Government of Antigua and Barbuda

Medium Term Debt Management Strategy

For the period 2016-2020

FOREWORD

A **Medium-Term Debt Management Strategy (MTDS)** tool helps governments to implement sound debt management over the medium term, in order to achieve a composition of the government debt portfolio that captures the government's preferences with regard to the cost-risk tradeoff. It also ensures that debt is serviced under a wide range of shocks without risk of default.

Antigua and Barbuda's MTDS (2016-2020) has been carefully prepared with consideration being given to the financing framework which is aimed at meeting the medium term fiscal financing requirement that would minimize debt servicing, budgetary costs and the risk exposure to government; while at the same time making every effort to maintain the debt at a sustainable level. Consequently, the MTDS is primarily focused on debt financed by the Government's budget and determines the overall composition of the debt portfolio over the medium term, while considering the macroeconomic indicators and the market environment.

The Government of Antigua and Barbuda (GoAB) is committed and will endeavor to achieve significant milestones, which will lead to improvement in debt management in Antigua and Barbuda. In light of this, the establishment of a Public Debt Law would be prudent since it will give the GoAB leverage in the amount and type of instruments it can offer hence, reducing the risks in its debt portfolio.

Effective debt portfolio management has been evident by the recording of reliable and accurate debt data and by the keen monitoring of the debt sustainability indicators. As recent as September 2015, a Debt Sustainability Analysis (DSA) was done by the Eastern Caribbean Central Bank (ECCB). The Debt to GDP ratio is on a downward trajectory, however, the indicators reveal that the debt is still unsustainable over the medium term.

Implementing such an explicit and official MTDS will allow the GoAB to make informed decisions on considerations given to the costs and risks of alternative sources of financing. The MTDS will lead the way on financing option which is most suitable and will guarantee that the GoAB capitalizes on new financing opportunities without compromising the cost and risks thresholds already established.

The GoAB is committed to achieving better development outcomes through improved transparency and accountability in public financial management. The publishing of the MTDS is a step towards honoring this commitment.

The intent in producing this debt strategy paper is that it will be viewed as a critical means by which informed policy decisions can be made by the relevant stakeholders, the debt burden and other fiscal exposures would be reduced and to strengthen relations with current and prospective investors which will include development partners.

ACKNOWLEDGEMENT

The Ministry of Finance wishes to express sincere gratitude to the Debt Management Unit and the Macro-Fiscal Unit in the Ministry of Finance for compiling the 2016-2020 MTDS and to the Debt Management Advisory Services Unit at the Eastern Caribbean Central Bank (DMAS/ECCB) for their technical assistance. Debt management is dynamic and requires staff to be flexible and have varying skill sets, therefore capacity building remains a priority. The skills at the Debt Management Unit (DMU) are continuously being developed with training through CANEC/DMAS[2] in debt management practices including debt negotiation, data recording, debt sustainability assessments and the MTDS analytical tool.

The Ministry of Finance also wishes to express its appreciation to the European Union (EU), the IMF and the World Bank[3], and Caribbean Development Bank (CDB) for technical and financial assistance as part of the wider Public Financial Management Project and reform of the Civil Service.

[2] Debt Management Project managed by the ECCB
[3] See Informational Appendix for information on World Bank comprehensive debt framework

ACRONYMS

ABAA	Antigua and Barbuda Airport Authority
ABIB	Antigua and Barbuda Investment Bank
ACB	Antigua Commercial Bank
APUA	Antigua Public Utilities Authority
ATM	Average Time to Maturity
ATR	Average Time to Refixing
BAICO	British American Insurance Company
CANEC	Canada - Eastern Caribbean
CARTAC	Caribbean Regional and Technical Assistance Centre
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CDB	Caribbean Development Bank
CLICO	Caribbean Life Insurance Company
CNY	Chinese Yuan
DSA	Debt Sustainability Assessment
ECAB	Eastern Caribbean Amalgamated Bank
ECCB	Eastern Caribbean Central Bank
EEC	European Economic Commission
EIB	European Investment Bank
FP	Financial Programming
CDB	Caribbean Development Bank
CS-DRMS	Commonwealth Secretariat Debt Recording Management System
CUB	Caribbean Union Bank
DMAS	Debt Management Advisory Service
DMU	Debt Management Unit

ECAB	Eastern Caribbean Amalgamated Bank
ECCB	Eastern Caribbean Central Bank
ECCU	Eastern Caribbean Currency Union
FAA	Finance Administration Act
GOAB	Government of Antigua and Barbuda
GDP	Gross Domestic Product
IDA	International Development Assistance
IMF	International Monetary Fund
MoF	Ministry of Finance
MTDS	Medium Term Debt Management Strategy
OCR	Ordinary Capital Resources
OFID	OPEC Fund for International Development
PBL	Policy-Based Loan
PSIP	Public Sector Investment Programme
RGSM	Regional Government Securities Market
SBA	Stand-By Arrangement
SFG	Stanford Financial Group

EXECUTIVE SUMMARY

The Medium-term Debt Management Strategy (MTDS) 2016-2020 reveals the government's policies for financing its activities during this period. The strategy aims to fulfill some specific debt management objectives to include:

Maintain a satisfactory and prudent debt structure consistent with the Government's payment capacity; refinance high cost loans and credit facilities to reduce debt servicing and to adjust the maturity profile of Central Government Debt in a way that balances lower financing cost and risk; support the development of a well-functioning domestic and regional market;

Improve transparency.

The operational targets set for the risk indicators are as follows:

- Non – USD denominated loans should less than 20% of the debt portfolio
- Debt maturing in less than a year should be less than 15% and
- Average time to Maturity (ATM) would be less than or equal to 8.2 years

The MTDS is primarily focused on debt financed by the Government's Budget and is tailored to identify and categorize the types of creditors by their respective terms. Consequently, strategies were formulated to suit the types of instruments developed from these categories in the most prudent manner in order to meet the objectives of the debt strategy.

Also, this MTDS was developed in line with the primary macroeconomic variables recorded at the end of 2014. It also analyzes various strategy assumptions. Four strategies were tested as explained below:

- **Strategy 1**: (S1) assumes that the status quo is maintained throughout the projection period. There will be an average financing split of (64/36) in favour of domestic financing, over the years, however, this will lead to over-reliance on the RGSM with the securities offering on the market reaching EC$280M by 2020.

- **Strategy 2:** (S2***):*** From 2016-2017, this strategy's financing assumptions are identical to that of S1. However, (S2) assumes that borrowing will be more externally focused, with borrowing done bilaterally with the Chinese in CNY. The average financing split over the period is (57/43) in favour of domestic borrowing.

- **Strategy 3**: (S3) Assumes financing will be secured from the domestic market but the concentration will be on longer-term securities. Focus will be placed on the 5, 10 and 15-year bonds over the projection period.

- **Strategy 4**: (S4) Assumes a combination of financing from the Chinese in USD and CNY and from the domestic market where longer-term securities will be offered. Over the period, there will be an average financing split of (57/43) which favours domestic borrowing however the two outer years, 2019 and 2020 favour external financing.

From the analysis done using the MTDS tool, S4 was chosen as the most feasible strategy. The cost/risk trade-off when compared to S2 is still a better option even though the indicators for both strategies are very close. By 2020, the debt to GDP ratio for S4 will be 63.9% while with S2 it will be 63.8%. The refinancing risks for both strategies are very similar; however, the foreign exchange risk for S2 outstrips S4 by 6.26%. The target set for this indicator was that exposure to the RMY should be less than 25%. S2 was 27.33% while S4 was 21.07%.

An annual borrowing plan will be developed based on the assumptions made in the selected strategy. Thus, the borrowing plan will reflect any upcoming auctions and subsequently any new borrowings externally where the Chinese play a pivotal role. However, borrowing will also be contracted from other multilateral sources.

In view of the fact that the MTDS is constructed on a macroeconomic framework, it will be crucial to have consistent monitoring of macroeconomic and market developments.

Significant changes could impact the domestic economy which could influence an investor's perception on the risk linked to government issued securities.

The Ministry of Finance will carry out regular monitoring and evaluation of performance and progress made on the MTDS. This would be assessed by a quarterly public debt report followed by an annual update. Also, the quarterly report will comprise an analysis of the performance of the preceding quarter, which will disclose any potential risks and advise on possible measures to allay such risks in the following quarter. Any change that is significant and continuous could mean a potential modification of the strategy going forward.

Section 1: Introduction

The Government of Antigua and Barbuda remains committed to place public finances on a sustainable footing and establish the basis for economic growth, despite the many challenges it faces in this persistent global economic crisis. However, when the three-year Stand By Arrangement (SBA) with the IMF ended in June 2013, the fiscal stance adopted during the program was relaxed and this was further exacerbated with the run up to the general elections in June 2014. Consequently, scheduled debt repayments to external creditors could not be met and with limited cash flow options, arrears that were previously normalized have re-emerged.

The Government has introduced a series of measures to address its fiscal imbalances; however, arrears are projected to grow. Persistent cash flow issues along with other financial and banking problems, signify potential risks. Conversely, the prospect of the funding to be received from the Citizen by Investment Program (CIP) and foreign direct investment could considerably improve the country's economic outlook. Nonetheless, these would not preclude the need for the Government to make some essential policy adjustments.

Thus, the need for the design and implementation of a Medium Term Debt Management Strategy (MTDS) for Antigua and Barbuda could therefore not be overemphasized. This MTDS will look at specific plans to be accomplished in the medium term 2015-2020 with the explicit intent of ensuring that the debt management objectives are met.

Section 2: Debt Management Objectives

The overall objective of the MTDS is to ensure that debt management policies provide support to the on-going Medium Term Development Strategy of the government, while ensuring that Government's financing needs and obligations are met on a timely basis, in a cost-effective manner, with a prudent management of risk.

Specifically the Debt Strategy will seek to:

i. Maintain a satisfactory and prudent debt structure consistent with the Government's payment capacity;

ii. Refinance high cost loans and credit facilities to reduce debt servicing and to adjust the maturity profile of Central Government Debt in a way that balances lower financing cost and risk;

iii. Support the development of a well-functioning domestic and regional market;

iv. Improve debt management functions through greater transparency in the operations of the Debt Management Unit.

Section 3: Review of Medium Term Debt Management Strategy (MTDS) 2013-2017

The government prepared an MTDS in 2013 with the support of the CANEC Debt Management Advisory Services (DMAS). The strategy was prepared for the period 2013 to 2017. It proposed prioritizing external financing on concessional terms from multilateral and bilateral creditors, while at the same time developing the domestic capital markets. The success of the IMF Stand By Arrangement improved the Government's credit worthiness and the Government was able to approach new creditors and re-engage existing ones. The Regional Government Securities Market continued to be a viable source of funds for debt financing and short-term cash flow management.

The strategy was skewed heavily towards multilateral sources. Of the new financing projected, 44.2 percent was external and 55.8 percent was domestic financing. Financing from multilateral sources was projected at 32.8 percent. And bilateral financing was 11.4 percent. Securities accounted for 32.1 percent of new domestic financing and the short-term commercial facility made up 4.3 percent. The new financing included financing for the resolution of ABI Bank Ltd, as well as the last disbursement of the Policy Based Loan from the Caribbean Development Bank (CDB) due for disbursement in 2013.

At the end of 2013, the total debt stock amounted to EC$3,094.78m[4]. The public debt to GDP ratio rose by 5.1 percent to 93.2 percent in 2013, from the 88.1 percent recorded at the end of 2012. By the end of 2013, 13 percent 0f the domestic debt was attributed to RGSM securities, an 8 percent increase over 2012. Loans from the domestic banks and other financial institutions, accounted for 52 percent of the debt, the Non-RGSM securities recorded the second highest percentage (28 percent) of the domestic debt with the floating debt and the overdraft representing 5 percent and 2 percent respectively.

Of the XCD$466.6 million which was disbursed, most of the disbursed funds (XCD$213.7 million) were received from Credit Suisse and China EXIM Bank. Credit Suisse funds were used to repay a Commercial Paper that was used to finance works done on the runway at the VC Bird International Airport and to complete outstanding work. Disbursements from China EXIM Bank (XCD$102.4) were to fund expansion works on the V.C Bird International Airport Terminal Project Loan signed in 2010. Plans to resolve ABI bank limited and the corresponding financing to do so were not executed in 2013 as planned.

The government continued to work towards the objective of developing the RGSM but did not fulfill the plan of reducing reliance on overdrafts and increasing its options for

[4] This figure includes the total amount of the Credit Suisse debt for the purpose of this report. Otherwise only the amount that is guaranteed by the central government is reported; USD $24.65 M

financing through bilateral and multilateral sources. The bulk of disburesemnts in 2013 came from a commercial source.

This prompted the government to make plans for the drafting of a new MTDS in 2015. The year 2014 was an election year.

Figure 1- Public Debt Stock 2010-2014

Outstanding Total Public Debt Stock 2010-2014						
	in XCD$ millions			in % of GDP		
	External	Domestic	Total	External	Domestic	Total
2010	1165.0	1544.4	2709.4	38.0%	50.4%	88.4%
2011	1260.0	1582.5	2842.5	41.3%	51.9%	93.2%
2012	1202.0	1639.0	2841.0	37.0%	50.4%	87.3%
2013	1427.5	1667.3	3094.8	44.0%	51.4%	95.5%
2014	1397.8	1888.9	3286.7	40.8%	55.1%	95.9%

Figure 2: Selected Economic Indicators

	2010	**2011**	**2012**	**2013**	**2014**
GDP (Market Prices) (1).	3,065.96	3,050.78	3,252.73	3,199.52	3,370.02
Real GDP Growth	(8.53)	(1.87)	3.61	1.54	4.21
GDP per Capita (EC$) (1)	33,766	35,969	34,522	33,336	34,469
Annualised Inflation Rate	2.92%	4.04%	1.84%	1.06%	1.33%
Balance of Payments (in EC$ million)					
Exports	1,414.35	1,451.94	1,477.42	1,484.51	1,492.54
Gross Tourist Receipts	803.90	841.77	861.30	848.17	861.86
Imports	1,833.11	1,731.69	1,895.35	1,946.13	1,957.13
Current Account (% of GDP) (1).	-10.34%	-15.53%	-14.59%	-15.25%	-15.15%
Capital and Financial Account (net)	409.69	476.24	578.38	655.87	510.64
ECCB Net Foreign Assets	2,498.31	2,717.94	3,031.40	3,149.94	3,804.49
Public Finance (in EC$ million)					
Overall Fiscal Balance (% of GDP) (1)	-0.26%	-3.61%	-1.20%	-3.44%	-0.71%
Primary Balance (% of GDP) (1)	1.86%	-1.51%	1.24%	-1.63%	2.23%
Interest / Revenues (as % Fiscal)	9.29%	10.27%	11.61%	9.59%	14.45%
Public Debt (in EC$ million)	2,783.90	2,819.30	2,831.10	3,069.78	3,287.31

Gross Domestic Debt	1,595.60	1,629.30	1,639.20	1,667.98	1,903.95
Gross External Debt	1,188.30	1,189.90	1,191.90	1,401.80	1,383.36
Public Debt (% of GDP) (1)					
Gross Public Debt	90.80%	92.41%	87.04%	95.95%	97.55%
Gross Domestic Debt	52.04%	53.41%	50.39%	52.13%	56.50%
Gross External Debt	38.76%	39.00%	36.64%	43.81%	41.05%

Section 4: Assessment of the Macroeconomic Environment

The major contributors to economic activity in Antigua and Barbuda are tourism, construction, the public sector and wholesale and retail activity. During 2014 the economy grew by 4.2 percent due to an increase of economic activity in the public sector, wholesale and retail sector and construction. Tourism as represented by hotels and restaurants grew by 5.3 percent.

In 2015, economic activity is expected to decelerate in to reflect growth of 2.6 percent. Based on the data from the first half of 2015, there was a decline in tourist arrival of 3.6 percent and activity in the construction sector was not as robust as 2014. Inflation was low at 0.6 percent. Hotels and Restaurants is only expected to only grow by 1.6 percent while construction is expected to grow by 5.6 percent. Wholesale and retail activity is expected to grow by 3.8 percent.

Antigua and Barbuda continues to face challenges on its fiscal accounts. In order to ensure fiscal and debt sustainability and achieve a debt to GDP target of 60 percent in 2030, the government has decided to pursue fiscal policy that would lead to primary surpluses over the medium term.

The overall fiscal deficit amounted to $110.0 million (3.2 percent of GDP) in 2014, while the primary deficit represented 2.0 percent of GDP. Borrowing from the domestic financial system and an accumulation of both external and domestic arrears financed the deficit. The current account deficit amounted to $56.3 million (1.6 percent of GDP). Preliminary estimates for 2015 indicate an improvement in the fiscal performance in 2015 with a possible small primary deficit of 0.2 percent of GDP. This was due mainly to high collections of corporate income taxes and consumption taxes.

Over the medium term the government is aiming to achieve primary surpluses of 3 percent of the GDP by improving expenditure management and controls, revenue generation and debt management. The goal is to generate an underlying primary balance of no less than 3 percent of GDP in 2016. The additional resources would help to fund implementation of key projects that can create employment and expand economic output.

Based on projections provided by the Eastern Caribbean Central Bank, the economy of Antigua and Barbuda is expected to grow by 2.8 percent in 2016 and 2.7 percent in 2017. However there is some optimism that this growth could be larger based on the planned investments of EC$3 billion by the government. Strong growth will positively impact the outcome of the debt strategy.

Section 5: Medium Term Debt Strategy 2016-2020

Financing Assumptions

The Government intends to continue prioritizing external financing on concessional terms from multilateral and bilateral creditors, while at the same time developing the domestic capital markets. The Regional Government Securities Market will continue to be a viable source of funds for debt financing and cash flow management. These pricing assumptions are based on the existing terms in the debt portfolio, ongoing negotiations and market conditions.

The pricing assumptions[5], which underlie the 2015-2020 MTDS projections, are shown in table 1 below.

Table 1: Pricing Assumptions

[5] These pricing assumptions are the terms used for the representative instruments in the MTDS analytical toolkit and are based on prevailing terms and market conditions.

Currency Type	Instrument Type / Name	Interest Type	Interest Rate %- Base rate if Variable	Grace (y)	Maturity (y)
FX	Bilateral (a)	Fix	1.38%	4	15
FX	Bilateral (b)	Fix	1.27%	7	25
FX	Bilateral (c)	Var	0.37%	1	12
FX	Multilateral (a)	Fix	2.35%	6	27
FX	Multilateral (b)	Var	1.93%	4	18
FX	Commercial (a)	Fix	0.00%	4	5
DX	Commercial (b)	Fix	8.26%	0	15
DX	Other Domestic	Fix	0.44%	0	30
DX	Statutory Bonds	Fix	2.00%	20	30
DX	15 Year Bond (RGSM)	Fix	5.85%	7	15
DX	5 Year Bond (RGSM)	Fix	6.96%	2	5
DX	T-Bills RGSM	Fix	5.13%	0	1
DX	Bank Resolution (Bond)	Fix	0.00%	5	20

Description of Alternative Financing Strategies

The analysis compares a number of alternative strategies. An assessment is carried out on the relative performance of four strategies, with a differentiation in the financing sources for each. Strategy 1 assumes the current borrowing practices are maintained, which is maintaining the status quo of financing the gap more heavily from domestic sources such as the RGSM, while Strategies 2 -4 attempt to reduce interest costs and extend maturities by relying more heavily on external financing and long term domestic securities.

The candidate strategies are described below. In the first and second year of all strategies, the financing mix is fixed with a 75:25 and 70:30 domestic to external funding ratio respectively given already identified financing. The alternative strategies are therefore elaborated in years three to five of each strategy. Table 2 below shows the percentage of gross borrowing over the five years under each alternative strategy.

Table 2: Percentage of Gross Borrowing over projection period

% of gross borrowing - Over Projection Period					
New debt		S1	S2	S3	S4
Bilateral (a)	FX	3%	3%	2%	9%
Bilateral (b)	FX	10%	23%	8%	16%
Bilateral (c)	FX	0%	0%	0%	0%
Multilateral (a)	FX	2%	1%	2%	3%
Multilateral (b)	FX	13%	11%	12%	10%
Commercial (a)	FX	6%	3%	5%	2%
Commercial (b)	DX	7%	6%	3%	3%
15 Year Bond (RGSM)	DX	0%	0%	3%	2%
5 Year Bond (RGSM)	DX	5%	4%	15%	11%
T-Bills RGSM	DX	40%	34%	36%	28%
Bank Resolution (Bond)	DX	14%	14%	14%	15%
External		35%	41%	28%	40%
Domestic		65%	59%	72%	60%

Strategy 1 (S1): Assumes that the status quo is maintained throughout the projection period. This strategy focuses on the domestic capital market through the issuance of securities on the RGSM. The Government began issuing securities on the RGSM in 2006 and has maintained a presence ever since. From 2017, there will be a 60/40 financing split in favor of domestic financing, however, this will lead to over-reliance on the RGSM with the securities offering on the market reaching EC$280M by 2020. 81 percent of new financing will be domestic with external funds from multilateral and bilateral creditors average 10 and 35 percent respectively.

Strategy 2 (S2): From 2015-2017, this strategy financing assumptions are identical to that of S1 however from 2018 emphasis is placed on Chinese borrowing in CNY. External borrowing as a percentage of total increases to 50.0 percent in 2018, and jumps to 55 percent and 60.0 percent in 2019 and 2020 respectively. While the China loans carry fairly low fixed interest rates, exchange rate risk exists.

Strategy 3 (S3): This strategy demonstrates that between 2017-2020, new financing will be secured with a 70/30 split in favor of domestic financing. These funds would be sourced mainly from the domestic market with a concentration on longer-term securities. Focus will be placed on the 5, 10 and 15-year bonds over the projection period. External borrowing would come from a combination of multilateral and bilateral sources.

Strategy 4 (S4): This strategy combines external and domestic financing over the latter three years by 50/50 in 2018, 55/45 in 2019 and 60/40 in 2020. The new externalfinancing will be sourced mainly from China in both CNY and USD (80 percent of external financing) and from other multilateral sources. Domestic financing will be in the form of longer term securities of 5-15 yearsand TBills.

Description of Shock Scenarios

The strength of each alternative strategy is assessed on the basis of the baseline scenario for interest and exchange rate changes. Moderate and Extreme shocks were applied in both instances. For the purpose of the analysis, we assume that exchange rate shocks materialize in 2016 and are sustained through the remainder of the strategy period whereas the interest rate shocks were applied for the entire projection period.

Scenario 1: A 10.0 percent appreciation of the Renminbi (RMY) that materializes in 2016 and is sustained through the remainder of the time horizon (through 2020). This is taken into consideration due to Antigua's exposure to RMY (13% of total debt) in 2014.

Scenario 2: An interest rate shock of 100 basis points for bonds and variable rate loans, and 68 basis points for T-Bills. This scenario corresponds to a moderate interest rate shock to the instruments whereby testing the change in market conditions.

Scenario 3: This is an extreme interest rate shock applied to bonds, variable rate loans and T-Bills. The rate increases by 100 basis points above those of scenario 2.

Scenario 4: This scenario corresponds to a 5.0 percent appreciation of the RMY and is combined with the interest rate shock of scenario 2. This tests the impact of concurrent shocks on the strategy.

Cost-Risk Analysis of Alternative Debt Management Strategies

The performances of the four alternative strategies were assessed in terms of their relative cost and risk and the country debt targets. A number of indicators were considered; for example, the performance of each strategy in terms of the implied interest rate, the refinancing and *foreign exchange risk.* The results are shown in table 1 below. The indicators for the current debt portfolio (2014) are shown as well as the performance in 2012 when the first strategy was developed.

Table 3: Cost and Risk Indicators for Alternative Strategies

Risk Indicators		2012	2014	As at end 2020				Targets
			Current	S1	S2	S3	S4	
Nominal debt as % of GDP		73.3	76.9	60.7	60.6	60.9	60.6	
Interest payment as % of GDP		3.1	2.6	2.3	2.2	2.4	2.3	
Implied interest rate (%)		4.2	4.3	3.8	3.7	4.0	3.7	
Refinancing risk	Debt maturing in 1yr (% of total)	10.6	13.5	13.4	10.6	13.6	10.4	< 15%
	ATM Total Portfolio (years)	10.2	8.2	7.3	8.2	6.9	7.8	=>8.2 years
Interest rate risk	Fixed rate debt (% of total)	64.1	91.3	86.9	89.4	88.5	90.5	
FX risk	RMY Debt as % of Total	6.8	13.7	17.0	26.5	15.1	20.5	<20%

Table 3 shows that if the current policy is maintained throughout the projection period (S1), refinancing risk will be high since 13.5 percent of total debt will be maturing in one (1) year and the average time to maturity is 7.3 years. When compared to the current strategy, nominal debt as a percentage of GDP has declined by 16.2 percent to 60.7 percent, which is inline in achieving debt to GDP of 60 percent by 2030. All other strategies maintained the same level of debt to GDP. Refer to Figure 3, which shows that the debt service payments would be most costly and the interest payments will be at a moderate cost when compared to the other strategies.

S2, bilateral funding from China, is least costly however it increases the RMY exposure to 26.5 percent by end 2020 compared to 13.7 percent as at end 2014; this increase in foreign exposure does not meet the operational target. The lower cost in this strategy arises from the lower interest rate offered by China funding.

S3 has the least foreign exposure however both cost and refinancing risks are high. This is evident in Table 1, which shows Implied interest rate is 4.0 percent and the average time to maturity is 6.9 years, does not meet the operational target. Additionally, Figures 1 and 2 in the Appendix shows that this strategy will be most costly and very risky by end 2020.

S4 has low cost and a manageable risk profile. This strategy shows that by end 2020, 10.4 percent of the total debt will be maturing in 1 year and only 20.5 percent of the debt will be denominated in RMY currency. Figures 1 and 2 in the Appendix further shows that S4 has low debt service payments and low interest payments to GDP by end 2020.

The strategy selected was S4 which is a combination of financing from the Chinese and longer-term securities from the domestic market. Based on the current strategy as at end 2014 and the operational targets, it was decided that the government needed to take another approach for financing the deficit. >> Despite only meeting one of the operational targets, the strategy proved that by end 2020 it will less costly and has a risk that the government will be able to manage.

Figure 3: Total Debt Service Payments to GDP as at end 2020

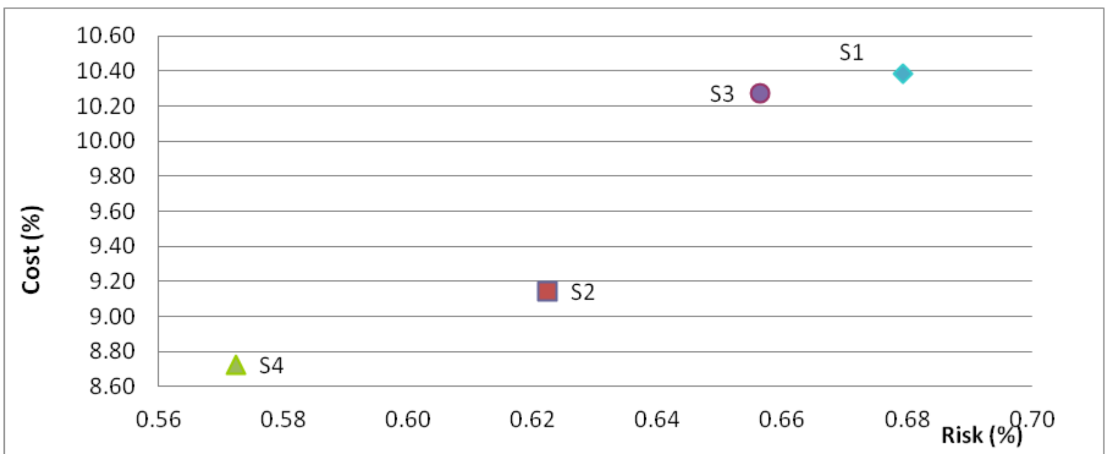
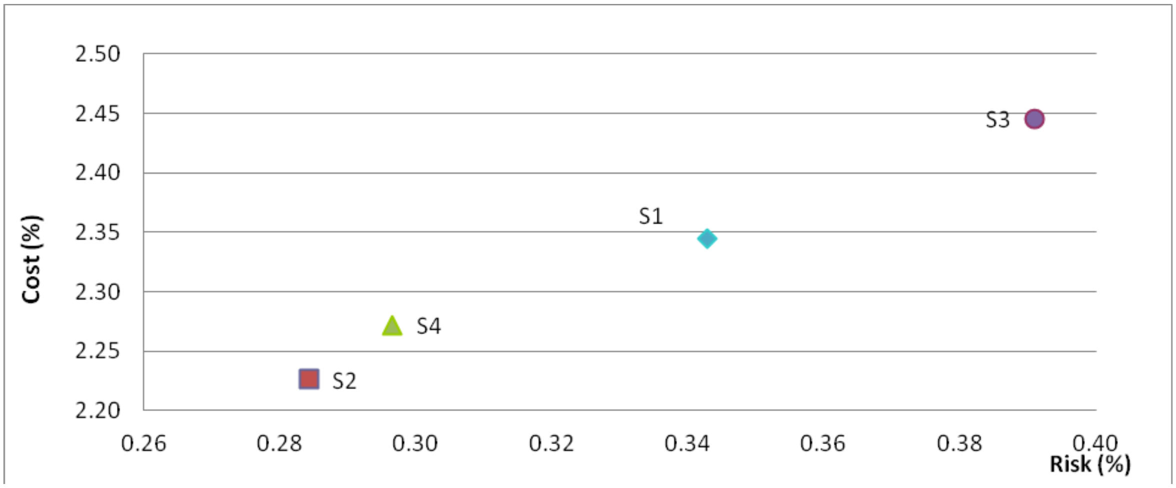


Figure 4: Interest Payments to GDP as at end 2020



Section 6: Implementation Methodology and Borrowing Plan

The development of the annual borrowing plan will be guided by the borrowing assumptions laid out in strategy 4 (*S4*). This plan should be in accordance with the Government's overall debt management objective to ensure debt sustainability.

With a view to adopting more prudent and transparent fiscal management practices as well as enhancing the functioning of the RGSM, the GOAB is continuously seeking ways to improve its systems of accountability and transparency. As a consequence, information on the cash flow and debt stock will be disclosed periodically to all investors, consistent with the rules of the Regional Debt Coordinating Committee (RDCC)[6].

The objectives, assumptions and risk indicators provide the platform for which the DMU would monitor and report on implementation of the selected strategy. A review of the MTDS will be done quarterly and will form part of the activities of the Unit in the yearly action plan. Based on the DeMPA requirements, the strategy should be updated annually, as debt data and borrowing could change drastically during the year. If the underlying assumptions for the macroeconomic framework, policy decisions and market trends do not hold, the strategy would be subject to review and possibly revised.

The MTDS will be presented in Parliament and made available to other key stakeholders involved in the debt management process. Continued collaboration with local, regional, and multilateral partners is critical to ensure the success of the strategy and achievement of the debt management objectives.

Borrowing Plan

Table 4: Borrowing Plan of Selected Strategy

% Borrowing by Creditor Type	2015	2016	2017	2018	2019	2020
External	**25%**	**30%**	**40%**	**50%**	**55%**	**60%**
Bilateral	3%	11%	32%	40%	44%	48%
Multilateral	15%	17%	8%	10%	11%	12%
Commercial	7%	2%	0%	0%	0%	0%
Domestic	**75%**	**70%**	**60%**	**50%**	**45%**	**40%**
RGSM						
Bonds	2%	21%	18%	20%	18%	16%
T-Bills	17%	49%	42%	30%	27%	24%
Bank Recapitalisation	47%	0%	0%	0%	0%	0%
Commercial	10%	0%	0%	0%	0%	0%

CONCLUSION AND NEXT STEPS

The performance of the medium term debt strategy will depend on the three main factors; the result of the fiscal performance over the medium term, the ability to find financing at low cost and risks, the reduction of arrears over the medium term. This would require that the debt management unit work more closely with the budget unit and treasury on fiscal forecasting and cash flow management.

The next steps to achieving the goals are:

1. Work with the treasury to improve cash flow performance. This will help the borrowing plan to be relevant to the borrowing needs.
2. Improve attention the risk management of guarantees
3. Amore rigorous assessment of borrowing terms and conditions
4. Work with development partners to improve the legislative framework for borrowing.

GLOSSARY

Amortization
Principal repayments.

Average Term to Maturity (ATM)
A measure of the weighted average time to maturity of all the principal repayments.

Average Time to Re-fixing (ATR)
A measure of the weighted average time until all principal payments in the debt portfolio become subject to a new interest rate.

Basis point (bp)
One hundredth of 1% (i.e. 0.01%).

Benchmarks
Informal term for those bonds, usually with a large outstanding amount and a coupon in line with the prevailing general level of interest rates, which are used by participants in other markets to price other instruments of similar maturity, such as corporate bonds and as a consequence usually trade with high liquidity.

Competitive bid
A bid for the bond, which, if successful, would be filled at the price stated by a bidder in a conventional bond auction. For index-linked auctions such a bid would be filled at the strike price of the auction.

Coupon
Total annual interest paid on a bond, usually in two equal, semi-annual installments.

Duration
The weighted average time to maturity of a bond's cash flows, where the weights are defined as the present values of the cash flows (this is "Macaulay" duration). "Modified" duration is a variant of this and provides a measure of a bond's volatility, or sensitivity of the bond's price to changes in interest rates.

Liquidity
Description of the ease with which one can undertake transactions in the particular market or instrument. A market where there are always ready buyers and sellers willing to transact at competitive prices is regarded as liquid.

Market value
The value of an asset if it was sold in the market at its current price.

Maturity date
The date on which a bond/loan is redeemed/repaid.

Maturity Profile
A series of principal repayments up to final maturity

Primary market
The issuance of bonds by the GOAB at auction.

Redemption date
The date on which a bond is redeemed, also referred to as the maturity date.

Repo
Sale and repurchase agreement. A combined transaction providing for the sale and subsequent repurchase of (in this context) a bond.

Repo rate
The return earned on the cash leg of a repo transaction, expressed as an annual interest rate.

Settlement
Exchange of bond for assurance of payment; the conclusion of a securities transaction by delivery.

Settlement date
Date on which the transfer of bond and payment occur; by convention the next business day after the trade is conducted (T+1), although other settlement dates may be negotiated bilaterally.

Spread
a) The difference between the price a market maker will buy and sell a bond (bid/offer spread); and
b) The difference in yield between two bonds, (e.g. a 10s/30s spread will refer to the difference between the yield on a 10-year bond and a 30-year bond).

Strips
Separate Trading of Registered Interest and Principal Securities; for some ("strippable") bonds, the coupons and principal can be traded separately.

Treasury bill
A short-term obligation having a maturity period of one year or less and sold at a discount from face value.

Yield curve

In its simplest form this is the mathematical relationship computed across all bonds between yield and maturity.

Description of Instrument Types

Cash Management Instruments

- Overdrafts
- Revolving credits
- Treasury Bills

Long Term Financing Instruments

- Term Loans
- Syndicated Credits
- Bonds
- Debentures

Risk Management Instruments

- Standby Facilities / Backstops
- Interest Rate Swaps
- Repurchase Agreements (Repos)

STATISTICAL APPENDIX

Figure 5: Amortization Profile for Alternative Strategies

Figure 6: Total Debt Service Payments to GDP as at end 2020

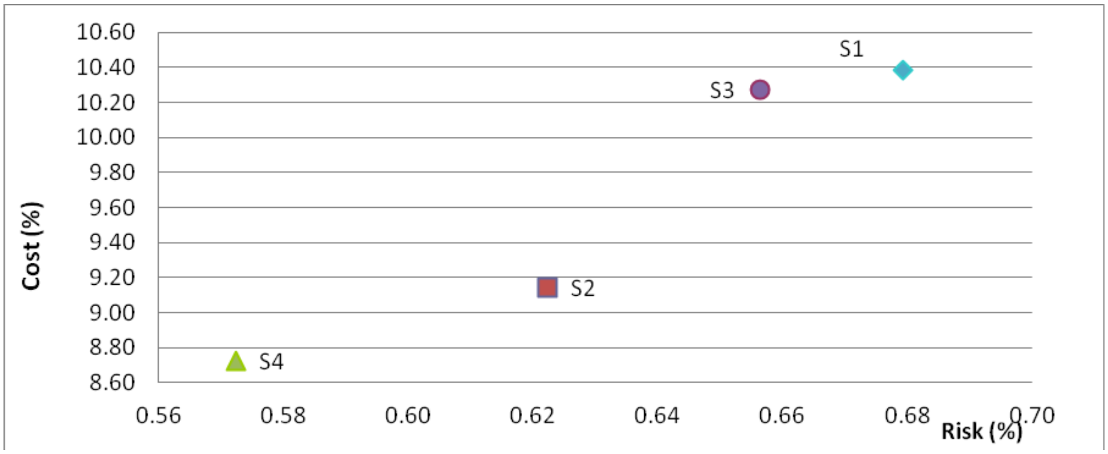


Figure 7: Interest payments to GDP as at end 2020

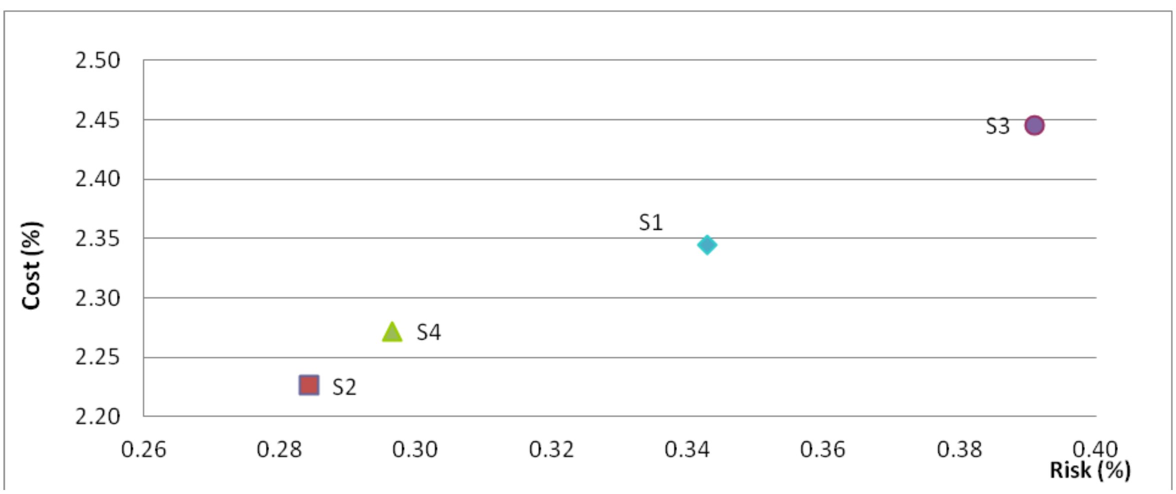


Figure 8: Composition of Debt by Instrument Type as at end 2014 (current) and as at end 2020 (for each strategy)

Figure 9: Risk Scenarios

Debt Stock to GDP ratio as at end 2020

Scenarios	S1	S2	S3	S4
Baseline	60.73	60.56	60.93	60.62
Exchange rate shock (0%)	66.29	66.72	66.31	66.44
Interest rate shock 1 (Moderate Shock)	61.37	61.16	61.62	61.23
Interest rate shock 2 (Extreme Shock)	62.08	61.83	62.37	61.90
Combined shock (0% depreciation and interest rate shock 1)	63.94	64.02	64.09	63.92
Max Risk	5.56	6.16	5.39	5.82

Interest Payments to GDP Ratio as at end 2020

Scenarios	S1	S2	S3	S4
Baseline	2.34	2.23	2.45	2.27
Exchange rate shock (0%)	2.45	2.34	2.55	2.38
Interest rate shock 1 (Moderate Shock)	2.51	2.36	2.63	2.41
Interest rate shock 2 (Extreme Shock)	2.69	2.51	2.84	2.57
Combined shock (0% depreciation and interest rate shock 1)	2.56	2.41	2.68	2.47
Max Risk	0.3	0.3	0.4	0.3

PV of Debt to GDP Ratio as at end 2020

Scenarios	S1	S2	S3	S4
Baseline	56.2	54.4	56.9	54.2
Exchange rate shock (0%)	60.8	59.3	61.4	58.8
Interest rate shock 1 (Moderate Shock)	56.8	54.9	57.6	54.7
Interest rate shock 2 (Extreme Shock)	57.5	55.5	58.4	55.3
Combined shock (0% depreciation and interest rate shock 1)	58.9	57.2	59.7	56.9
Max Risk	4.6	4.9	4.5	4.7

INFORMATIONAL APPENDIX

1. DEBT MANAGEMENT PERFORMANCE ASSESSMENT (DEMPA)

The DeMPA comprises a set of 14 debt management performance indicators and 33 dimensions, which aim to cover the full spectrum of Government debt management (DeM) operations as well as the overall environment in which these operations are conducted. While the DeMPA does not specify recommendations on reforms and/or capacity and institution building needs, the performance indicators do stipulate a minimum level that should be met under all conditions. Consequently, indicators for which the minimum requirements are not met indicate areas in which reform and/or capacity building would be most beneficial.

The scope of the DeMPA is central government debt management activities and closely related functions such as issuance of loan guarantees; on-lending, cash flow forecasting and cash balance management.

A debt management performance assessment (DeMPA) mission to St. John's, Antigua and Barbuda took place in September of 2015. The objective of the mission was to undertake a comprehensive assessment of debt management operations using the DeMPA debt performance indicators.

The assessment revealed that Antigua and Barbuda met or exceeded the requirements for effective debt management along the following dimensions of the DeMPA tool:

(i) Regarding coordination with fiscal policy, debt service forecasts are provided on time for the yearly budget preparation. In addition, the Ministry of Finance conducts an annual in-house debt sustainability analysis;

(ii) Borrowing on the RGSM meets high standards; and

(iii) Legal advisors are involved in the vetting stage of the negotiating process with external creditors.