbourne, March, Parkville, Australia.
- Gravelle, T. 1999. *Liquidity of the Government of Canada Securities Market: Stylised Facts and Market Microstructure Comparisons to the United States Treasury Market*. Bank of Canada.
- Gravelle, T. 1998. "Buying Bank Government Bonds: Mechanisms and Other Considerations." *Bank of Canada Working Paper* 98-9.
- Gray, S. and G. Hogarth, 1996. Introduction to Monetary Operation in Tony Latter (ed.), *Handbooks in Central Banking* No. 10, September, Centre for Central Banking Studies, Bank of England.
- Grey, S. 1996. "Management of Government Debt." Bank of England, Central Banking Studies.
- International Monetary Fund and World Bank. 2001. *Developing Government Bond Markets: A Handbook*, Washington D.C.
- International Monetary Fund and World Bank. 2001. *Guidelines for Public Debt Management*, Washington D.C.
- International Monetary Fund and World Bank. 2002. *Guidelines for Public Debt Management: Accompanying Document*. Washington D.C.
- Ionue, H. 1999. "The structure of Government Securities Markets in G10 Countries: Summary of Questionnaire Results." Report of a Study Group Established by the Committee on the Global Financial System.
- Headlam, A. 2003. "Forward Exchange Market in Jamaica: Implications for Central Bank Policy." *Bank of Jamaica Working Paper*.

- Lattie, C. and R. Stennett, 2002. "Macroeconomic Implications of Cross Border Capital Flows: Some Jamaican Scenarios." *Bank of Jamaica Working Paper*.
- Mohanty, M.S. 2001. "Improving Liquidity in Government Bond Markets: What can be done?" *BIS Papers No. 11*.
- Morais, C. 2002. "Jamaica's Public Debt: Dynamics and Sustainability". *Bank of Jamaica Working Paper*.
- Mihaljek, D., M. Scatigna and A. Villar, 2001. Recent Trends in Bond Markets. *BIS Papers No. 11*.
- Ministry of Finance and Planning – Debt Management Unit's Website, [www.mof.gov.jm](http://www.mof.gov.jm)
- Mishkin, F. S. 1997. "The Causes and Propagation of Financial Instability: Lessons for Policymakers." Paper presented at a symposium on Maintaining Financial Stability in a Global Economy, sponsored by Federal Reserve Bank of Kansas City, August, Jackson Hole, Wyoming.
- Bank of Jamaica, 2002. *Quarterly Monetary Policy Report*. Vol. 3, No. 1, 21-25.
- Standard and Poors. 2003. Research Summary – Jamaica (July).
- Worrell, D. 2000. "Monetary and Fiscal Coordination in Small Open Economies", *IMF Working Paper*, No. 56.

APPENDIX

Figure A

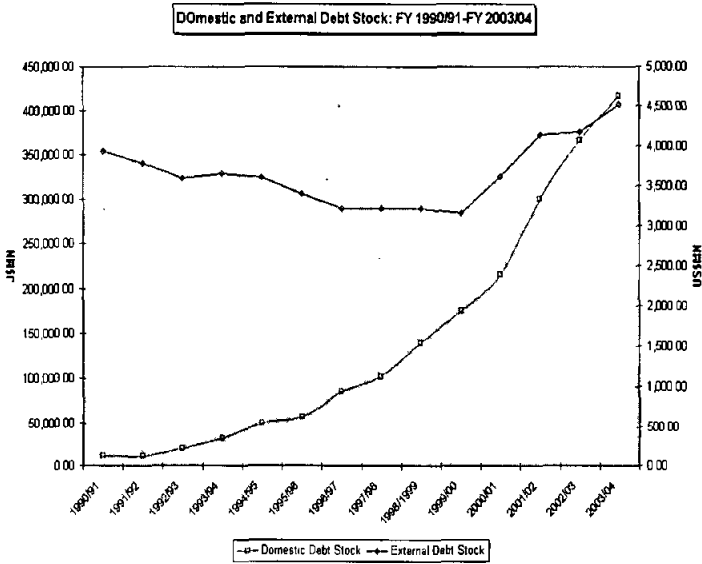


Figure B

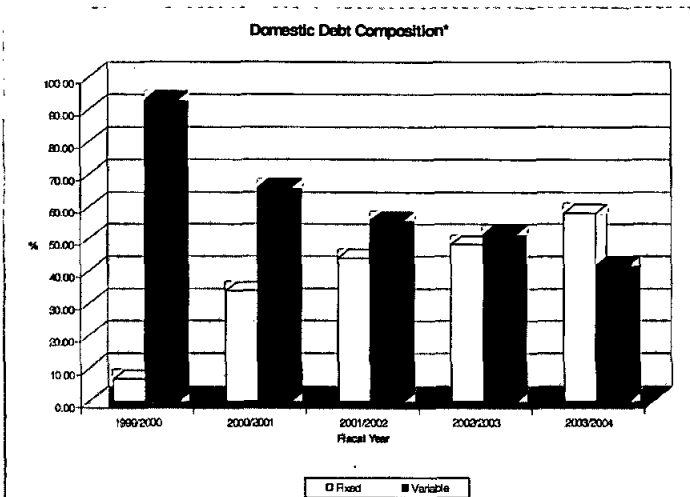




Figure C

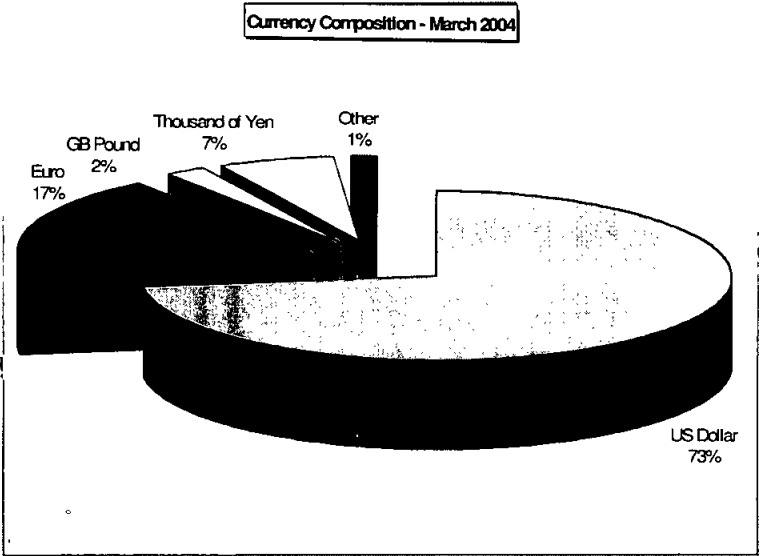


Figure D

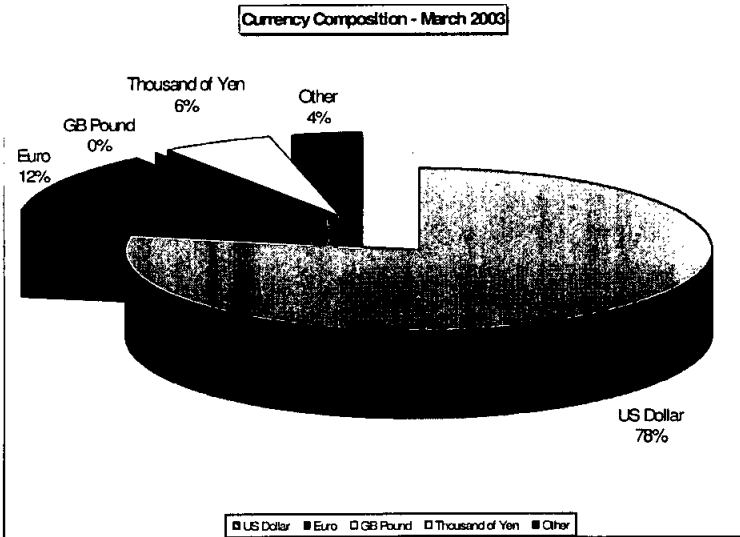


Figure E

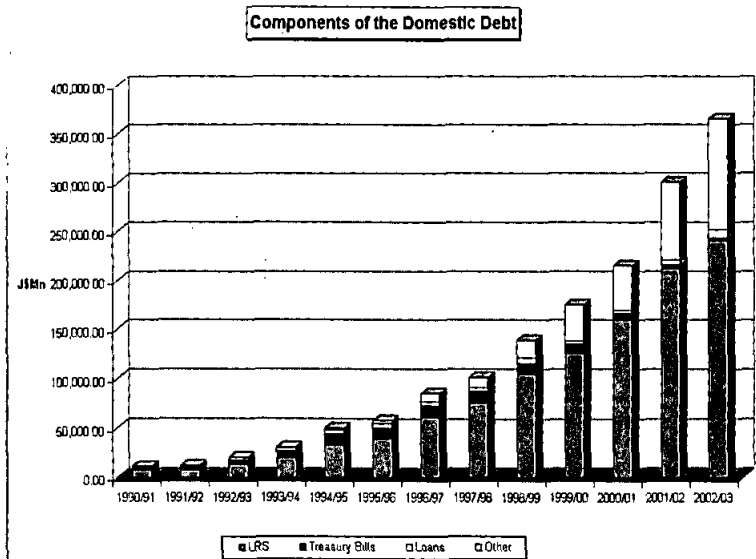


Figure F

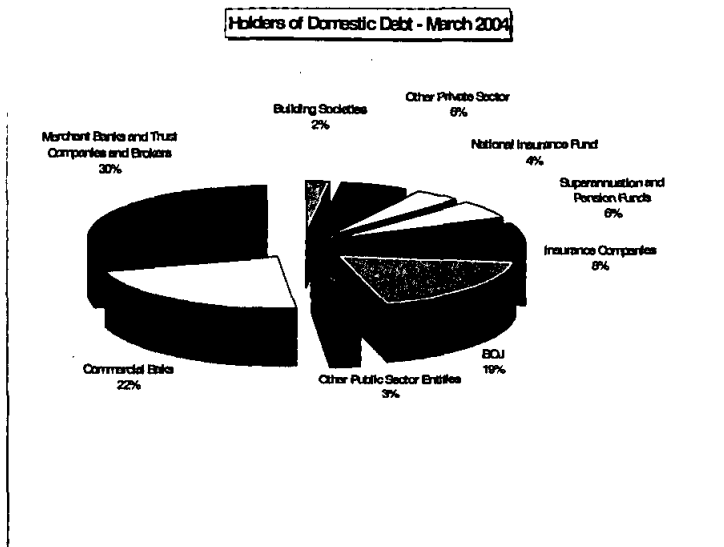
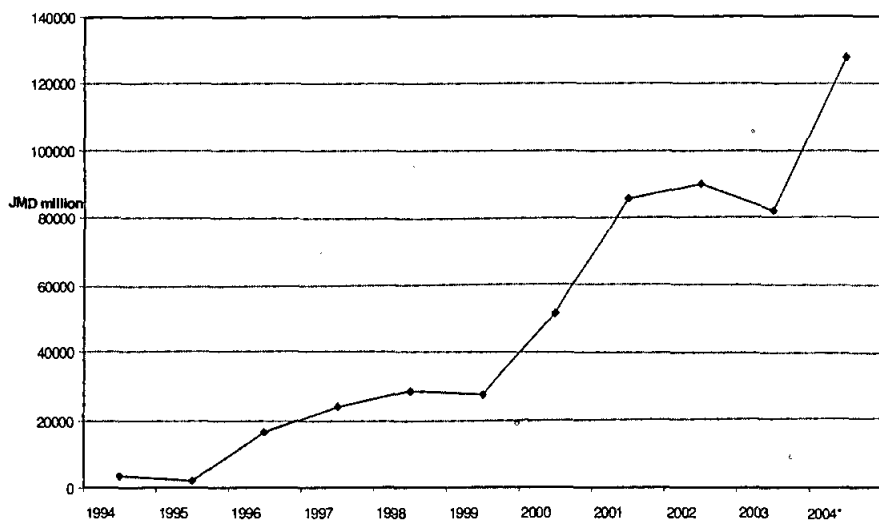


Figure G

## Stock of open market liabilities as at calendar year end



\* As at September 2004.

**Table A**  
**Government of Jamaica Eurobonds**

Issue Year	Bond (M)	Maturity Date	Coupon (%)
28 June 97	US\$200	2 Jul 02	9.625
5 June 98	US\$250	10 Jun 05	10.875
24 February 00	Euro 200	24 Feb 03	10.000
31 August 00	US\$225	1 Sep 07	12.750
9 February 01	Euro 175	9 Aug 04	10.500
10 May 01	US\$400	15 May 11	11.750
19 December 01	US\$250	15 Jan 22	11.625
20 Jun 02	US\$300	20 Jun 17	10.625
14 October 03	US\$50	14 Oct 08	9.000
11 February 04	Euro 200	11 Feb 09	10.500
4 March 04	US\$50*	5 Sep 08	9.500
30 April 04	US\$125	20 Jun 17	10.625
27 July 04	Euro 200	27 Jul 12	11.000

Note: \* Issue in the Caribbean.

**Table B**  
**Domestic Debt Maturity Structure as at 31 July 2004**  
**(JSM)**

	Up to 1 1 Year	>1-5 Years	>5-10 Years	10 Years and Over	Total
LRS	28,059.5	85,925.3	59,249.4	53,601.2	226,835.4
Treasury Bills	3,750.0	0.0	0.0	0.0	3,750.0
Land Bonds	0.0	0.0	0.0	546.5	546.5
Debentures	21,302.5	78,955.5	597.5	0.0	100,855.5
US\$ Indexed Bonds	7,987.3	32,923.5	0.0	0.0	40,910.9
US\$ Denominated Bonds	6,143.8	41,943.7	1,031.7	618.0	49,737.3
Loans	280.8	9,071.1	8,166.3	100.3	17,618.5
Other	0.0	0.0	0.0	0.2	0.2
Total	67,524.0	248,819.0	69,044.9	54,866.2	440,254.2
Percentage	15.3	56.5	15.7	12.5	

**Table C**  
**External Debt Maturity Structure as at August 2004**

	<1 Year	1-5 Years	>5-10 Years	>10 Years and Over	Total
Bilateral	0.8	163.5	278.3	511.5	954.1
Multilateral	3.9	82.8	274.6	916.1	1,277.4
Commercial bank	0.0	13.2	129.6	79.9	222.7
Other Commercial	46.6	34.9	131.7	34.5	247.6
Bonds	250.1	568.1	643.0	675.0	2,136.2
Total	301.4	862.5	1,457.2	2,217.0	4,838.0
Percentage	6.2	17.8	30.1	45.9	100.0

**Table D**  
**Debt and Debt Service Indicators**  
**US\$M**

	1990*	1991*	1992*	1993*	1994*	1995*	1996*
Total External Debt Service (accrued)	861.1	736.9	756.6	651.9	657.3	661.0	579.5
Total External Debt Service (actual)	663.5	620.6	637.9	542.1	536.0	592.6	579.5
Principal	371.2	364.7	393.4	340.6	349.6	400.4	392.3
Interest	292.3	255.9	244.5	201.6	186.5	192.2	187.2
Gross Exports of Goods & Services (PERCENTAGE)	2,328.3	2,270.2	2,353.5	2,394.3	3,149.6	3,555.4	4,054.7
External Debt Service Ratio (accrued)	37.0	32.5	32.2	27.2	20.9	18.6	14.3
External Debt Service Ratio (actual)	28.5	27.3	27.1	22.6	17.0	16.7	14.3
External Interest/Export of Goods & Services	12.6	11.2	10.4	8.42	5.9	5.41	4.6
External Debt Outstanding/Export of Goods & Services	178.4	170.7	156.3	154.0	116.0	97.1	81.0
External Debt/GDP*	100.8	159.0	94.2	100.1	75.6	67.6	47.6
Domestic Debt/GDP	27.7	19.2	21.2	19.5	25.6	29.3	32.2
Total Debt/GDP	128.4	178.2	115.3	119.6	101.2	96.9	79.8

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

**Notes:** + Revised.

**Table D**  
**Debt and Debt Service Indicators- Continued**  
**US\$M**

	1997*	1998*	1999*	2000*	2001*	2002*	2003*
Total External Debt Service (accrued)	523.1	635.6	603.5	477.2	591.4	798.2	1,125.1
Total External Debt Service (actual)	523.1	635.6	603.5	477.2	591.4	798.2	1,125.1
Principal	344.8	438.9	418.1	308.2	319.6	506.2	812.8
Interest	178.3	196.7	185.4	169.0	271.8	291.3	312.3
Gross Exports of Goods & Services (PERCENTAGE)	4,120.6	4,129.7	4,123.8	4,557.7	4,417.8	4,432.5	4,950.9
External Debt Service Ratio (accrued)	12.7	15.4	14.6	10.5	13.4	18.0	16.4
External Debt Service Ratio (actual)	12.7	15.4	14.6	10.5	13.4	18.0	16.4
External Interest/Export of Goods & Services	4.3	4.8	4.5	3.71	6.15	6.6	6.3
External Debt Outstanding/Export of Goods & Services	79.5	80.1	73.3	74.1	93.9	98.1	84.7
External Debt/GDP*	45.6	43.5	41.6	45.4	52.8	54.4	54.0
Domestic Debt/GDP	38.6	42.5	58.4	55.4	79.3	86.1	86.7
Total Debt/GDP	84.2	86.0	100.0	107.7	132.1	140.5	139.4

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

**Notes:** + Revised.