



Government of Jamaica

# MEDIUM-TERM DEBT MANAGEMENT STRATEGY



**FY2017/18 - FY2019/20**

**Ministry Paper No:**

**February 9, 2017**



## TABLE OF CONTENTS

<b>List of Abbreviations .....</b>	<b>iii</b>
<b>Foreword .....</b>	<b>v</b>
<b>Acknowledgements .....</b>	<b>vi</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>SECTION I: Introduction .....</b>	<b>2</b>
<b>SECTION II: Profile of the Debt Stock .....</b>	<b>4</b>
<b>SECTION III: Recent Debt Developments.....</b>	<b>5</b>
<b>SECTION IV: Cost and Risk Analysis.....</b>	<b>7</b>
4.1. Cost .....	8
4.1.1. Treasury Bill Yields.....	9
4.2. Refinancing Risk .....	9
4.3. Market Risk.....	10
4.3.1. Interest Rate Risk .....	10
4.3.2. Inflation Risk.....	12
4.3.3. Foreign Currency Risk .....	12
4.4. Contingent Liability Analysis .....	14
<b>SECTION V: Macroeconomic Overview.....</b>	<b>15</b>
5.1 Risk Factors to the Debt Strategy .....	16
<b>SECTION VI: Modelling of Medium-Term Debt Strategy FY2017/18-FY2019/20 .....</b>	<b>19</b>
6.1. Scenarios.....	19
6.2. Strategies .....	19
6.3. Output from the Toolkit.....	21
<b>SECTION VII: FY2017/18 Annual Borrowing Plan .....</b>	<b>25</b>
7.1. Issuance Strategy .....	26
7.2. Liquidity Buffers.....	27
7.3. Active Liability Management Operations .....	27
<b>SECTION VIII: Domestic Market Development Update .....</b>	<b>28</b>

<b>GLOSSARY .....</b>	<b>35</b>
-----------------------	-----------

## **BOXES**

<b>Box 1 – Liability Management Operations .....</b>	<b>6</b>
------------------------------------------------------	----------

## **TABLES**

<b>Table 1- Composition of Debt Stock .....</b>	<b>4</b>
<b>Table 2- Debt-to-GDP trajectory for period end-FY2011/12 to end-FY2016/17.....</b>	<b>5</b>
<b>Table 3- Medium-term projections of debt-to-GDP .....</b>	<b>5</b>
<b>Table 4- Debt Indicator results for end-March 2016 and end-December 2016 .....</b>	<b>7</b>
<b>Table 5- Currency Composition and Associated Cost of Total Debt.....</b>	<b>14</b>
<b>Table 6- Government Guaranteed Loans at end-December 2016 .....</b>	<b>14</b>
<b>Table 7- Macroeconomic Indicator ... ..</b>	<b>16</b>
<b>Table 8- Impact of Increase in Interest and Exchange Rates on Interest Payments..</b>	<b>17</b>
<b>Table 9- Cost and Risk indicators of the Selected Strategies.....</b>	<b>21</b>
<b>Table 10- Medium-Term (end-FY2019/20) Debt Indicator Targets.....</b>	<b>23</b>
<b>Table 11- Annual Borrowing Plan FY2017/18.....</b>	<b>25</b>
<b>Table 12- Proposed Issuance of GOJ Securities for FY2017/18.....</b>	<b>32</b>
<b>Table 13- Proposed Schedule for Treasury Bills Tenders .....</b>	<b>33</b>

## **FIGURES**

<b>Figure 1- Average Interest Rate of External Debt at end-December 2016 .....</b>	<b>8</b>
<b>Figure 2- Average Interest Rate of Domestic Debt at end-December 2016 .....</b>	<b>8</b>
<b>Figure 3- Treasury Bill Rates for the period April 1, 2016 – December 2016 .....</b>	<b>9</b>
<b>Figure 4- Maturity Profile of Outstanding debt at end-December 2016.....</b>	<b>10</b>
<b>Figure 5- Interest Rate Composition of Total Debt.....</b>	<b>11</b>
<b>Figure 6- Interest Rate Composition of the Outstanding Debt .....</b>	<b>11</b>
<b>Figure 7- Inflation Risk in Portfolio at end-December 2016 .....</b>	<b>12</b>
<b>Figure 8- Foreign Currency Movements for April – December 2016 .....</b>	<b>13</b>
<b>Figure 9- Foreign Currency Risk in the Portfolio at end-December 2016.....</b>	<b>13</b>
<b>Figure 10- Debt service-to-GDP .....</b>	<b>21</b>
<b>Figure 11- Interest Payment to GDP in FY2019/20 .....</b>	<b>22</b>
<b>Figure 12- Foreign Currency Debt-to-GDP in FY2019/20 .....</b>	<b>22</b>
<b>Figure 13- Foreign Currency debt-to-GDP – baseline scenario and shock scenario ..</b>	<b>23</b>
<b>Figure 14- Annual Borrowing Plan for FY2017/18.....</b>	<b>26</b>

## **LIST OF ABBREVIATIONS**

<b>ABP</b>	Annual Borrowing Plan
<b>ATM</b>	Average Time-to-Maturity
<b>ATR</b>	Average Time-to-Refixing
<b>BOJ</b>	Bank of Jamaica
<b>BPS</b>	Basis Points
<b>CPI</b>	Consumer Price Index
<b>DMB</b>	Debt Management Branch
<b>EFF</b>	Extended Fund Facility
<b>EGC</b>	Economic Growth Council
<b>FAA Act</b>	Financial Administration and Audit Act
<b>FOMC</b>	Federal Open Market Committee
<b>FR</b>	Fixed-Rate
<b>FRF</b>	Fiscal Responsibility Framework
<b>FY</b>	Fiscal/Financial Year
<b>FX</b>	Foreign Exchange
<b>GDP</b>	Gross Domestic Product
<b>GOJ</b>	Government of Jamaica
<b>ICM</b>	International Capital Market
<b>IDB</b>	Inter-American Development Bank
<b>IMF</b>	International Monetary Fund

<b>IRP</b>	Investor Relations Programme
<b>JMD</b>	Jamaica Dollar
<b>JSE</b>	Jamaica Stock Exchange
<b>LAC</b>	Latin America and Caribbean
<b>LIBOR</b>	London Inter-Bank Offered Rate
<b>LMO</b>	Liability Management Operations
<b>MEGJC</b>	Ministry of Economic Growth and Job Creation
<b>MTDS</b>	Medium-Term Debt Management Strategy
<b>NDX</b>	National Debt Exchange
<b>NIR</b>	Net International Reserves
<b>PBMA Act</b>	Public Bodies Management and Accountability Act
<b>PDMA</b>	Public Debt Management Act
<b>SBA</b>	Stand-by Arrangement
<b>SPS</b>	Specified Public Sector
<b>T-Bills</b>	Treasury Bills
<b>USD</b>	United States Dollar
<b>VR</b>	Variable-Rate
<b>WATBY</b>	Weighted Average Treasury Bill Yield

## FOREWORD

The Government of Jamaica (GOJ) is entering a new financial year, with relatively stable macroeconomic and fiscal indicators, having successfully completed thirteen (13) scheduled reviews under the International Monetary Fund's (IMF) Extended Fund Facility (EFF) arrangement. Recognizing the benefits of participating in an IMF programme, the GOJ negotiated a successor programme to the EFF, a precautionary Stand-By Arrangement (SBA) that was approved by the IMF Executive Board in November 2016.

This Medium-Term Debt Management Strategy FY2017/18 – FY2019/20, governed by the Public Debt Management Act, 2012 (**PDMA**), represents the Government's unwavering commitment to ensuring that borrowing requirements are satisfied at minimum costs with prudent levels of risks. The Strategy includes the Annual Borrowing Plan (ABP) designed to reduce costs and facilitate the return of the debt to sustainable levels. Additionally, the strategy will focus on the further development of the domestic market.

In keeping with the objective of inclusiveness and open dialogue with stakeholders, the GOJ welcomes your comments at: [invrelations@mof.gov.jm](mailto:invrelations@mof.gov.jm).



Audley Shaw, CD, MP  
Minister of Finance and the Public Service  
February 9, 2017



Everton McFarlane  
Financial Secretary (Assigned)  
February 9, 2017

## **ACKNOWLEDGEMENTS**

As FY2017/18 approaches, the Debt Management Branch (DMB) in the Economic Management Division continues to play an integral role in the achievement of the goals of the GOJ by developing and implementing critical strategies to facilitate the reduction of the public debt to a sustainable level.

The DMB remains steadfast in its efforts to be innovative and proactive in the strategies pursued to satisfy the financing needs of the Government at minimum costs and prudent levels of risk.

Sincere appreciation is extended to the DMB team for the valuable contribution to the production of the MTDS, as well as the dedication to the process, ensuring that the content and quality of the document meet international standards.

I would also like to express special thanks to Miss Darlene Morrison, Deputy Financial Secretary, Economic Management Division; Mrs. Michele Robinson, Debt Management Consultant; Mr. Diego Rivetti, IMF Consultant and the Public Debt Management Committee for their input, guidance and support, which contributed to the development of this publication.



Dian Black  
Principal Director  
Debt Management Branch  
February 9, 2017

## EXECUTIVE SUMMARY

Over the last three years, Jamaica made significant economic progress through the achievement of targets under the International Monetary Fund's (IMF) Extended Fund Facility (EFF) arrangement, as reflected in improvements in key macroeconomic indicators. Real Gross Domestic Product (GDP) recorded moderate growth of 1.7% for calendar year 2016. This expansion was supported by a rebounding agricultural industry led by the Agro-Parks initiative, which benefitted primarily from favourable weather conditions. Inflation and unemployment rates declined, while the current account balance and Net International Reserves (NIR) improved for the first two quarters of the fiscal year. The improved macroeconomic environment has resulted in improved investor confidence, as shown by the movement in the Business Consumer Index which stood at 142.0 in the last quarter of 2016, 19 points higher than the 123.0 recorded for the last quarter of 2015.

The Government of Jamaica (GOJ) was successful in executing its debt management strategy over the review period. A major achievement was the mitigation of refinancing risk through the execution of a tender and exchange liability management operation. The GOJ also made moderate progress in restoring an active domestic market, as evidenced by successful quarterly issuances during the review period.

The GOJ is cognizant of the high level of exposure of the portfolio to foreign currency risk. The adverse movements in exchange rates have increased the Jamaica dollar equivalent of foreign currency debt and are the main contributor to the increase in the debt-to-GDP at end-FY2016/17. With the repayment of the FY2017/18 maturities, it is expected that the ratio will return to a downward trajectory by end-March 2018.

The Medium-Term Debt Management Strategy (MTDS) is designed to satisfy the GOJ's borrowing needs at lowest costs, while minimizing risks in the portfolio. The MTDS FY2017/18 – FY2019/20 will continue to guide prudent debt management operations. The MTDS analytical toolkit was utilized to stress-test and assess various scenarios from which a strategy was chosen for the medium-term. The selected strategy informs the development of the Annual Borrowing Plan (ABP) for FY2017/18, which comprises a mix of financing options supported by a calendar of domestic market issuances to satisfy the Government's financing requirements. The MTDS also includes an update on the plans for the further development of the domestic debt market.



## **THE MEDIUM-TERM DEBT MANAGEMENT STRATEGY AND ITS GUIDELINES**

The Medium-Term Debt Management Strategy (MTDS) is the Government's policy document detailing a three-year plan of action to ensure financing needs are met at the lowest possible cost and a prudent degree of risk. The document, which is updated on an annual basis, is underpinned by the Fiscal Responsibility Framework (FRF) and legislated by the Public Debt Management Act (PDMA), 2012.

Contextual guidelines for the formulation of the MTDS are as follows:

- Minimizing cost;
- Mitigating foreign currency risk;
- Mitigating refinancing risk;
- Smoothing the maturity profile;
- Extending the maturity of securities;
- Promoting the development of the domestic debt market; and
- Developing a monitoring framework for public bodies' debt.

## **SECTION I: INTRODUCTION**

In FY 2016/17, the GOJ conducted its debt operations in line with the MTDS FY2016/17-FY2018/19 (MTDS FY2016/17) and achieved most of the targets. The MTDS FY2017/18-FY2019/20 (MTDS FY2017/18) is a continuation of the GOJ's FY2016/17 plans for financing its borrowing needs for the medium-term. It includes:

- A brief description of the debt portfolio and macroeconomic environment for FY2016/17;
- The analysis of alternative borrowing strategies (utilizing the IMF-World Bank MTDS Toolkit<sup>1</sup>) and the selection of a preferred strategy which guides the borrowing plan, consistent with the GOJ's debt management objectives<sup>2</sup>;
- The Annual Borrowing Plan (ABP) which outlines the appropriate mix of financing for FY2017/18; and
- Activities to support the further development of the domestic debt market.

The scope of the analysis covers the public debt—domestic and external—at points referencing both the GOJ and EFF arrangement definitions. Public debt as defined by GOJ includes Central Government, Bank of Jamaica (BOJ) and external guarantees, while the EFF definition consists of Central Government, Bank of Jamaica, net PetroCaribe Development Fund, external and domestic guarantees. The stock of debt used in the MTDS analytical toolkit includes Central Government debt and guarantees currently serviced by the GOJ.

On April 1, 2017, a new definition for Public Debt will become effective. The new definition identifies Public Debt as the consolidated debt of the Specified Public Sector (SPS)<sup>3</sup> net of any cross-holdings, except that of the Bank of Jamaica (BOJ). The Specified Public Sector (SPS) consists of the Public Sector, excluding any public body certified by the Auditor

<sup>1</sup> Four alternative strategies are developed and subjected to scenario modelling and stress testing. The strategies are assessed on the basis of the cost /risk tradeoffs of the resulting portfolios.

<sup>2</sup> The strategy also provides the target bands for the main risk indicators— foreign currency, interest rate and refinancing, —in which the Government intends to guide the funding and the structure of the debt. The target bands provide the GOJ with the flexibility required to respond to volatility in the financial markets.

<sup>3</sup> The public sector by definition comprises the central government and public (financial and non-financial) corporations.

General as primarily carrying out functions that are of a commercial nature. The MTDS projections for Public Debt for FY2017/18 onwards are based on the new definition.

The document is divided into eight sections. **Section I** comprises the Introduction. **Section II** provides a synopsis of the profile of the debt portfolio. **Section III** highlights recent debt developments. **Section IV** provides a cost and risk analysis of the portfolio, as well as risk mitigation strategies. **Section V** provides an update of the macroeconomic environment. **Section VI** discusses the design and selection of a strategy for the medium-term, and **Sections VII** and **VIII** outline the Annual Borrowing Plan and domestic market developments, respectively.

The MTDS FY2017/18 was prepared by the Debt Management Branch (DMB) of the Economic Management Division. The DMB is responsible for the management of the GOJ's debt operations, including formulation and implementation of the debt management strategy and annual borrowing plan as well as debt negotiation (excluding financing from official sources), issuance, recording, reporting, and repayments.

## SECTION II: PROFILE OF THE DEBT STOCK

The stock of public debt (current GOJ definition) stood at \$2,150.0 billion at end-December 2016, representing an increase of \$81.3 billion, or 3.9% over the \$2,068.7 billion recorded at end-FY2015/16. It is expected to increase further by end-March 2017 to \$2,180.3 billion. At \$1,315.7 billion at end-December 2016, the external debt stock continued to be the larger portion of total outstanding debt, and accounted for 61.2%. Domestic debt of \$834.3 billion accounted for 38.8% of the total. The domestic and external portfolios grew by 2.3% and 5.0%, respectively. The increase in the domestic debt stock was mainly due to the issuance of new benchmark investment notes, while the increase in the external portfolio was due to the depreciation of the Jamaica dollar vis-à-vis the US dollar. Currency movements added \$3.4 billion and \$65.5 billion to the total domestic and external portfolios, respectively, and accounted for 84.8% of the overall increase in the total debt stock. Total new debt was \$37.3 billion, and of that amount \$26.6 billion represented inflows to the domestic portfolio.

See **Table 1** below for a further breakdown of the outstanding stock of debt as at end-FY2015/16 and end-December 2016.

**Table 1: Composition of Debt Stock (in billions of Jamaica dollars)**

	End-March 2016		End-December 2016		Change	
	J\$ Bn	% total debt	J\$ Bn	% total debt	J\$ Bn	%
<b>TOTAL DEBT*</b>	<b>2,068.7</b>	<b>100.0</b>	<b>2,150.0</b>	<b>100.0</b>	<b>81.3</b>	<b>3.9</b>
<b>TOTAL DOMESTIC DEBT</b>	<b>815.9</b>	<b>39.4</b>	<b>834.3</b>	<b>38.8</b>	<b>18.4</b>	<b>2.3</b>
Marketable securities	813.2	39.3	831.7	38.7	18.5	2.3
<i>Bonds</i>	809.2	39.1	826.8	38.5	17.6	2.2
<i>T-Bills</i>	4.0	0.2	4.9	0.2	0.9	22.5
Loans	2.7	0.1	2.6	0.1	(0.1)	(3.7)
<b>TOTAL EXTERNAL DEBT</b>	<b>1,252.8</b>	<b>60.6</b>	<b>1,315.7</b>	<b>61.2</b>	<b>62.9</b>	<b>5.0</b>
Marketable Securities	694.1	33.7	720.6	33.5	26.5	3.8
<i>Bonds</i>	694.1	33.7	720.6	33.5	26.5	3.8
Loans	558.7	26.9	595.1	27.7	36.5	6.5
<i>Bilateral</i>	91.7	4.4	90.3	4.2	(1.4)	(1.5)
<i>Multilateral</i>	430.9	20.9	475.7	22.1	44.8	10.4
<i>IMF</i>	80.8	3.9	96.5	4.5	15.7	19.4
<i>IDB</i>	191.8	9.3	217.4	10.1	25.6	13.3
<i>IBRD</i>	99.8	4.8	103.9	4.8	4.1	4.1
<i>Other</i>	58.5	2.9	57.9	2.7	(0.6)	(1.0)
<i>Private Creditors</i>	36.1	1.6	29.1	1.4	(7.0)	(19.4)

Source: Ministry of Finance and the Public Service

\*Debt as defined by the GOJ includes Central Government, Bank of Jamaica and external guaranteed debt

### SECTION III: RECENT DEBT DEVELOPMENTS

On November 11, 2016, the GOJ entered into a new precautionary Stand-By Arrangement (SBA) with the IMF. This coincided with the cancellation of the 4-year EFF arrangement, which had a final review quarter ending December 2016. Over the three and a half years of the EFF, there were significant improvements in debt-to-GDP, as growth in the real sector accelerated, in keeping with the growth agenda, providing a fillip to GDP performance. Concurrently, the Government was proactive in implementing various debt management strategies. As seen in **Table 2**, under the EFF definition, at end-FY2012/13, debt-to-GDP peaked at 145.3%, and is projected to be 122.5% at end-FY2016/17. However, as a result of the Government partially pre-financing debt payments due in FY2017/18 and depreciation of the Jamaica dollar vis-a-vis the US dollar, debt-to-GDP is projected to reflect a marginal increase of 2.3 percentage points over FY2015/16

**Table 2: Debt-to-GDP trajectory for period end-FY2011/12 to end-FY2016/17**

	2011/12	2012/13	2013/14	2014/15	2015/16	Proj. 2016/17
Debt/GDP*	132.0%	135.6%	133.1%	129.9%	122.3%	124.1%
Debt/GDP**	140.3%	145.3%	140.5%	136.6%	120.2%	122.5%
External debt/GDP	59.5%	60.2%	63.0%	62.8%	74.1%	75.6%
Domestic debt/GDP	72.5%	75.4%	70.1%	67.1%	48.3%	48.5%
Interest/GDP	9.6%	9.5%	7.5%	7.9%	7.4%	7.9%

Source: Ministry of Finance and the Public Service

\*GOJ-defined total debt includes Central Government, Bank of Jamaica and external guaranteed debt

\*\*EFF-defined total debt includes Central Government, Bank of Jamaica, net PetroCaribe, and external and domestic guaranteed debt

**Table 3** below provides projections based on the new Public Debt<sup>4</sup> definition<sup>5</sup>. These projections are in line with the debt-to-GDP target of 60.0% by end-FY2025/ 26.

**Table 3: Medium-term projections of debt-to-GDP**

	Proj. FY2016/17	Proj. FY2017/18	Proj. FY2018/19	Proj. FY2019/20
Debt /GDP	115.00%	108.60%	100.70%	89.50%

Source: Ministry of Finance and the Public Service

<sup>4</sup> Public Debt as the consolidated debt of the Specified Public Sector (SPS) net of any cross-holdings except those of the Bank of Jamaica. The Specified Public Sector consists of the Public Sector, excluding any public body certified by the Auditor General as primarily carrying out functions that are of a commercial nature.

<sup>5</sup> This is consistent with the *Public Sector Debt Statistics Guide*, which defines the public sector as the general government (which includes the central government), as well as public financial and non-financial corporations that do not perform commercial activities.



## Box 1: Liability Management Operations in the International Capital Market

### LIABILITY MANAGEMENT OPERATIONS CONDUCTED IN THE INTERNATIONAL CAPITAL MARKETS (ICM) DURING FY2016/17

The Government, in the MTDS FY2016/17 – FY2018/19, articulated its intention to execute “opportunistic” liability management operations (LMO) during FY2016/17. To this end, a series of buyback trades in an aggregate amount of US\$25,589,000.00 (nominal value) of near to maturity 2017 and 2019 global bonds were successfully arranged during the first three quarters.

In August 2016, an LMO effected through a tender and exchange and new issue transaction was also successfully executed. The objective of the transaction was to simultaneously mitigate refinancing risk, while reducing debt service costs and the debt stock.

The LMO comprised three facets – tender for cash or an exchange to the host bond in the long-term segment of the external yield curve or tender for new bonds. The average participation rate was an unprecedented 68.6% in the tender and exchange operation, representing US\$317.8 million (79.4%) of the US\$400.1 million and US\$467.4 million (62.8%) of the US\$744.2 million outstanding for Notes due 2017 and 2019, respectively. This extraordinary participation rate was significantly above the benchmark success rate of between 30.0%-40.0% for this type of LMO, attesting to the improved investor confidence and appetite for Jamaica’s debt within the emerging market segment of the ICM.

The re-opening of the 8.0% Amortizing Notes due 2039, at a yield of 6.75% and a price of 114.082, facilitated the switch of the tendered 10.625% Notes due 2017 and 8.0% Amortizing Notes due 2019 offered for exchange. Investors demonstrated overwhelming demand for Jamaica’s credit, as the cash order books for the re-opening of the Notes due 2039 were more than six times oversubscribed, totalling over US\$2,300.0 million in bids. In addition, the geographic distribution of Jamaica’s issuances has now widened the investor base to include non-traditional geographic locations throughout Asia and Europe. Some of these territories include Singapore, Lebanon, Israel, Russia and Finland. The heightened demand allowed Jamaica to tighten the pricing of the re-opening by 25 basis points (bps).

The net effect of the transaction was an aggregate increase of US\$743.2 million in the 8.0% Notes due 2039, which, along with the original US\$500.0 million outstanding, totalled US\$1,243.2 million for the 2039 Notes. Ancillary to this, a further trade was executed, which entailed the opportunistic buyback of US\$4.6 million (nominal value) of the 6.75% Amortizing Notes due 2028 and US\$450,000.00 (nominal value) of the 8.5% Amortizing Notes due 2021. The transaction was financed with the remaining proceeds from the Tender/Exchange transaction.

The transactions were successful in achieving the cost/risk objectives. Refinancing risk was mitigated and debt service costs were reduced for the medium-term, while the exchange of the near-to-maturity bonds into longer-term bonds resulted in an extension of the average-time-to-maturity of the debt portfolio. The effective funding ratio achieved, as a result of the favourable Tender/Exchange transaction prices of the bonds involved, resulted in a stock reduction of US\$42.0 million, alongside a one-year debt service cost reduction of US\$9.5 million. The combination of both transactions resulted in improved debt indicators through an overall stock reduction of US\$47.0 million, which facilitated an immediate 0.4% reduction in debt-to-GDP.

Notably, the post-transaction trading performance of the host bond was strong prior to the United States elections. Subsequently, the robust trading levels of the bond were reversed, reflecting the general bearish mode of the bond market.

Prior to the launch of the transaction on August 9, 2016, the average price of the Notes due 2039 remained flat at just over 115.00; however, following the renewed post-transaction interest in the long-end of the Jamaica yield curve, there was an increase of 2.1% in the average price of the Notes to 117.35 as at November 8, 2016. Subsequently, the prices declined but have been slowly gaining momentum.

## SECTION IV: COST AND RISK ANALYSIS

The main objective of the MTDS is to create a portfolio which will best minimize costs and mitigate risks in the medium-term. Targets were established for the major risk factors inherent in the portfolio (foreign currency, interest rate, refinancing, and contingent liability risks) in the *MTDS FY2016/17-FY2018/19*. With minor adjustments to the initial Borrowing Plan, most of the established targets outlined were achieved. The results are shown in **Table 4**.

In particular, the strategy pursued allowed the Government to continue benefitting from low interest rates in the domestic market, as the interest cost associated with variable-rate domestic debt remained flat due to low T-Bill rates. New fixed-rate issuances also benefitted. While US LIBOR increased in the external markets, the external portfolio was cushioned, as most external loans were contracted on a fixed-rate interest basis. Refinancing risk was actively mitigated during the review period and is currently moderate. Given the significant proportion of the portfolio denominated in foreign currency, management of the foreign currency risk was difficult and the portfolio continued to increase in Jamaica dollar terms, due to depreciation of the Jamaica dollar vis-à-vis the US dollar.

**Table 4: Debt indicator results for end-March 2016 and end-December 2016, and targets for end-March 2017**

	OUTCOMES			TARGETS (End Mar-2017*)	
	End Mar-2016	End Dec-2016	Change	Min	Max
<b>Foreign Currency risk</b>					
Foreign currency debt/total debt	64.0	64.3	0.3	61.0	65.0
Foreign currency domestic debt/total domestic debt	8.6	8.1	-0.5	8.0	10.0
<b>Interest Rate Risk</b>					
<b>Total Debt**</b>					
Fixed-Rate	65.4	65.7	0.3	67.0	70.0
Variable-Rate	34.6	34.3	-0.3	30.0	33.0
<b>Domestic Debt</b>					
Fixed-Rate***	58.7	59.6	0.9	60.0	65.0
Inflation-linked debt	5.4	5.4	0.0	-	2.1
Variable-Rate	41.3	40.4	-0.9	35.0	40.0
<b>External Debt</b>					
Fixed-Rate	69.8	69.6	-0.2	70.0	72.0
Variable-Rate	30.2	30.4	0.2	28.0	30.0
<b>Refinancing Risk</b>					
Average Maturity (years)	9.9	10.3	0.4	≥9.0	-
% maturing in one year					
Total debt	2.3	4.2	1.9		≤10.0
Domestic debt	1.3	8.8	7.5	-	-
External debt	3.0	1.3	-1.7	-	-
<b>Contingent Loan Guarantee Risk</b>					
Guarantee loans (% of GDP)	10.4	9.9	-0.5	-	8.0
<b>Average Interest Cost</b>					
Average Interest rate (total)	6.1	6.1	0.0	-	-
Domestic	7.4	7.4	0.0	-	-
External	5.3	5.3	0.0	-	-

Source: Ministry of Finance and the Public Service

\* These targets were established in MTDS FY2016/17-FY2018/19

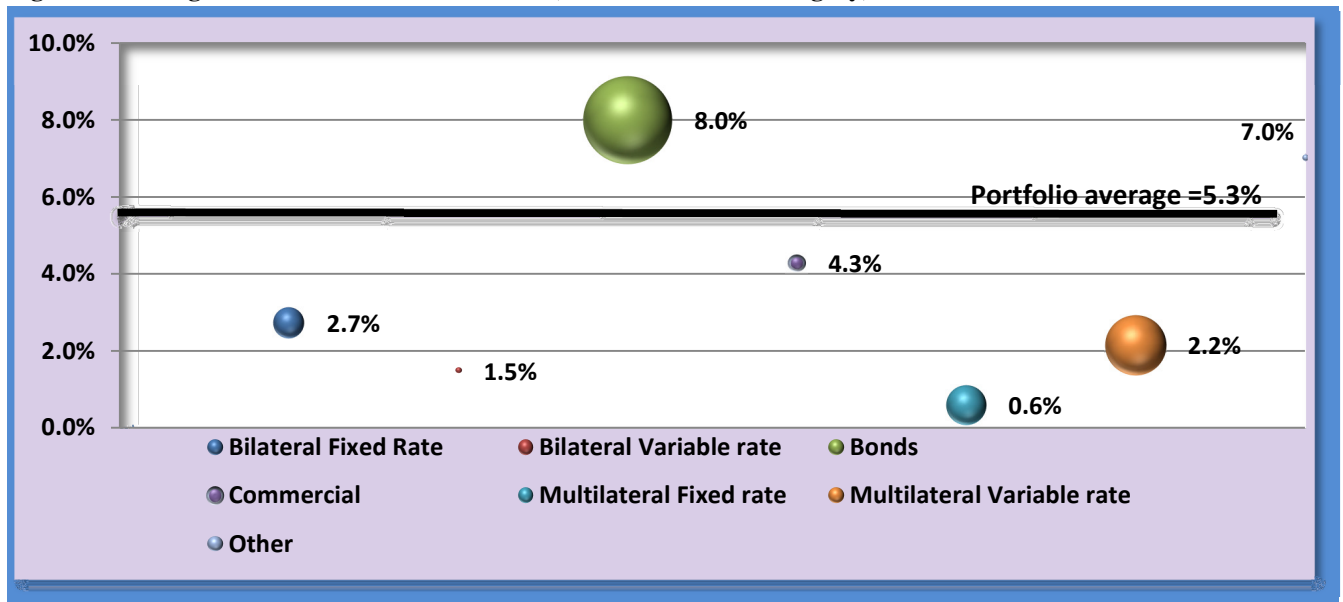
\*\* Total debt, as defined by the GOJ, includes Bank of Jamaica, Central Government and external guaranteed debt

\*\*\* Includes inflation-linked debt

## 4.1 COST

The average interest rate of the total outstanding debt remained unchanged at 6.1% at end-December 2016 when compared to end-March 2016. Similarly, the average interest rates of the external and domestic portfolios remained unchanged at 5.3% and 7.4%, respectively.

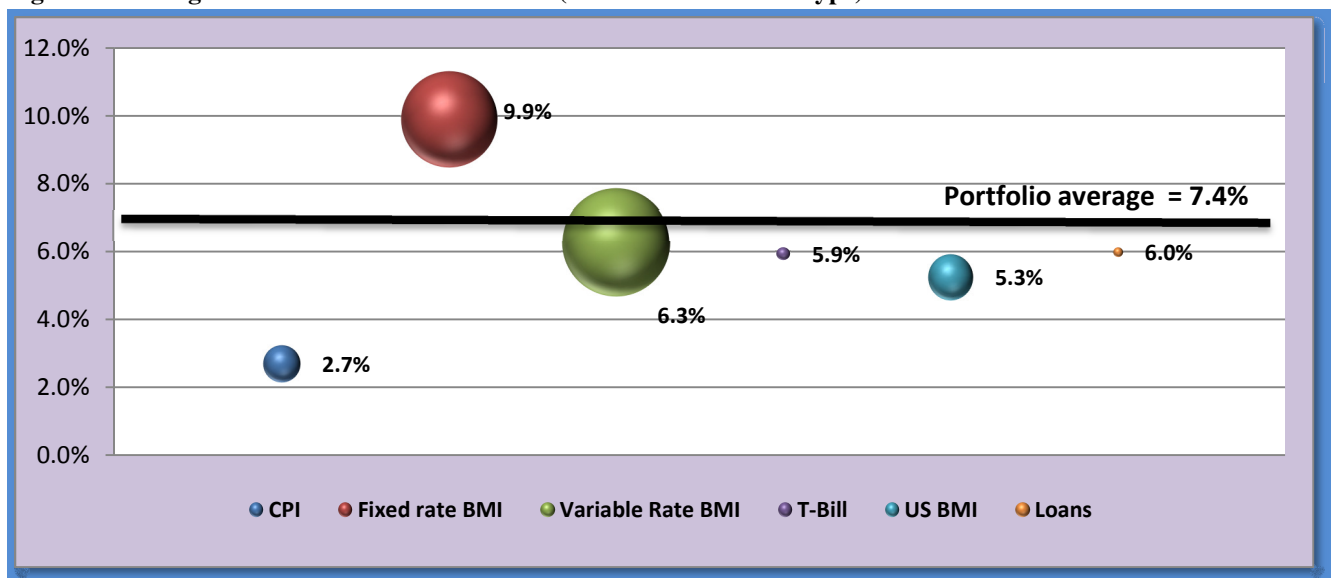
**Figure 1: Average interest rate of external debt (based on creditor category) at end-December 2016**



Source: Ministry of Finance and the Public Service

NB: The relative proportion of each category is represented by the size of the associated circle

**Figure 2: Average interest rate of domestic debt (based on instrument type) at end-December 2016**



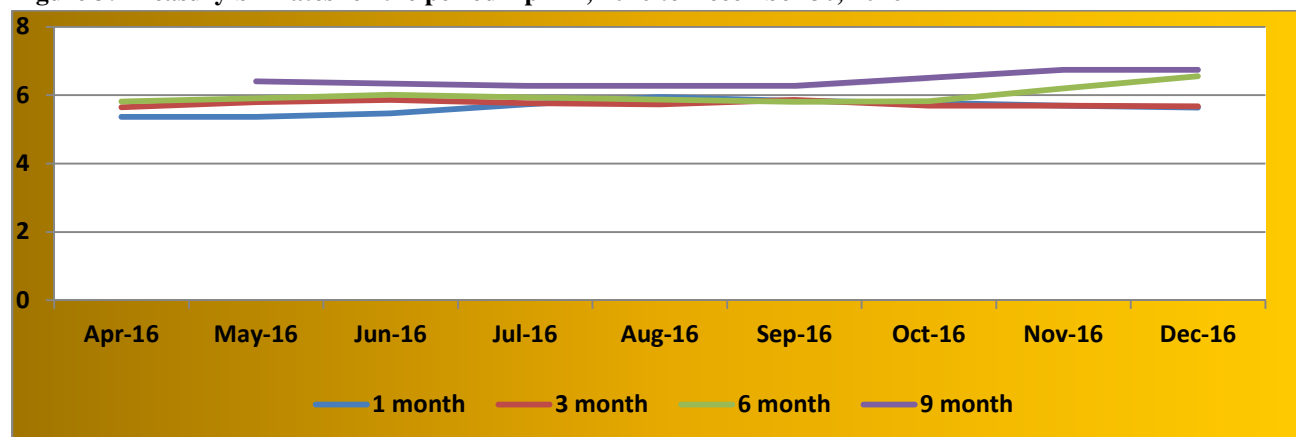
Source: Ministry of Finance and the Public Service

NB: The relative proportion of each category is represented by the size of the associated circle

### 4.1.1. Treasury Bill (T-Bill) Yields

The Weighted Average Treasury Bill Yield (WATBY) for the 1-month T-Bill trended up from 5.37 to 5.47 at the end of the first quarter of the fiscal year, and then remained relatively stable at 5.64 at end-December 2016. The WATBY for the 3-month T-Bill, which is used to reprice the domestic variable-rate debt, has remained flat for the review period, while the WATBY for the 6-month issues remained flat up to October 2016 and has since increased.

Figure 3: Treasury bill rates for the period April 1, 2016 to December 30, 2016



Source: Ministry of Finance and the Public Service

## 4.2 REFINANCING RISK

Refinancing risk is the probability that governments will experience difficulties rolling over maturities. The most common measure used to assess refinancing risk is the proportion of the debt that becomes due within one year, or the concentration of debt that falls due within a specified time period. High levels of maturities in any one period could result in increased costs. This results from unfavourable changes in interest rates on re-fixed debt, as well as bunching, which could cause fiscal stress due to the high levels of financing required in the short-term.

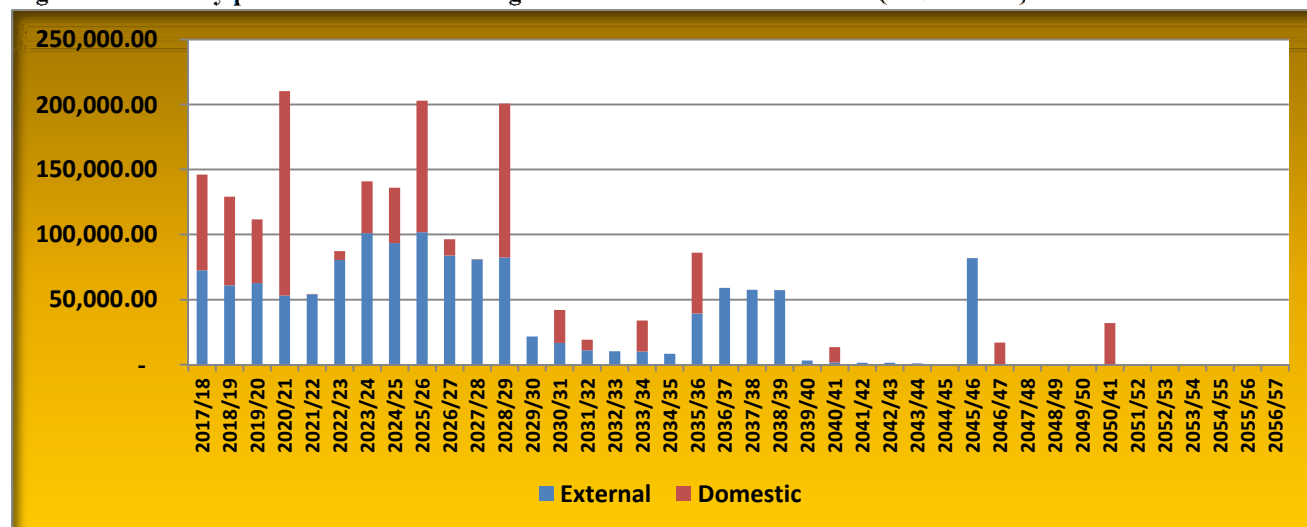
The maturity profile of the domestic portfolio extends over 31 years. Refinancing risk is low, with 8.8% (\$73.4 billion) scheduled to mature in one year or less. This amount includes \$68.5 billion in maturing benchmark investment notes. Refinancing risk is lower in the external portfolio. The maturity profile spans 39 years, and maturities becoming due in one year or less total \$17.5 billion or 1.3% of outstanding external debt. **Figure 4** shows the maturity profile of the public debt.

The opportunistic buyback of near-to-maturity domestic and external debt resulted in a reduction in the amount of debt that would become due in one year or less, thereby reducing refinancing risk. The successful execution of the Government's tender and exchange transaction in August 2016 was an endorsement of the refinancing risk mitigation strategy. A significant proportion of the global bonds



due in 2017 and 2019 were exchanged for new issues of an existing global bond scheduled to mature in 2039. This resulted in a positive impact on the Average Time to Maturity (ATM), which improved from 9.9 years at end March 2016 to 10.3 years at end-December 2016.

**Figure 4: Maturity profile of the outstanding debt as at end-December 2016 (in Smillions)**



Source: Ministry of Finance and the Public Service

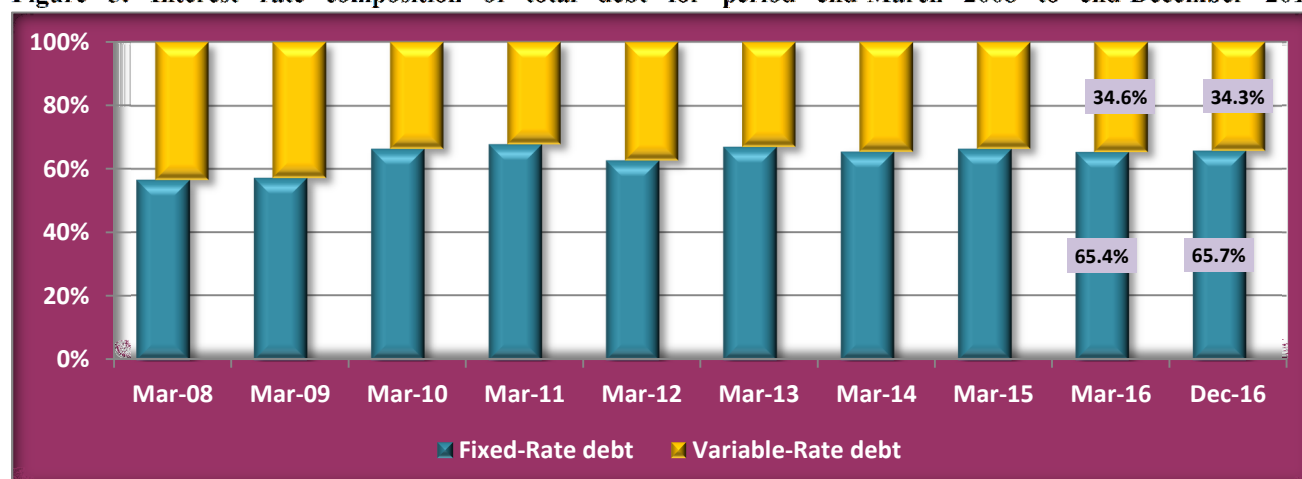
## 4.3 MARKET RISK

Market risk relates to changes in macroeconomic or financial variables that have a direct impact on the cost of debt in terms of both stock and flow. The portfolio is exposed to market risks, which may result in market-determined variables adversely affecting the debt portfolio. This could cause a financial loss, reflecting as an increase in debt service costs and/or an increase in the outstanding stock of debt. Among the variables that influence market risk are: interest rates, exchange rates and inflation rates.

### 4.3.1 Interest Rate Risk

Interest rates applicable to variable-rate debt are reset periodically during the life of a loan. The debt portfolio is moderately exposed to interest rate risk as the variable-rate proportion accounts for 34.3% of total outstanding public debt. Consistent with the Government's debt management strategy, the majority of new debt contracted during the year was on a fixed interest rate basis. At end-December 2016, fixed-rate debt dominated the debt portfolio, thereby mitigating the effects of potential negative interest rate shocks on debt service costs. The medium-term objective is to reduce the share of variable-rate debt in the portfolio to 30.0%.

**Figure 5: Interest rate composition of total debt for period end-March 2008 to end-December 2016**

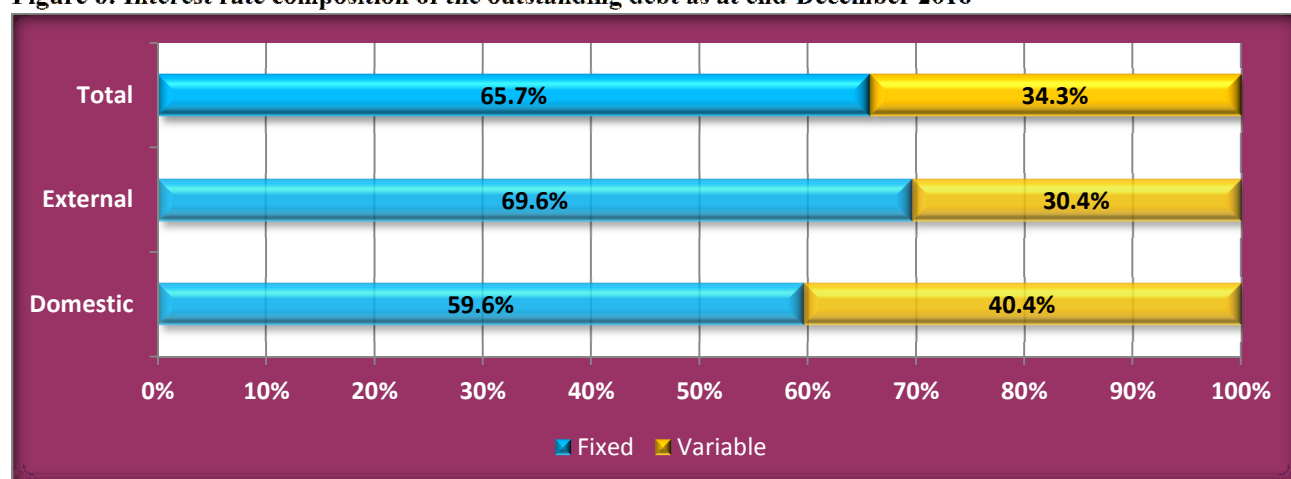


*Source: Ministry of Finance and the Public Service*

Domestic variable-rate debt represented 40.4% of the domestic debt portfolio at end-December 2016. This debt is reset periodically using the 3-month Weighted Average Treasury Bill Yield which remained relatively low and stable during the review period. While the proportion of variable-rate domestic debt was not within the target band at end-December 2016, the strategy to raise only fixed-rate domestic debt resulted in an increase of 0.9 percent relative to end-March 2016.

Fixed-rate debt in the external portfolio was reduced by 0.3 percent at end-December 2016 to 69.6% compared to end-March 2016. This was mainly due to the buyback of fixed-rate bonds. Concurrently, there were inflows of variable-rate debt from multilaterals. Variable-rate external loans are linked to the US dollar London Inter-Bank Offer Rates (LIBOR), which have been increasing, but are still relatively low.

**Figure 6: Interest rate composition of the outstanding debt as at end-December 2016**

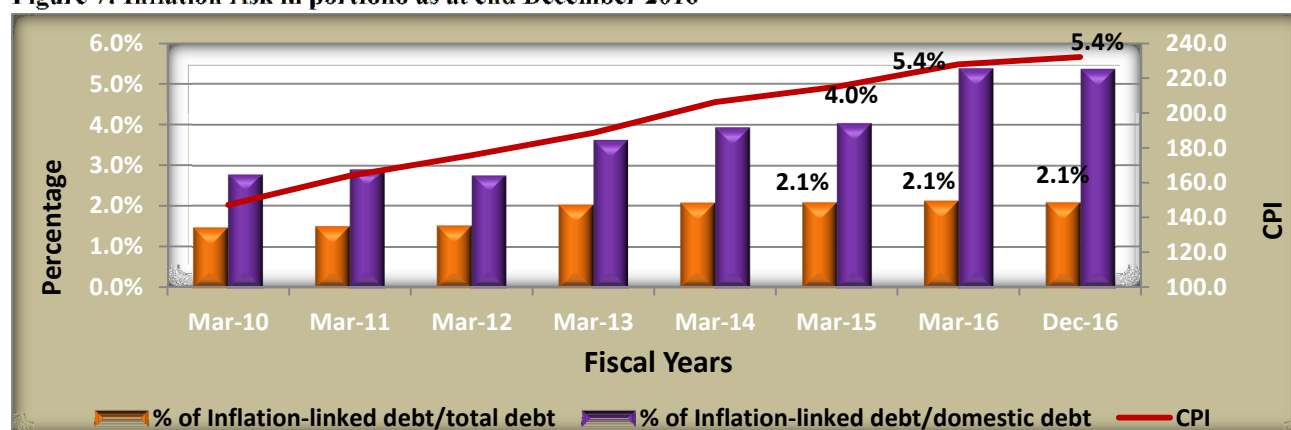


*Source: Ministry of Finance and the Public Service*

### 4.3.2 Inflation Risk

Inflation levels have remained relatively low in 2016. In the first quarter of the year, the rate applicable to the BOJ's 30-day Certificate of Deposit was reduced by 0.25 percentage points, from 5.25% to 5.0%. The adjustment was based on a favourable inflation outlook of 3.0%. However, in subsequent months, as the rate of depreciation of the local currency vis-à-vis the US dollar accelerated, the inflation outlook was adjusted. The annual inflation rate is projected to be 4.1% for FY2016/17. The stock of inflation-indexed debt is revalued based on the official daily values of the Consumer Price Index (CPI). Despite the relatively low and stable inflation rate, there was a marginal increase in outstanding nominal debt linked to the CPI. At end-December 2016, inflation-linked debt remained flat at 5.4% and 2.1%, respectively, of the domestic and total debt outstanding.

Figure 7: Inflation risk in portfolio as at end December 2016



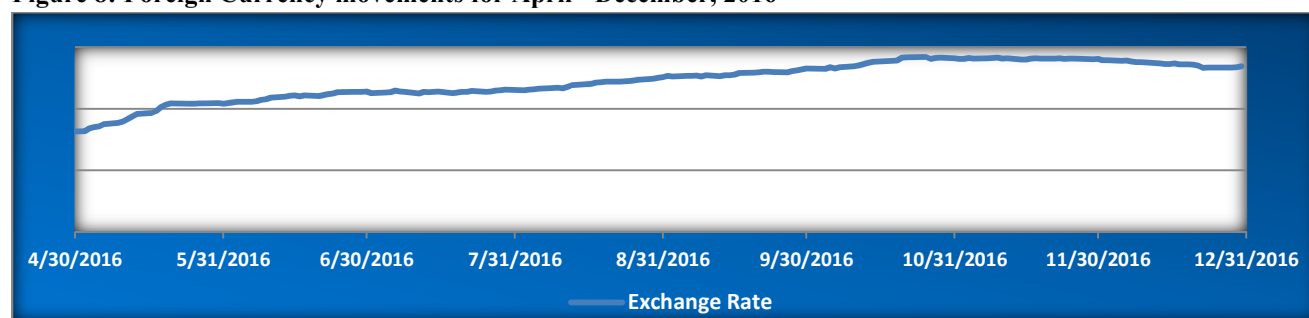
Source: Ministry of Finance and the Public Service

### 4.3.3 Foreign Currency Risk

Debt denominated in currencies other than the local currency expose the portfolio to foreign currency risk as the local currency value of the debt changes with movements in exchange rates. The depreciation of the Jamaica dollar relative to other foreign currencies increases the debt stock and the associated debt service costs.

As shown in **Figure 8**, at the beginning of the fiscal year, the rate of depreciation of the Jamaica dollar vis-à-vis the US dollar was marginal, benefitting from the effects of the liquidity resulting from a GOJ bond maturity in February 2016. However, this trend did not follow through in the subsequent months as the rate of depreciation accelerated in May 2016. This occurred as demand for US currency increased as a result of several large US dollar bond issues by market players. By the end of September 2016, the rate of depreciation was flat, and some revaluation has occurred since November 2016. Over the review period, the Jamaica dollar depreciated by 5.3%. By end-December 2016, the total debt stock had increased by \$81.3 billion, of which 84.8% or \$68.9 billion is directly attributable to currency movements.

**Figure 8: Foreign Currency movements for April - December, 2016**

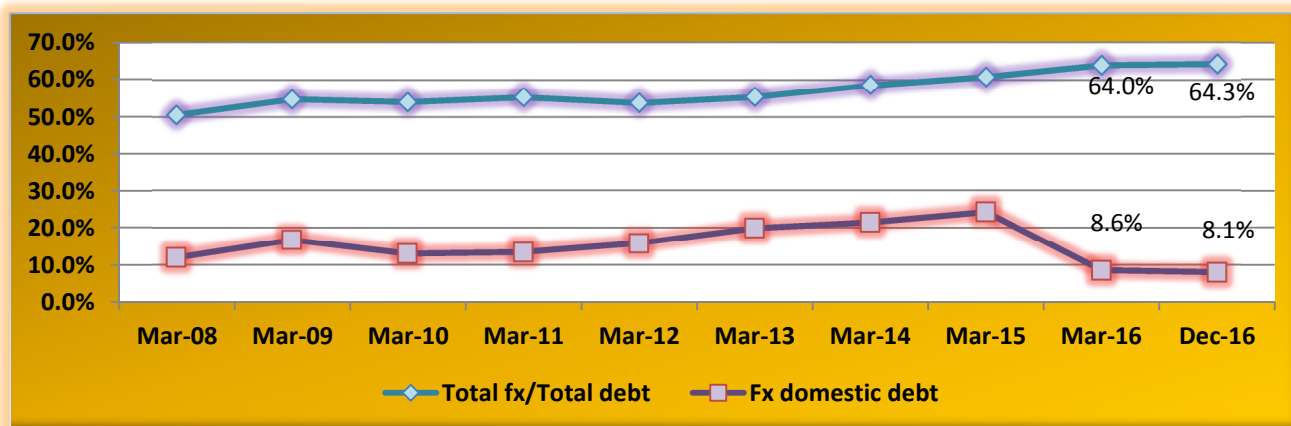


Source: Ministry of Finance and the Public Service

Consistent with the strategy, during FY2016/17, there was positive net flow of \$20.9 billion in local currency debt and negative net flow of US\$21.4 million in foreign currency debt. Despite the negative net flow of foreign currency debt, in Jamaica dollar terms, the share of foreign currency debt relative to total debt increased as a result of depreciation of the Jamaica dollar vis-à-vis the US Dollar.

There was a 0.2 percent reduction in foreign currency debt at end-December 2016 compared to end-March 2016. However, when expressed in Jamaica dollar terms, the foreign currency debt increased by 0.3 percentage points to represent 64.3% of total outstanding debt at end-December 2016. Domestic debt denominated in foreign currency decreased by 0.5 percentage points, from 8.6% to 8.1%. This was due to the Government refinancing a maturing US dollar-denominated benchmark note with Jamaica dollar securities.

**Figure 9: Foreign currency risk in the portfolio as at end-December 2016**



Source: Ministry of Finance and the Public Service

The significant foreign currency exposure of the debt portfolio is reflective of the fact that the domestic market is not sufficiently deep or liquid to absorb the Government's demand for financing without causing adverse movements in domestic interest rates and/or crowding out of the domestic private sector. Consequently, the Government has secured budgetary financing from external sources. Despite the risk associated with foreign currency borrowing, loans from official sources and access to



the global debt markets can provide the advantage of attractive borrowing terms, such as long tenor and/or lower interest rates.

**Table 5: Currency composition and associated cost of total debt at end-December 2016**

Currency	% of portfolio	Average Cost (%)
US dollar	64.3	10.4
Jamaica dollar	35.7	7.5

*Source: Ministry of Finance and the Public Service*

However, as currency movements are taken into consideration, the debt stock could increase due to parity changes, and foreign currency debt could be more costly in terms of debt service. **Table 5** shows the average cost over the review period which considers both interest and depreciation associated with debt denominated in both local and foreign currencies.

## 4.4. CONTINGENT LIABILITY ANALYSIS

**Table 6: Government guaranteed loans at end-December 2016**

Portfolio	% of GDP	% of total debt
Domestic	2.2	1.8
External	7.7	6.3
<b>Total</b>	<b>9.9</b>	<b>8.1</b>

*Source: Ministry of Finance and the Public Service*

Contingent liabilities are obligations that materialize if a particular event occurs. They can be explicit, if the sovereign contractually acknowledges its responsibility to cover the beneficiary under specific circumstances; or implicit, when the government is expected to do so because it has a “moral” obligation to act, in most cases related to a high opportunity cost of not intervening.<sup>6</sup>

In FY2016/17, the Government did not issue any new guarantees or explicit contingent liabilities. However, due to disbursement, indexation to inflation and currency movements, the stock of guaranteed debt increased marginally at end-December 2016, see Table 6. Guaranteed loans to GDP decreased from 10.4% at end-March 2016 to 9.9% at end-December 2016, see **Table 4**.

The GOJ, in an effort to account for all explicit contingent liabilities and associated risks, has established targets in the PDMA (2012). According to Section 18 of the Act, the objective is to lower the guaranteed debt-to-GDP ratio to 8.0% at end FY2016/17. It is expected that this target will be met. The Act further provides that the ratio should be below 5.0% and 3.0% at end-FY2021/22 and FY2026/27, respectively. In order to meet these targets, a comprehensive framework has been developed with respect to the monitoring of guarantees. To this end, Public Bodies are required to provide a monthly report to the Minister with responsibility for Finance with details on the status of all debt and liabilities, whether or not they have been guaranteed.

<sup>6</sup>Elizabeth Currie and Antonio Velandia (2002). “Risk Management of Contingent Liabilities within a Sovereign Asset-Liability Framework”. (World Bank, Washington DC)

## **SECTION V: MACROECONOMIC OVERVIEW**

Following the positive outturn for FY2015/16, Jamaica realized further improvements in its macroeconomic environment during FY2016/17, as shown by the positive performances of key macroeconomic indicators over the review period. These macroeconomic achievements contributed to the GOJ's continued success in meeting all quantitative targets under the EFF.

The GOJ successfully completed thirteen (13) quarterly reviews under the EFF, enabling the Government to effectively negotiate a successor agreement—a three-year precautionary Stand-by Arrangement (SBA). The SBA, valued at US\$1.64 billion was approved by the IMF Executive Board in November 2016.

Fiscal discipline and the execution of proactive debt management strategies contributed to a steady downward trajectory of debt-to-GDP between FY2012/13 and FY2015/16. However, as a result of the Government partially pre-financing debt payments due in FY2017/18 and depreciation of the Jamaica dollar vis-a-vis the US dollar, debt-to-GDP is projected to reflect a marginal increase of 1.8 percentage points to record 124.1% (EFF of 122.5%) at-end FY2016/17. With payment of the FY2017/18 maturities, it is expected that the ratio will return to a downward trajectory by end-FY2017/18, and will remain on track to achieve the legislated target of 60.0% of GDP by end-March 2026.

In an effort to accelerate and restore robust growth to the economy, the GOJ created the Ministry of Economic Growth and Job Creation (MEGJC) and the Economic Growth Council (EGC), which are tasked with the responsibilities of crafting strategies to remove barriers to growth and increase job creation over a period of four years. The primary objective of the EGC is to facilitate a growth rate of 5.0% within four years.

During FY2015/16, the country experienced growth, with the economy expanding by 1.0%, or 0.2 percentage points above the projected 0.8%. The trend continued during FY2016/17, with the economy growing by 1.4% and 2.0% during the first two quarters. This exceeded the growth rates recorded for the corresponding periods of FY2015/16, and represented the sixth and seventh consecutive quarterly expansion. A rebounding agricultural industry, led by the Agro-Parks initiative, recorded increased growth of approximately 28.0%, 18.6 percentage points above the 9.4 % recorded for the June 2016 quarter, and accounted for almost 76.0% of the growth recorded in the September 2016 quarter. This was supported by favourable weather conditions.

Inflation continued to decline in FY2016/17, with the December 2016 quarter recording 1.7%, while the Balance of Payments current account deficit for the June 2016 quarter was US\$29.8 million, an improvement of US\$98.7 million over the corresponding period.

The Net International Reserves (NIR) remains in a strong position, increasing by US\$282.1 million, from US\$2,437.3 million at December 2015 to US\$2,719.4 million in December 2016. The

unemployment rate of 12.9% at July 2016 decreased by 0.2 percentage points, from the 13.1% recorded at July 2015. Also, the country's credit ratings improved in November 2016, with Moody's upgrading Jamaica's government issuer, senior unsecured and provisional shelf ratings to B3 from Caa2, and revising its outlook to stable from positive.

In the recent *World Bank Ease of Doing Business Report, 2017*, Jamaica is the second-highest ranked economy in the Caribbean, and seventh in the Latin America and Caribbean (LAC) region. Strong commitment and adherence to fiscal consolidation, as well as prudent debt management practices helped to entrench macroeconomic stability, and place the debt on a downward trajectory. The Government continues to focus on maintaining stability, boosting job creation and building confidence through the achievement of five percent growth within four years.

**Table 7: Macroeconomic Indicators**

	FISCAL YEARS					
	2015/16 Actual	2016/17 Est.	2017/18 Proj.	2018/19 Proj.	2019/20 Proj.	2020/21 Proj.
<b>Macroeconomic variables:</b>						
Nominal GDP (J\$ billion)	1,691.0	1,757.6	1,884.0	2,039.8	2,211.8	2,386.4
Nominal GDP growth rate (%)	7.6	3.9	7.2	8.3	8.4	7.9
Real GDP growth rate (%)	1.0	1.6	2.2	2.6	2.7	2.8
Inflation: Annual Pt to Pt (%)	3.0	4.1	5.0	5.5	5.5	5.0
<b>Interest rates:</b>						
30-day CD rate	5.25	5.00	-	-	-	-
180-day Treasury Bill (avg)	6.29	6.14	-	-	-	-
Avg. exchange rate (J\$=US\$1:00)	118.76	127.29	-	-	-	-
Oil Prices (WTI) (avg. US\$/barrel)	45.0	46.3	47.5	55.0	57.5	59.0

Source: Ministry of Finance and the Public Service and the Bank of Jamaica

## 5.1 RISK FACTORS TO THE DEBT STRATEGY

The performance and outturn of key macroeconomic variables—exchange rate, inflation, interest rates and GDP—are critical to the fiscal and debt trajectories and affect debt operations. Consequently, continued prudent fiscal policy and economic reform, supported by sound management of the financial system are required to limit the impact of exogenous factors. In order to ensure complementarity between the debt strategy and the overall macroeconomic framework, it is important that coordination mechanisms are implemented.

The debt portfolio continues to be heavily exposed to foreign currency risk, as 64.3% of the total outstanding debt is denominated in foreign currency at end-December 2016. The level of interest rate and inflation risk continue to be moderate, as both interest rates and the level of inflation have been low in recent times. Based on the portfolio composition at end-December 2016, **Table 8** shows that a

1.0% depreciation of the Jamaica dollar vis-à-vis the US dollar would add \$13.8 billion to the total debt stock, and a 1.0% uptick in both domestic and external interest rates would increase debt service costs by \$7.4 billion.

**Table 8: Impact of increase in interest and exchange rates on interest payments on the debt stock**

Static Sensitivity Analysis of Interest Payments and Debt Stock using Stock of debt at end-December 2016 (\$ millions)					
Depreciation of the Domestic Currency		Baseline	1.0%	5.0%	10.0%
Debt Stock		-	13,833.5	69,167.5	138,334.9
Debt Stock change		-	0.6%	3.2%	6.4%
As % of GDP		-	0.8%	3.9%	7.9%
Interest rate increase			1.0%	2.0%	8.0%
Interest payments:	Domestic	-	3,369.7	6,739.3	26,957.3
	External	-	3,999.4	7,998.7	31,994.9
	Total	-	7,369.0	14,738.1	58,952.2
As % of GDP			0.4%	0.8%	3.4%
Dynamic Sensitivity Analysis of Interest Payments and Debt Stock					
Fiscal Year		end-December 2016	Proj. 2017/18	Proj. 2018/19	Proj. 2019/20
<b>Domestic Interest (% of GDP)</b>					
Baseline		3.3%	3.6%	3.8%	3.0%
Interest rate increase:	1.0%	3.5%	3.8%	3.7%	2.7%
	2.0%	3.7%	3.9%	3.9%	2.9%
	8.0%	4.8%	5.1%	4.9%	3.8%
<b>External Interest (% of GDP)</b>					
Baseline		2.7%	4.1%	3.9%	3.7%
Interest rate increase:	1.00%	2.9%	4.3%	3.8%	3.3%
	2.00%	3.1%	4.5%	4.0%	3.5%
<b>Total Interest (% of GDP)</b>					
Baseline		6.0%	7.7%	7.7%	6.7%
External: 2.0%	Domestic: 8.0%	8.0%	9.6%	8.9%	7.4%
<b>Debt Stock (% of GDP)</b>					
Baseline		124.1	108.6	100.7*	89.5*

Source: Ministry of Finance and the Public Service

\*Based on the new definition of debt as defined in Section 48A of the FAA Act



The following are potential risks to the macroeconomic framework:

- Revenue and economic growth weaker than projected;
- Fiscal risks—wage settlements, unbudgeted expenditures, judicial awards, public private partnerships;
- Exogenous shocks causing fiscal slippage;
- Increases in international commodity prices that could drive the domestic inflation rate upwards, in particular, rebounding global oil prices that could adversely affect the cost of energy;
- Sustained reduction in the NIR;
- A deterioration in the international trade balance;
- Higher than projected depreciation of the local currency vis-à-vis major international currencies;
- Increase in unemployment; and
- Extended and severe drought conditions and poor farming practices.

## **SECTION VI: MODELLING OF MEDIUM-TERM DEBT STRATEGY FY2017/18 - FY2019/20**

The purpose of an MTDS is to inform future financing choices. The design of strategies, therefore, has a strong focus on managing the risk exposure embedded in the debt portfolio. The MTDS also identifies variations to cost and risk as the composition of the debt changes. The MTDS toolkit is an analytical tool that quantifies the potential risk of alternative debt management strategies. The GOJ has used this tool to evaluate four strategies and rank the output based on cost and risk. Central Government debt and guarantees currently serviced by the Government at end-December 2016 were used for the analysis. The model assumes that the medium-term borrowing needs of the Government will be satisfied by issuing combinations of fifteen stylized instruments categorized as follows:

- Fixed- and variable-rate multilateral/bilateral loans with maturities of 10 years and 20 years;
- A 15-year global bond;
- Loans from external commercial banks;
- T-Bills; and
- Domestic fixed-rate benchmark investment notes (BIN) maturing in 2-, 5-, 10-, 15- and 30-years and variable-rate BIN maturing in 2- and 10-years.

### **6.1 SCENARIOS**

It is assumed that the market variables (interest rates and exchange rates) will increase at a relatively slow pace over the medium-term. Also, the model assumes consistent growth in nominal GDP of at least 7.0% for the respective years in the period under consideration.

A number of shocks were applied to the baseline. These include: 1) a scenario involving a 30.0% depreciation of the foreign exchange rate in year 3; 2) a 200 basis points increase in both domestic and external interest rates; and 3) a combination shock of 15.0% depreciation, and increase in interest rates by 100 basis points.

### **6.2 STRATEGIES**

The strategies tested have some common borrowing features, including annual financing of US\$150.0 million from the multilaterals, as well as rolling over the nominal outstanding stock of T-Bills. The specific features of the four strategies are:

### ***S1 – Baseline with External Commercial Bank Financing***

This strategy replicates some aspects of the FY2016/17 borrowing strategy over the medium-term, where financing needs will be covered in the following proportions: 51.0% from external sources and 49.0% from domestic sources. The distribution among the domestic instruments remains the same and will be allocated in the following proportions: issuance of 22.0%, 44.0% and 27.0% in the 10-, 15- and 30-year BIN, respectively. This strategy highlights the continued focus on extending the maturity profile and reducing bunching in the short-term. The distribution among the external instruments also includes borrowing of 75.0% of the external requirement from foreign commercial banks, as multilateral sources cannot absorb the total financing needs.

### ***S2 - Majority External Financing***

The Government would fulfill 70.0% of its borrowing needs from external sources. Of this, approximately 80.0% will be raised by issuing a fixed-rate global bond. The remaining 30.0% will be financed through 10-, 15- and 30-year BIN and T-Bills in the domestic market.

### ***S3- Majority Short-Term and Variable-Rate Debt***

This strategy will mirror the distribution in Strategy 1: 51.0% from external sources and 49.0% from domestic sources. Additionally, as in Strategy 1, multilateral and commercial bank lending are relied on, with 25.0% from multilaterals and 75.0% from commercial banks. However, in contrast, it is assumed that domestic appetite is subdued and market participants are willing to lend only on a short-term and/or variable-rate basis. Instruments with maturities of five years or less will account for 60.0% of the proposed domestic issuance and the other 40.0% in 10-year instruments. Domestic variable-rate issuance is allocated 20.0% short-term and 20.0% long-term.

### ***S4 – Increased Fixed-Rate Long-Term Domestic Debt***

In an effort to rebalance the portfolio, only 30.0% of the total financing needs will be raised from external sources. Given the relatively small external share, multilateral financing and loans from commercial banks would be assumed in relatively equal proportions. The new domestic issuances would reflect a stronger appetite for longer maturities: the proposed domestic fixed-rate instruments are 10, 15 and 30 years with allocations of 25.0%, 40.0% and 30.0%, respectively.

## 6.3 OUTPUT FROM THE TOOLKIT

As shown in **Table 9** below, shows the results from the toolkit. Strategy 4 is the preferred choice when ranked against the selected strategies.

**Table 9: Cost and Risk indicators of the selected strategies**

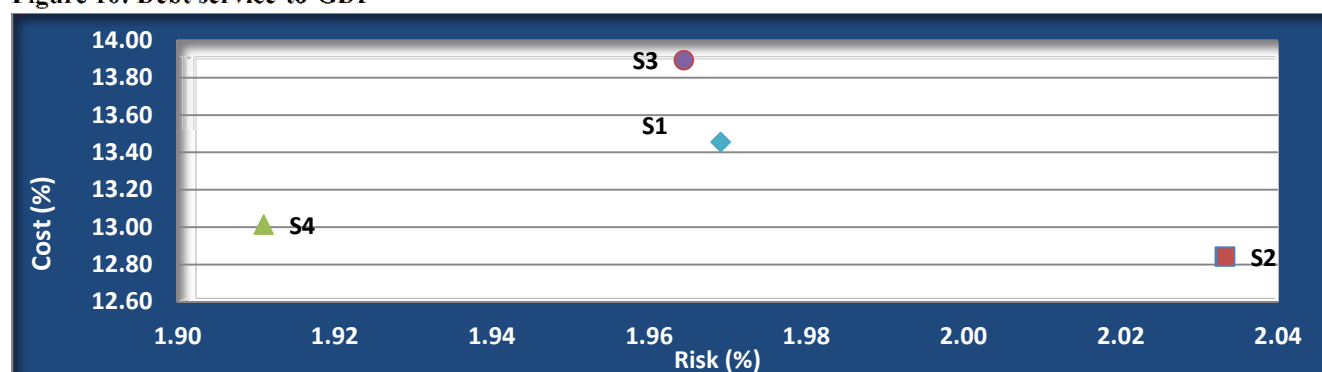
Risk Indicators		2016	At end--2019			
		Current	S1	S2	S3	S4
Interest payment as % of GDP		8.1	8.1	7.6	7.5	7.7
Implied interest rate (%)		7.0	7.3	6.9	7.1	7.3
Refinancing risk	Debt maturing in 1yr (% of total)	6.8	9.3	9.5	10.9	9.7
	Debt maturing in 1yr (% of GDP)	7.9	10.7	10.3	11.7	10.4
	ATM External Portfolio (years)	10.9	9.0	9.8	8.9	9.3
	ATM Domestic Portfolio (years)	9.4	12.0	10.0	8.0	11.6
	ATM Total Portfolio (years)	10.3	10.1	9.9	8.6	10.4
Interest rate risk	Average Time to Refixing (ATR) (years)	8.8	9.0	9.2	7.3	9.3
	Debt refixing in 1yr (% of total)	30.5	29.0	23.0	34.3	26.1
	Fixed-rate debt (% of total)	75.4	75.5	81.6	70.6	78.5
FX risk	FX debt as % of total	61.6	61.3	68.1	65.0	60.2

Source: Ministry of Finance and the Public Service/ MTDS toolkit

Boxes shaded in blue represent positive indicators and boxes shaded in red represent unfavourable outcomes

As shown in **Table 9**, the results for Strategy 4 showed reduced foreign currency exposure and extended Average Time to Maturity (ATM), which is due to the high ATM for the domestic portfolio. **Figure 10** shows that Strategy 3 is ruled out due to the high level of risk associated with short-term borrowing and the uncertainty in debt service costs that is associated with variable-rate debt. Strategy 1 is also unfavourable due to the associated high cost of borrowing despite the low refinancing risk.

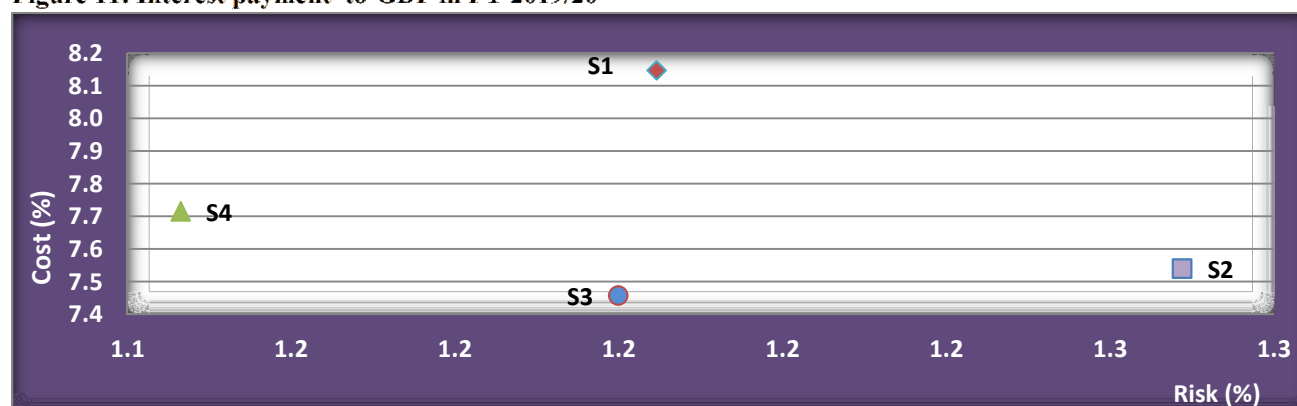
**Figure 10: Debt service-to-GDP**



Source: Ministry of Finance and the Public Service/ MTDS toolkit

The higher costs in Strategies 1 and 4 are directly attributable to the proposed issuance of long-term fixed-rate debt in the domestic market in order to mitigate refinancing risk. Regarding Strategy 3, the high cost is due to issuance of variable-rate debt which may increase debt service costs should the shock in domestic interest rates occur. In relation to S3, the focus on short-term instruments also reduce the cost, but the frequent roll-over of these instruments exposes the portfolio to higher risks, should the interest rates increase. Additionally, in S1 and S3, the greater proportion of the total outstanding debt scheduled to be re-fixed in one year or less increases the exposure of the portfolio to refinancing and interest rate risks.

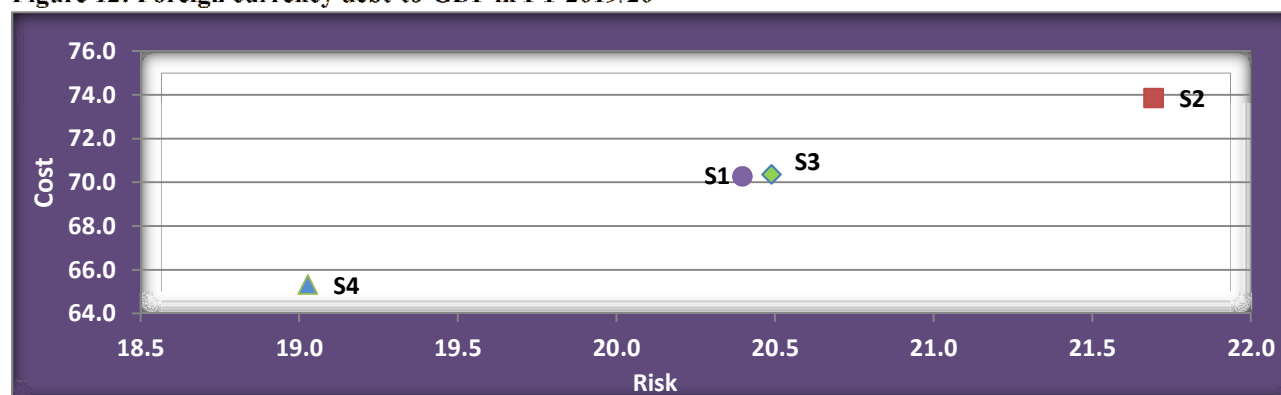
**Figure 11: Interest payment-to-GDP in FY 2019/20**



Source: Ministry of Finance and the Public Service/ MTDS toolkit

As depicted in **Figure 11**, while strategies 2 and 3 show lower implied interest rates than the other selected strategies, the impact of possible shocks on foreign exchange and interest rates causes them to be ranked as sub-optimal. In particular, for S2, the lower cost is directly due to the issuance of the bond in the ICM where global bonds generally carry a lower coupon than instruments of similar tenor issued in the domestic market. However, the foreign currency denomination of the bonds makes the portfolio highly exposed to foreign currency risk.

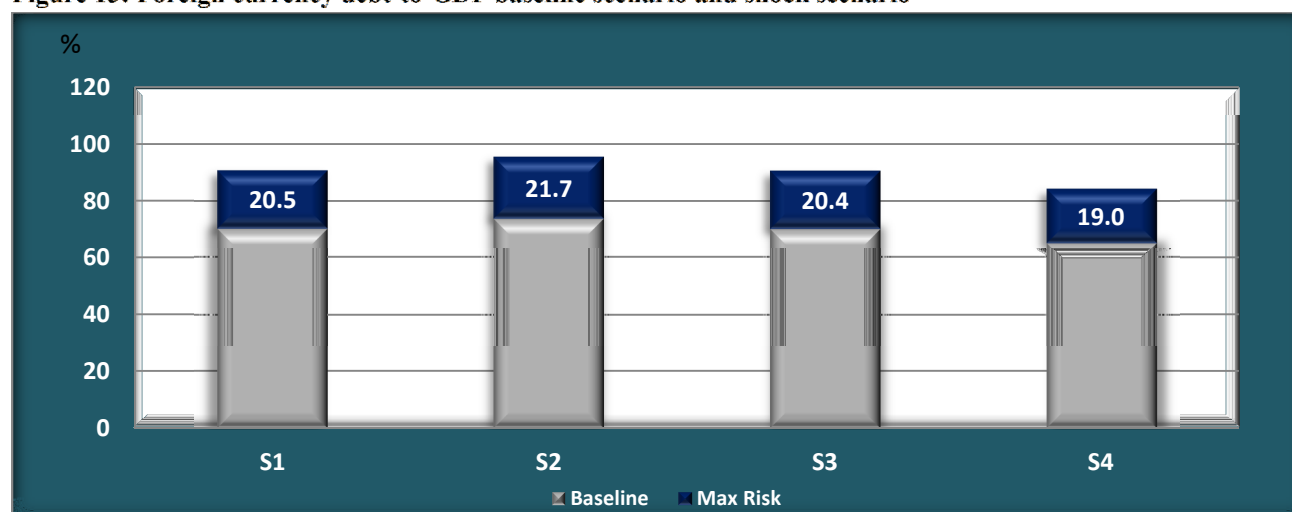
**Figure 12: Foreign currency debt-to-GDP in FY 2019/20**



Source: Ministry of Finance and the Public Service/ MTDS toolkit



**Figure 13: Foreign currency debt-to-GDP baseline scenario and shock scenario**



Source: Ministry of Finance and the Public Service/ MTDS toolkit

**Figure 13** shows that the foreign currency risk would remain high under all baseline strategies up to end-FY2019/20; however, the level of risk would be exacerbated in Strategy 2. The impact of the foreign exchange rate shock is less severe in Strategy 4, because the combination of instruments used to meet the financing requirements comprises mainly local currency.

The medium-term targets are set out in Table 10 below.

**Table 10: Medium-term (end-FY2019/20) debt indicator targets**

INDICATORS	End-March 2020
<b>FOREIGN CURRENCY RISK</b>	
Total foreign currency debt/Total debt (%)	65.0
Foreign currency domestic debt/Total domestic debt (%)	6.0
<b>INTEREST RATE RISK</b>	
<b>Total debt</b>	
Fixed-rate	70.0
Floating-rate	30.0
<b>Domestic debt</b>	
Fixed-rate	70.0
Floating-rate	30.0
<b>External debt</b>	
Fixed-rate	70.0
Floating-rate	30.0
<b>REFINANCING RISK</b>	
<b>Maturity structure</b>	
Average maturity (years)	≥9.0
% Maturing in 1 year or less	≤10.0

Source: Ministry of Finance and the Public Service

The following are the bases on which the targets in Table 10 were established:

- **Foreign currency risk-** The primary balance will assist in reducing the growth of the total debt, while the Government's increased activities in the domestic market will reduce the dependence on foreign currency debt to finance its operations. Foreign currency domestic debt is expected to be no more than 6.0% at end-March 2020, as all maturing domestic debt will be rolled by issuing new or reopened existing local currency benchmark notes. However, the domestic market may not be sufficiently deep to refinance the large maturities in the external portfolio, therefore maturing external debt may be refinanced with foreign currency loans. In an effort to rebalance the currency composition of the total debt portfolio, the Government will seek to reduce the outstanding external debt using funds from central government revenue. Total foreign currency debt is expected to be no more than 65.0% of total debt at end-March 2020.
- **Interest rate risk-** At end-March 2019, fixed-rate debt is expected to be no less than 70.0% of total debt. Consistent with the strategy to roll over fixed-rate instruments and replace maturing variable-rate debt with fixed-rate debt, the proportion of fixed-rate domestic debt is expected to increase. This is based on the Government's plan to issue only fixed-rate instruments in the domestic bond market over the medium-term. In addition, external capital markets issuances are usually on a fixed-rate basis, while loans from multilateral sources though both fixed- and variable-rates have conversion options.
- **Refinancing risk-** Debt maturing in one year or less is expected to be no more than 10.0% at any time during the medium-term. The Government plans to issue instruments along all points of the yield curve, however, focus will be at the medium- to- long end. As a result, the Average Time to Maturity of the total debt portfolio is expected to be, at a minimum, 9 years.

## SECTION VII: ANNUAL BORROWING PLAN FOR FY 2017/18

The Government's financing requirement is determined by the Central Government's programmed operations. The financing requirement for FY2017/18 is projected at \$159,612.0 million or 8.5% of GDP, representing an increase of 56.6% over the financing requirement for FY2016/17.

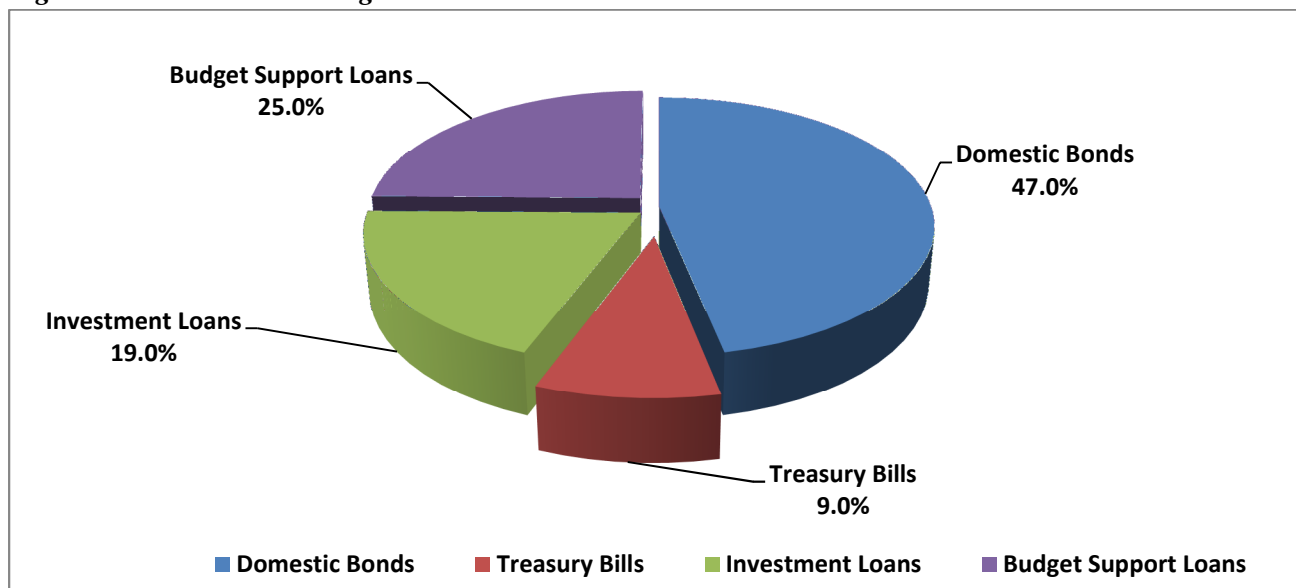
The GOJ has accepted a World Bank proposal to raise the equivalent of \$39,534.0 million through a World Bank Policy-Based Guarantee operation during the upcoming fiscal year. Other financing from external sources include investment loans totalling \$31,078.0 million. Financing from domestic sources is projected at \$89,000.0 million, a 32.5% increase over the revised budgeted amount programmed from the domestic market in FY2016/17, as the Government strategically targets incremental increases in domestic financing in order to mitigate foreign currency exposure in the debt portfolio. This will be obtained through the issuance of \$74,600.0 million in bonds while \$14,400.0 million will be issued in T-Bills.

**Table 11: Annual Borrowing Plan FY 2017/18**

	Budgeted (\$mn)
<b>Domestic (\$mn)</b>	<b>\$89,000.0</b>
Market Issues	\$74,600.0
T-Bills	\$14,400.0
<b>External</b>	<b>70,612.0</b>
Investment loans -	\$31,078.0
World Bank Guaranteed Loan	\$39,534.0
ICM	\$0.0
<b>Total (\$mn)</b>	<b>\$159,612.0</b>

*Source: Ministry of Finance and the Public Service*

**Figure 14: Annual Borrowing Plan FY2017/18**



*Source: Ministry of Finance and the Public Service*

Guided by international best practice, the Government will maintain transparency in its debt operations through inclusion of the annual calendar of GOJ domestic debt securities proposed for issuance for FY2017/18 in this document. The calendar and a schedule of proposed GOJ Treasury bill tenders are presented in Tables 12 and 13, respectively.

## **7.1 ISSUANCE STRATEGY**

During FY2017/18, the Government will issue fixed-rate bonds in the domestic market as outlined in the selected Strategy, S4. Strategy S4 is also predicated on the Government's plans to increase the ratio of fixed-rate to variable-rate debt and reduce the foreign currency to local currency debt by increasing the issuance of domestic fixed-rate securities, market conditions permitting.

In FY2017/18, the Government will maintain a constant presence in the market. Benchmark Investment Notes will be made available along all segments of the yield curve. However, as the Government is cognizant of the need to avoid the bunching of maturities, emphasis will be placed on issuances at the medium-to-long end of the curve in keeping with the strategy objective to extend maturities.

As a priority of its issuance strategy, the Government will resume the practice of floating some securities through the auction mechanism in order to promote efficient pricing and competitiveness. The method of issue will be included in the proposed annual calendar of GOJ domestic debt securities.

The GOJ also intends to refinance domestic maturities over the medium-term by issuing new fixed-rate bonds and reopening existing bonds. During the upcoming fiscal year, the Government will seek to build benchmarks in the 10-year to 25-year segments of the yield curve. Over the period, two new fixed-rate securities will be introduced to the menu of benchmark investment notes. The planned issuances will have the benefit of a large injection of liquidity resulting from a maturing fixed-rate benchmark note in May 2017. However, given the current market environment and investors' reduced demand for medium-to-long dated GOJ bonds, the Government will continue to build liquidity buffers to mitigate any risk to refinancing of the maturity in May 2017.

In FY2017/18, the GOJ will discontinue the issuance of the 28-day tranche of T-Bills as it seeks to increase coordination with the BOJ in implementing monetary policy. Concurrently, the nominal amounts offered on the 3-month and 6-month tranches will be increased by approximately 50.0%. The 9-month or 273-day T-Bills, which were re-introduced during the first quarter of FY2016/17, will be retained as part of the cadre of short-term offerings available to retail as well as institutional investors. The GOJ will maintain the issuance strategy of placing bonds in the primary market, creating on-the-run benchmark notes at various segments along the yield curve, and facilitating the resurgence of an active and robust secondary market.

## **7.2 LIQUIDITY BUFFERS**

Medium-term projections show high levels of maturities over the next four years, commencing in FY2017/18, where there are significant bond maturities. This indicates a consequent refinancing risk. The building of liquidity buffers is a method of mitigating refinancing risk. The GOJ will borrow with a view to pre-financing any maturing or outstanding public debt by taking advantage of favourable market conditions to gradually build cash buffers, covering at least three months of debt service costs.

## **7.3 ACTIVE LIABILITY MANAGEMENT OPERATIONS**

Sections 6 and 10 of the PDMA, 2012, support this strategy by empowering the Minister with responsibility for Finance to undertake portfolio management operations. Such operations include roll-overs, swaps, buybacks, switches, other liability management transactions and the redemption of debt instruments. The programme of making opportunistic use of tools such as swaps, buybacks, and switches, which started in FY2015/16, will continue during FY2017/18.



## **SECTION VIII: DEVELOPMENT OF THE DOMESTIC BOND MARKET – An Update**

In recent years, the importance of the development of domestic government bond markets has become a core debt management objective for governments of developing countries. A fully developed government bond market is predictable, reliable, liquid and well-regulated with a diversified investor base, a deep and liquid securities market with access to public, private and international bonds, a sound securities custody and settlement system and relevant legislation and regulations.



Developed bond markets provide the government with a reliable non-inflationary source of financing which eliminates dependence on captive financing arrangements and facilitate a well-balanced financial environment that promotes economic growth and development. Consequently, domestic bond market development is increasingly a focal point for debt management as governments become more risk averse to the significant foreign currency risk associated with external financing.

Jamaica's domestic bond market has the fundamental elements necessary for an efficient securities market. It is characterized by sound legal, tax, and regulatory infrastructure; smooth and secure depository and settlement arrangements, a liberalized financial system with competing intermediaries and a diverse investor base. Over the years, the operations of the domestic bond market were effective and functional with active and efficient primary and secondary markets as the Government played its role in the development of the market, while satisfying its financing needs.

Jamaica's three-year MTDS, which is reviewed annually, continues to place emphasis on the domestic bond market. Jamaica's domestic bond market has, since FY2013/14, displayed mixed indicators of development. This is partly due to the prolonged effects of a number of legislative, financial, regulatory and structural reforms of the financial sector. It is also due to the execution of two liability management operations in the domestic market required under the previous arrangements with the IMF to facilitate sustainability of the fiscal and monetary operations. Declining investor confidence led to extended inactivity in both the primary and secondary markets, which lasted through to the end of the third quarter of FY2015/16. This necessitated adjustments to the GOJ approved annual borrowing plans, where scheduled domestic financing was substituted with external financing.

Reforms, geared towards improving key macroeconomic indicators and enhancing sound fiscal and monetary policies and prudent debt management have resulted in marked improvements in vital macro-economic variables, particularly inflation, the NIR and GDP. Achievements such as the Government meeting all quantitative targets under the previous EFF arrangement with the IMF have

also resulted in a significant improvement in investor confidence in the economy. Significant upgrades from the major credit ratings agencies have also contributed to increased activity in the domestic bond market, as evidenced by stability in domestic market rates.

The positive developments, coupled with increased communication and consultations with market players, through the Investor Relations Programme (IRP), laid the foundation for a phased re-entry into the domestic bond market. This began during the last quarter of FY2015/16. Buoyed by positive demand, the Government maintained a presence in the market over the review period, in keeping with the ABP FY2016/17, and is projected to issue three bonds, as scheduled, in February 2017.

A primary objective of Jamaica's MTDS FY2017/18, continues to be the further development of the domestic Government bond market to achieve the level of market activity that existed prior to execution of the National Debt Exchange in February 2013.

The Government will continue to review and develop the IRP to facilitate increased interaction, exchange of ideas and better understanding of the expectations of the market. This will be achieved through conference calls, one-on-one meetings, formal and informal surveys and meetings with the wider investor groups, as it seeks to enhance the symbiotic relationship with the market.

Given the Government's intention to further diversify the investor base, the IRP will embark on a public education programme targeting the retail investor. The outreach will seek to introduce, educate and guide "small" investors to the menu of investment options, and will take the form of town hall meetings with the distribution of brochures in several communities throughout the island. Further, the IRP will also be tasked with researching and establishing a framework for the inclusion of external investors in domestic bond issuances.

During the upcoming fiscal year, the Government will continue to place priority on coordination with all major stakeholders conducive to efficient and effective debt management operations. Consequently, in accordance with Section 8 (1) and (2) of the PDMA, 2012, a Debt Financing Committee<sup>7</sup> will review and recommend all terms and conditions for domestic issuances.

Further, during the upcoming fiscal year, the Government will continue to place priority on coordination with the BOJ as it seeks to improve efficiency in issuance, secondary market trading and custody and settlement arrangements. Greater emphasis will be placed on increasing the issue of domestic benchmark investment notes by auction in the JamClear-CSD, and the more efficient issue and custody of T-Bills, as the Government seeks to finalize steps towards dematerializing the Bills in the securities depository.








---

<sup>7</sup> The Committee coordinates, through its membership, representatives from the Accountant General's Department (AGD), Bank of Jamaica (BOJ), and the Economic Management, Public Enterprises and Public Expenditure Divisions of the MOFPS.

The BOJ, in collaboration with the Jamaica Stock Exchange (JSE), is in the final phase of implementing a Fixed Income Trading Platform<sup>8</sup>, which will integrate the JSE platform with the existing JamClear CSD infrastructure, and facilitate the listing of GOJ bonds on the JSE. The listing of GOJ bonds is expected to improve operational efficiency by providing greater transparency, and a higher level of security; facilitate real time price discovery, improved market information and fair trading; and ultimately support the development of the domestic bond market. The platform will also report on yield and trading information to stakeholders.

In accordance with the objectives of the MTDS, during the second quarter of FY2016/17, the GOJ engaged in a liability management operation in the domestic market through the execution of a buyback transaction in September 2016. The transaction for a security due to mature in 2017 was mutually beneficial to both parties, effectively reducing refinancing risk in the domestic portfolio while realigning the portfolio of the financial institution. During FY2017/18, the Government will continue the programme of portfolio management operations over the medium-term including the opportunistic buyback or swap of near-term securities.

With the focus on the further development of the domestic government bond market, during FY2017/18, the Government will introduce initiatives to garner support for domestic bond issuances to further deepen and develop the market. The Government will:

-  Take advantage of increased demand for investments at the long end of the curve through the sensitization of the public sector, in particular on pension planning and long-term investments and special needs issuances;
-  Engage the BOJ in respect of necessary regulatory and operational adjustments with respect to recent discussions on widening the GOJ's role and the dealers' obligations to participate in GOJ issuances within the current primary dealer framework;
-  Increase the GOJ's presence in the domestic market, market conditions permitting;
-  Convert multilateral debt to local currency where possible, and in keeping with the cost and risk trade-off consideration;
-  Embark on a campaign to encourage public bodies to invest in GOJ local currency debt rather than USD corporate debt;
-  Increase coordination with the BOJ regarding the management of Jamaica dollar liquidity;
-  Investigate the possibility of buying back US dollar-denominated debt in the domestic portfolio;

---

<sup>8</sup> Consistent with international standards and best practices, a National Payments Council (NPC) was established by the Bank of Jamaica (BOJ) under the National Payments Reform Programme. The NPC is charged with the oversight of the National Payments System, which includes the Jam-Clear-Real Time Gross Settlement (JamClear-RTGS) and the JamClear-Central Securities Depository (JamClear-CSD) systems operated by the BOJ. The NPC established a market user group to guide the implementation of a Fixed Income Trading Platform.

- Lay the necessary legislative and operational framework for foreign participation in local currency issuances in the domestic market;
- Continue the policy of conducting debt operations openly, equitably and transparently through the provision of timely reports and statistics on the debt and on the DMB's operations via a range of communication channels; and
- Continue to publish an annual Schedule of Domestic Debt Securities and GOJ Treasury Bill Tenders.

**Table 12: Proposed Issuance of Government of Jamaica Securities for FY2017/18**

PLEASE NOTE THAT THE SCHEDULE IS SUBJECT TO CHANGE

SUBSCRIPTION DATE	INSTRUMENT TYPE	METHOD OF ISSUE
<b>Q1</b>		
April 19, 2017	3-month and 6-month T-Bills	Auction
April 26, 2017	Reopen FR 7.75% BIN* Due Feb 2022	Tap
May 17, 2017	3-month, 6-month and 9-month T-Bills	Auction
May 24, 2017	Reopen FR BIN Due 2021 - <b>4-yr</b> <b>New Issue</b> FR BIN Due 2037 – <b>20-yr</b>	Auction Auction
June 14, 2017	3-month and 6-month T-Bills	Auction
<b>Q2</b>	<b>INSTRUMENT TYPE</b>	
July 19, 2017	3-month and 6-month T-Bills	Auction
July 26, 2017	Reopen FR 9.50% BIN Due Feb 2026 Reopen FR 11.25% BIN Due Feb 2046	Tap Auction
August 16, 2017	3-month, 6-month and 9-month T-Bills	Auction
August 23, 2017	Reopen FR 7.75% BIN Due Feb 2022 Reopen FR BIN Due Feb 2037 – <b>20-yr</b>	Tap Auction
September 13, 2017	3-month and 6-month Treasury Bill Tenders	Auction
<b>Q3</b>	<b>INSTRUMENT TYPE</b>	
October 18, 2017	3-month and 6-month T-Bills	Auction
October 25, 2017	Reopen FR BIN Due 2021 – <b>4-yr</b>	Auction
November 15, 2017	3-month, 6-month and 9-month T-Bills	Auction
November 22, 2017	Reopen FR 9.50% BIN Due Feb 2026 Reopen FR 11.25% BIN – Due 2046	Tap Auction
December 13, 2017	3-month and 6-month Treasury Bill Tenders	Auction
<b>Q4</b>	<b>INSTRUMENT TYPE</b>	
January 17, 2018	3-month and 6-month Treasury Bill Tenders	Auction
January 24, 2018	<b>New Issue</b> FR BIN Due 2033 – <b>15-yr</b> Reopen FR 7.75% BIN Due 2022	Auction Tap
February 14, 2018	3-month, 6-month and 9-month T-Bills	Auction
March 14, 2018	3-month and 6-month T-Bills	Auction
March 21, 2018	Reopen FR BIN – Due 2021 – <b>4-yr</b> Reopen FR BIN – Due 2033 – <b>15-yr</b>	Auction Auction

**\*Benchmark Investment Note**

**Source: Ministry of Finance and the Public Service**

**Table 13: Proposed Schedule for Treasury Bills Tenders**

**PLEASE NOTE THAT THE SCHEDULE IS SUBJECT TO CHANGE**

<b>For Fiscal Year 2017/18</b>		
<b>Proposed Treasury Bill Tranche</b>	<b>Proposed Tender Date</b>	<b>Proposed Issue Date</b>
<b>Quarter 1</b>		
3 & 6-month T/Bills	April 19, 2017	April 21, 2017
3, 6 & 9 month T/Bills,	May 17, 2017	May 19, 2017
3 & 6-month T/Bills	June 14, 2017	June 16, 2017
<b>Quarter 2</b>		
3 & 6-month T/Bills	July 19, 2017	July 21, 2017
3, 6 & 9 month T/Bills	August 16, 2017	August 18, 2017
3 & 6-month T/Bills	September 13, 2017	September 15, 2017
<b>Quarter 3</b>		
3 & 6-month T/Bills	October 18, 2017	October 20, 2017
3, 6 & 9 month T/Bills,	November 15, 2017	November 17, 2017
3 & 6-month T/Bills	December 13, 2017	December 15, 2017
<b>Quarter 4</b>		
3 & 6-month T/Bills	January 17, 2018	January 19, 2018
3, 6 & 9 month T/Bills,	February 14, 2018	February 16, 2018
3 & 6-month T/Bills	March 14, 2018	March 16, 2018

*Source: Ministry of Finance and the Public Service*

**Notes:**

- The actual amounts in each tender will be determined at the time of invitation to tender.
- The dates and amounts are subject to change without notice.





## **GLOSSARY**

### ***Amortisation***

Amortisation refers to principal repayments on loans. These repayments reduce the borrowed money by portions, which are usually fixed amounts or expressed as a percentage of the whole.

### ***Auction***

An auction is a system by which securities are bought and sold on a competitive bidding process. The auctions are conducted on a multiple-price-bidding basis, which means that the successful investor will receive stocks at the price he bids.

### ***Average Time to Refixing***

The Average Time to Refixing is a measure of weighted average time for the variable interest rate loans in the total debt portfolio to be refixed. The larger the percentage of variable debt within the portfolio, the shorter the average time to refixing.

### ***Average Time to Maturity***

Average Time to Maturity is defined as the weighted average time to maturity of all principal repayments in the portfolio. This indicator shows how long it takes on average to rollover the debt portfolio. A shortening suggests that the portfolio is being rolled over more frequently and therefore is more exposed to refinancing risks

### ***Benchmark Bonds***

These are bonds that are sufficiently large and actively traded, such that their prices serve as reference for other bonds of similar maturities. More specifically, the benchmark is the latest issue within a given maturity. For a comparison to be appropriate and useful, the benchmark and the bond being measured against it should have a comparable liquidity, issue size and coupon. Government bonds are almost always used as benchmark.

### ***Contingent Liabilities***

Contingent liabilities are obligations that materialise if a particular event occurs. They can be explicit, if the sovereign contractually acknowledges its responsibility to cover the beneficiary under specific circumstances, or implicit, when the government is expected to do so because it has a “moral” obligation to act, in most cases related to a high opportunity cost of not intervening.

### ***Debt Buyback***

Is a liability management tool, whereby a debtor repurchases its own debt. The debtor's obligations are reduced while the *creditor* receives a bullet payment comprising the purchase price plus any accrued interest due at the date of settlement. Debt buybacks serve two main purposes: (1) to reduce

the outstanding amounts of bonds close to maturity in a portfolio, and to smooth the portfolio thus lowering refinancing risk, (2) allow debt managers to increase the issuance of on-the-run securities above and beyond what would otherwise have been possible.

### ***Debt Service Payments***

Debt service payments cover interest charges on a loan. Some sources also include amortisation under debt service payments. These payments liquidate the accrued interest (and loan obligations if amortisation is included).

### ***Fiscal Responsibility Framework***

The Fiscal Responsibility Framework, which came into effect October 1, 2010, is an encompassing framework which has, at its centre, fiscal rules that are designed to achieve desired fiscal outcomes, most notably, a reduction in, and maintenance of, a sustainable level of debt.

### ***Inflation-Indexed Bonds***

Inflation-Indexed bonds are securities with the principal linked to the Consumer Price Index. The principal changes with inflation, guaranteeing the investor that the real purchasing power of the investment will keep pace with the rate of inflation. Although deflation can cause the principal to decline, at maturity the investor will receive the higher of the inflation-adjusted principal or the principal amount of the bonds on the date of the original issue.

### ***Investment Loan***

The terms refer to loans, which fund capital development activities. The term capital refers to lasting systems, institutions and physical structures. Investment loans are typically funded from foreign sources by bilateral arrangements and multilateral institution.

### ***Liability Management Operation***

Liability Management (LM) is the process of rebalancing outstanding borrowing(s) in order to improve the composition of the public debt portfolio. LM operations have five main functions: (1) to increase liquidity in government securities markets, (2) to manage risks in the debt portfolio, (3) to decrease the cost of new funding, (4) to correct and/ or take advantage of market distortions, and (5) to stabilize the market during periods of stress.

### ***Loan Guarantee***

A legally binding agreement under which the guarantor agrees to pay any or the entire amount due on a loan instrument in the event of non-payment by the borrower.

### ***Public Debt***

Public Debt refers to the consolidated debt of the Specified Public Sector (SPS) net of any cross-holdings except those of the Bank of Jamaica. The Specified Public Sector consists of the Public Sector, excluding any public body certified by the Auditor General as primarily carrying out functions that are of a commercial nature.

### ***Stress Test***

A stress test is a “what if ” scenario that assumes a major change in one or more variables in order to see what effect this would have on various indicators. For example, the impact on of a significant change in oil prices on variables such as growth, inflation, and *external debt* in an economy

### ***Sovereign Rating***

A sovereign rating is an assessment of the default risk for medium and/or long-term debt obligations issued by a national Government (denominated in foreign currency), either in its own name or with its guarantee. Ratings are produced by independent agencies (Moody’s Investors Service, Standard & Poor’s and others). The ratings provide a guide for investment risk to capital market investors.

### ***Treasury Bills***

Treasury Bills are short-term debt obligations backed by the government with maturities less than one year. The Government of Jamaica issues Treasury Bills with 30-, 60- and 180-day tenors. Treasury Bills are issued through a competitive bidding process at a discount from par, which means that rather than paying fixed interest payments like conventional bonds, the appreciation of the instrument provides the return to the holder.

### ***Yield Curve***

A line graph showing the interest rates at specific points in time by plotting the yields of all securities with the same risk but with maturities ranging from the shortest to the longest available. The yield curve for Government securities is often used as a benchmark for pricing other debt in the market. The curve is also used as an indicator of macroeconomic conditions.