ABOUT THIS STUDY

This study was supported by funding from the Commonwealth of The Bahamas. The views and opinions expressed in this study are solely those of the authors and do not necessarily reflect the views and opinions of the Commonwealth of The Bahamas, the Prime Minister, the Ministry of Finance, or any of the organizations with which the authors are or have previously been associated.

David Kamin (kamin@nyu.edu) is an Assistant Professor of Law at New York University School of Law. He focuses on tax and budget policy. Prior to joining NYU, Kamin served as a Special Assistant to the President for Economic Policy at the White House and as Advisor to the Director at the United States Office of Management and Budget. In those capacities, Kamin helped to formulate tax and budget policy for President Obama.

Jonathan Orszag (jorszag@compasslexecon.com) is a Senior Managing Director and member of the Executive Committee of Compass Lexecon. Orszag is also a Fellow at the University of Southern California’s Center for Communication Law & Policy and a Senior Fellow at the Center for American Progress. Previously, Orszag served on President Clinton’s National Economic Council and as the Assistant to the Secretary of Commerce and Director of the Office of Policy and Strategic Planning.

The authors are grateful to Michael Easterly, Georgi Giozov, John Hore, and Gloriana Alvarez for excellent research assistance.
I. INTRODUCTION

The government of The Bahamas is operating with a significant fiscal deficit. Between the 2007/08 and 2012/13 fiscal years, the country’s debt has increased from 32.3 percent to 56.7 percent of gross domestic product (GDP).\(^1\) Since 2008, debt held by external bondholders has tripled.\(^2\) Further indebtedness is likely to require greater exposure to the vagaries of international markets. Official projections suggest that if no changes are made, central government debt would exceed 60 percent of gross domestic product by 2014/15 and continue rising thereafter.\(^3\)

At the same time, the Bahamian economy is in a fragile state. The nation’s real gross domestic product grew by less than 2 percent in each of 2010, 2011, and 2012, after falling in 2008 and 2009.\(^4\) Unemployment stood at 15.4 percent in 2013, down slightly from 15.9 percent in 2011, but still significantly above the 9 percent average rate that had been obtained in the five years prior to the global financial crisis of 2008.\(^5\) The United States, The Bahamas’ largest market, continues to be mired in slow growth, with real GDP increasing by 1.9 percent in 2013.\(^6\)

An inefficient system of taxation compounds the difficulty of balancing the Bahamian budget. Revenues are highly dependent upon taxes on international trade and domestic transactions, which are relatively inefficient and unfair. Some of these taxes also conflict with The Bahamas’ express intention to join the World Trade Organization (WTO). Meanwhile, taxation of property has been inefficient and uneven, leading to loss of potential revenue.

\(^3\) Calculations based on data from the Ministry of Finance.
\(^4\) International Monetary Fund World Economic Outlook.
\(^5\) International Monetary Fund World Economic Outlook.
\(^6\) United States Bureau of Economic Analysis.
A. OBJECTIVES OF THIS STUDY

Pursuant to these considerations, the government of The Bahamas is considering proposals to generate new revenues to stabilize its budget and also to improve economic growth immediately and over the long term.

The purpose of this study is threefold:

- To assess the seriousness and potential impact of present structural imbalances and how to reduce them while strengthening growth;
- To evaluate alternative proposals for new revenue;
- To examine issues related to the size and timing of the value added tax (VAT);
- To suggest ways to enhance the government’s fiscal credibility.

B. FINDINGS AND RECOMMENDATIONS

Based upon evidence and academic research, we recommend that The Bahamas enact a VAT but raise less revenue than originally proposed. This lower revenue is consistent with a VAT rate in the range of 5 to 10 percent, depending on the breadth of the tax base and the size of offsetting tax cuts. Additionally, we recommend The Bahamas adopt a backstop to be triggered if debt does not fall as a share of the economy. Our conclusions are based upon the following findings:

- The Bahamian economy continues to suffer from heightened unemployment in the wake of the global economic crisis. At the same time, the government budget is on an unsustainable long-term trajectory. Government fiscal policy should be crafted to address both challenges.

- The Bahamian tax system is generating insufficient revenue to support the government over the long term and, given its heavy reliance on tariffs, is relatively unfair and inefficient.

- A value added tax is superior to the viable alternatives in The Bahamas in terms of revenue generation, enforceability, and compatibility with economic growth,
and it could be designed to be less regressive than some of the tariffs that it would replace.

- Based on the most recent government projections, however, a VAT of 15 percent raising over 2 percent of GDP in revenue—the VAT initially proposed by the government—may not be necessary to put the Bahamian budget on a sustainable trajectory. Furthermore, immediate implementation of a VAT at this rate would substantially reduce economic growth over the short and medium terms, which would result in even higher unemployment.

- In combination with other fiscal reforms, a VAT raising less revenue than initially proposed—in the range of 1 percent of GDP in incremental revenue rather than over 2 percent—should be sufficient to address the long-term fiscal challenge and would be substantially less of a drag on short-term economic growth and employment. This is consistent with a VAT with a rate in the range of 5 to 10 percent, depending on the breadth of the tax base and the size of offsetting tax cuts. In the event that more revenue is needed by the government in the future to address deficits, establishing the VAT now will give the government much greater flexibility at that point, which will also enhance credibility with current credit markets.

- To maintain credibility with bondholders even as the government enacts a VAT at a different rate than it initially proposed, it would be advisable to establish a “trigger” that raises rates on the VAT if specified fiscal goals are not met.

C. STRUCTURE OF THIS STUDY

This study proceeds in four parts. Part II considers the effects of budget imbalances on economic performance and assesses The Bahamas’ present vulnerability to these effects. Part III discusses efforts to reform the current tax system and compares proposals for new taxes, including payroll taxes, personal income taxes, corporate income taxes, sales taxes and value added taxes. Part IV assesses the likely effects of different levels of the VAT, the administration of the tax, and trigger mechanisms. Part V explains the implementation of a proposed fiscal rule.
II. MAGNITUDE AND CONSEQUENCES OF BUDGET IMBALANCES

High levels of sovereign debt put nations in precarious positions, especially if those debts are increasing. Empirical studies have shown that government debt constrains economic growth when it becomes too large relative to gross domestic product. Investor beliefs about the credibility of government promises to reduce debts influence the levels of debt that individual countries are able to sustain over the long term.

While large debts constrain growth, paying off those debts removes resources from the private sector and therefore also has negative effects on the economy, especially during periods in which the economy is not operating at or near full employment. Empirical studies differ regarding the magnitude of these effects, but they cluster around a 0.3 percent decrease in growth for every 1 percent increase in tax revenue. Significantly, there is evidence that this “multiplier” is even greater when an economy is operating below full employment.

Right now, The Bahamas is in a favorable but precarious position. Its debt levels are healthy relative to the benchmarks established in the economics literature. Economic growth is sluggish, but positive. However, the rate of growth in the national debt has put the country on a trajectory where it could reach more dangerous levels, and the absence of a credible plan to halt this increase could raise the probability of sharp responses by the credit markets that could be damaging to the Bahamian economy. Investors are presently weighing Bahamian policymakers’ commitment to a sustainable fiscal path. Even absent a sharp response by the credit markets, large deficits over the long term could lead to lower levels of economic growth.

A. RESEARCH ON GOVERNMENT DEBT AND FISCAL POLICY

1. Research on fiscal policy and long-term growth

   (a) Debt/GDP ratios and economic performance

Research has shown a negative relationship between budget imbalances and economic growth over the long term. Furthermore, while the issue is more controversial, several studies have found that economic growth becomes even more significantly curtailed at
higher debt-to-GDP ratios. The most frequent result has been a “threshold effect” at around 90 percent of gross domestic product. These ratios are likely lower for developing countries. A study of 75 developing countries found that debt became a drag on growth at 64 percent of GDP, and a study of 12 countries in the Caribbean community put the threshold at 57 percent of GDP. However, other studies suggest that there is a negative relationship between high annual deficits and growth over the long term, irrespective of the debt-to-GDP level—which indicates that there could be reason to reduce deficit levels over the long term even if debt-to-GDP ratios are not elevated.


(b) **The importance of credibility**

The current level of deficits and debt, however, are not the only considerations. Reinhart, Rogoff, and Savastano (2003) found that countries’ histories of default and inflation played heavily into investors’ willingness to tolerate elevated levels of debt, and that “safe” levels of external debt for countries with poor credit histories may be as low as 15 percent of GNP.\(^{10}\) The quality of political institutions may also factor into a nation’s capacity for handling higher debt-to-GDP ratios.\(^{11}\)

Consistent with these results, the views of credit rating agencies have an influence on the interest rates that countries pay on their debts above and beyond what economic fundamentals would imply. Examining a panel of 35 emerging market countries, Jaramillo and Tejada (2011) found a one-notch upgrade within the investment grade asset class reduced the “spread” of a country’s interest payments over a riskless asset by between 5 and 10 percent, holding the current macroeconomic factors constant (i.e., debt-to-GDP ratio and growth). The effect was much larger when countries moved across the threshold between “investment grade” and “speculative” ratings. Specifically, if Standard & Poor’s were to upgrade a nation from BB+ to BBB-, spreads on its debt would decrease by 36 percent.\(^{12}\) Such results suggest that it is not only current deficit and debt levels that matter to credit markets but also credibility, as gauged by experts like the ratings agencies.

(c) **The role of “fiscal rules”**

Research in recent years has shown that enacting a “fiscal rule” is one way for a government to pre-commit to maintaining a sustainable fiscal trajectory—and that establishing such a fiscal rule can in fact help a government do so.\(^{13}\) In the words of

---


\(^{11}\) See Kourtellos et al. (2012).


\(^{13}\) International Monetary Fund, Fiscal Affairs Department, “Fiscal Rules—Anchoring Expectations for Sustainable Public Finances” (2009).
authors writing for the IMF, fiscal rules serve as “a permanent constraint on fiscal policy in terms of a summary indicator of fiscal performance.”\textsuperscript{14} Such rules have become increasingly popular around the world. As of 2009, the IMF reported that 80 IMF members had established national or supranational fiscal rules, as compared to seven countries as of 1990.\textsuperscript{15} Evidence over the last several decades suggests that fiscal rules do, in fact, help lead governments to sustainable fiscal trajectories and, moreover, can help strengthen a government’s credibility with the credit markets—and, as a result, lower borrowing costs.\textsuperscript{16} In particular, the IMF found that, in Organisation for Economic Co-operation and Development (OECD) countries with a prior history of fiscal responsibility (debt-to-GDP ratios below 70 percent), establishing a fiscal rule lowered 10-year bond spreads by 10 to 20 percent in the long run—though they also found no effect for countries without the prior history of fiscal discipline.\textsuperscript{17}

2. Research on fiscal policy and short- and medium-term growth

(a) Magnitude of the fiscal multiplier

While increasing debts are a concern especially over the long term, paying them off too rapidly can have negative effects on economic growth in the short and medium term. In other words, timing matters in assessing the effects of deficit reduction on growth.

In this respect, the concept of a fiscal multiplier is of primary importance. The fiscal multiplier is the ratio of a change in output (ΔY) to an exogenous change in the fiscal deficit (either ΔG for a change in government expenditure or – ΔT for a change in taxation) relative to the baseline.\textsuperscript{18} A tax multiplier of, say, -0.3 implies that, for any increase in tax revenues, output would fall by 30 percent of that. We estimate the effects of the imposition of VATs raising three different levels of revenue on the Bahamian


\textsuperscript{15} International Monetary Fund, Fiscal Affairs Department (2009), p. 7.

\textsuperscript{16} Id.

\textsuperscript{17} Id. at pp. 47–48.

economy in Part IV. Here, we consider some evidence regarding a central assumption underpinning that analysis, the magnitude of the tax multiplier in The Bahamas.

According to the traditional Mundell-Fleming model, the effectiveness of fiscal stimuli such as government expenditure and taxation is determined by a range of factors including trade openness, the exchange rate regime, the state of public finances, and the level of financial development. In light of weaker global economic conditions in recent years, there has been a resurgence of research that attempts to quantify the effect of fiscal policy on output and other measures of economic activity, in particular during economic downturns. For The Bahamas, the immediate concern is that significant austerity, including imposition of a VAT with a high rate, could significantly lower disposable income and consumer spending.

The macroeconomics literature provides a wide range of estimates for fiscal multipliers that vary by estimation methodology, country, time period, and the type of fiscal stimulus under consideration. In attempting to estimate the tax multiplier for The Bahamas, the following factors are relevant:

- Small, open economies such as The Bahamas tend to have smaller multipliers than large, closed economies. Theoretically, this is because the leakage from a small, open economy due to imports or purchases of internationally tradable goods diminishes the recirculation of spending in the economy.\(^\text{19}\)

- The response of output to government consumption is larger in high-income countries like the Bahamas than in low-income countries.\(^\text{20}\)

- Countries under fixed exchange rate regimes have larger multipliers than those under flexible exchange rate regimes. A fiscal expansion increases output, raises interest rates, and induces an inflow of foreign capital, which creates pressure to

---


appreciate the currency. When exchange rates are fixed, the Central Bank expands the money supply to prevent this appreciation, so monetary policy accommodates the rise in output.\footnote{Id. at p. 246. For additional support that multipliers are large under fixed exchange rate regimes, see Corsetti, Giancarlo, Andre Meier, and Gernot J. Müller, “What Determines Government Spending Multipliers?” Economic Policy 27, no. 72 (2012), pp. 521-565, and Born, Benjamin, Falko Juessen, and Gernot J. Müller, “Exchange Rate Regimes and Fiscal Multipliers,” Journal of Economic Dynamics and Control 37, no. 2 (2013), pp. 446-465.}

- Fiscal multipliers tend to be lower when debt is high.

These findings have mixed implications for the tax multiplier in The Bahamas. On the one hand, the multiplier could be higher due to the fixed exchange rate and a relatively low debt-to-GDP ratio, but this may be offset by the fact that The Bahamas is a small, open economy. It is clear that the imposition of VAT will have a negative effect on output in the short term, but the size and persistence of the effect is unclear.\footnote{This is consistent with the findings of Blanchard and Perotti (2002). See Blanchard, Olivier, and Roberto Perotti, “An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output,” Quarterly Journal of Economics 117, no. 4 (2002), pp. 1329-1368.} In terms of multiplier estimates for The Bahamas, Spilimbergo et al. (2009) suggest a tax multiplier of about 0.25 for small open economies,\footnote{Spilimbergo, Antonio, Martin Schindler, and Steven A. Symansky, “Fiscal Multipliers,” International Monetary Fund Staff Position Note, no. 09/11 (2009).} while Muir & Weber estimate a VAT multiplier of 0.38 for Bulgaria, another small open economy with a fixed exchange rate.\footnote{Muir, Dirk, and Anke Weber, “Fiscal Multipliers in Bulgaria: Low But Still Relevant,” International Monetary Fund Working Paper, no. 13/49 (2013).}

In Part IV below, we assume a multiplier of 0.3 in the short run, while also considering 0.1 and 0.7 as low and high alternatives.

\begin{itemize}
\item \textbf{(b) The importance of timing}
\end{itemize}

There is also mounting evidence that the effects of fiscal policy can vary with the underlying macroeconomic conditions. The fragile recovery currently underway in the Bahamian economy could be derailed by the imposition of a VAT. Auerbach and Gorodnichenko (2011) use data from a number of OECD countries to show that GDP...
multipliers of government purchases are larger when an economy is operating below full employment, while the responses of other key macroeconomic variables also vary over the business cycle.\textsuperscript{25} Baum et al. (2012) analyze the relationship between fiscal multipliers and the underlying state of the economy for the G7 countries (excluding Italy), finding that the position in the business cycle affects the impact of fiscal policy on output: On average, government spending and revenue multipliers tend to be larger in downturns than in expansions.\textsuperscript{26} Muir & Weber (2013) find that the impact of fiscal policy on economic activity is larger in downturns, but indirect taxes (such as VAT) have a relatively smaller impact than capital spending and direct taxes.\textsuperscript{27}

Some have offered evidence in favor of “expansionary fiscal contractions,” where short-term gains in economic activity are driven by contractionary fiscal policy if the policy raises confidence in the government’s solvency and reduces the need for disruptive adjustments later on.\textsuperscript{28} However, this runs contrary to the substantial majority of the economic literature, and the mechanism for such an immediate expansion in the face of austerity would be through a significant reduction in elevated interest rates. However, The Bahamas is not currently in a high interest rate environment, suggesting that an expansionary fiscal contraction is highly unlikely in The Bahamas.

\textbf{B. The Bahamas in perspective}

\textbf{1. Debt levels}

At present, Bahamian sovereign finances are not in any danger zone indicated in the empirical literature. At less than 60 percent of gross domestic product, its debt does not exceed even the lower threshold estimated for developing countries. About three-quarters


\textsuperscript{27} Muir and Weber (2013).

of the debt, including all short-term treasury bills, is held domestically, and capital controls limit the ability of Bahamian financial institutions, public corporations, and pension funds to invest in alternative assets. Refinancing risk is therefore low in the near term. Maturities on Bahamian long-term debt are spaced relatively evenly over the next 24 years, so no fiscal shocks are anticipated from obligations to pay large lump sums.

However, absent action, Bahamian finances are on an unsustainable trajectory. The following figures based on the government’s budget projections as of its 2013/14 budget communication and updated for actual results in 2012/13. If the country were to continue the policies in place before the government-announced deficit-reduction measures in this year’s budget, deficits would not fall below 4.5 percent of GDP over the next four years—and would average roughly 5 percent of GDP over that period. That would cause the debt-to-GDP ratio to continue to rise, climbing above 65 percent of GDP and continuing to rise from there.

Source: Authors' calculations based on Bahamian government projections.

29 Central Bank of The Bahamas, Quarterly Statistical Digest 22, no. 4, Nov. 2013, 59.
30 Id.
Even in the absence of the VAT, the government’s announced deficit reduction measures should make a substantial difference in the country’s fiscal trajectory, if they are adhered to. Importantly, this assumes no offsetting tax reductions in the absence of a VAT including those required by WTO accession. Government projections indicate that, absent any implementation of a VAT (and offsetting tax reductions), deficits over the next four years would fall below 2 percent of GDP and the debt-to-GDP ratio would also begin to drop slowly—after peaking in the low 60s as a share of the economy. This reflects implementation of an ambitious fiscal consolidation strategy. This fiscal strategy would cut the combination of recurrent and capital expenditures by 2 percent of GDP over this period compared to spending as of this year and would increase revenues by 2 percent of GDP compared to this year. Importantly, this represents a sustainable fiscal trajectory if adhered to. However, as suggested by the literature previously cited, there could be good reasons to still bring down deficits and debt further—and to enhance the credibility of the government’s proposed policies by enactment of additional revenue measures, such as a VAT and an explicit fiscal rule backed up by enforcement measures. Furthermore, if the government pursues significant tax cuts—such as to allow for WTO accession—a significant new revenue source such as a VAT would be necessary to achieve fiscal sustainability.

2. **Credibility**

The Bahamas enjoys a good reputation in international markets, but that could change in light of the current fiscal trajectory—and the ratings agencies’ assessments reflect both The Bahamas’ positive history and its current risk.

Reflecting The Bahamas’ history of fiscal responsibility, Moody’s Investors Service recently characterized the nation as having a “stable political system with high policy predictability,” and Standard & Poor’s has cited a “track record of generally prudent policies through different governments.” And, even with uncertainty surrounding the government’s proposed VAT, in January 2014 investors oversubscribed The Bahamas’

---

US$300 million bond offering by more than 20 times, enabling authorities to lower the coupon rate to 5.75 percent from an initially projected 6.5 percent.\textsuperscript{32}

Nevertheless, ratings agencies and the International Monetary Fund (IMF) have expressed concern about Bahamian budget trends. (See table on next page, placing The Bahamas current credit rating in the context of the different possible credit ratings.) In 2012, Moody’s downgraded Bahamian debt one ratings notch, from A3 to Baa1, citing high and rising debt levels, a small tax base, and dependence on tourism and an offshore financial sector.\textsuperscript{33} That put The Bahamas’ debt in the category of obligations that are “medium grade” and subject to “moderate” credit risk. And, in January 2014, Moody’s said that The Bahamas has a six-month window to address its deficit before it would again downgrade the country’s credit rating.\textsuperscript{34} Standard & Poor’s gives The Bahamas long-term credit a rating of BBB, indicating “adequate capacity to meet financial commitments.” However, similar to Moody’s, Standard and Poor’s has rated the outlook as negative and warned that, absent action, it could lower The Bahamas one or two notches in the credit ratings, citing, among other reasons, that while the government held spending constant in nominal terms, revenue had declined and the deficit increased.\textsuperscript{35} In an Article IV consultation, staff from the IMF said that reducing debt/GDP ratios over the medium term was “an imperative” for the Bahamian government.\textsuperscript{36}

To be clear, even with a further downgrade from the ratings agencies, The Bahamas could still have adequate access to outside capital markets, but, as the previous literature suggests, it tends to increase borrowing costs—especially if the credit rating is downgraded from “investment grade” (The Bahamas’ current rating class) to “speculative.” For Moody’s, The Bahamas is three notches away from crossing that line,


\textsuperscript{33} Moody’s Investors Service (2013).


\textsuperscript{35} Standard & Poor’s (2013).

\textsuperscript{36} International Monetary Fund, “The Bahamas: 2011 Article IV Consultation” (2011).
and for Standard & Poor’s, its rating is two notches away. Furthermore, further downgrades would increase the risk of a more dramatic cutoff from external financing.

### Placing The Bahamas Credit Rating in Context

<table>
<thead>
<tr>
<th>Moody's Long-Term Ratings</th>
<th>S&amp;P Long-Term Ratings</th>
<th>Rating Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaa</td>
<td>AAA</td>
<td>Prime</td>
</tr>
<tr>
<td>Aa1</td>
<td>AA+</td>
<td>High grade</td>
</tr>
<tr>
<td>Aa2</td>
<td>AA</td>
<td></td>
</tr>
<tr>
<td>Aa3</td>
<td>AA-</td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>A+</td>
<td>Upper medium grade</td>
</tr>
<tr>
<td>A2</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>A-</td>
<td></td>
</tr>
<tr>
<td>Baa1</td>
<td>BBB+</td>
<td>Lower medium grade</td>
</tr>
<tr>
<td>(Bahamas Rating)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baa2</td>
<td>BBB</td>
<td></td>
</tr>
<tr>
<td>(Bahamas Rating)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baa3</td>
<td>BBB-</td>
<td></td>
</tr>
<tr>
<td>Ba1</td>
<td>BB+</td>
<td>Non-investment grade speculative</td>
</tr>
<tr>
<td>Ba2</td>
<td>BB</td>
<td></td>
</tr>
<tr>
<td>Ba3</td>
<td>BB-</td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>B+</td>
<td>Highly speculative</td>
</tr>
<tr>
<td>B2</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>B-</td>
<td></td>
</tr>
<tr>
<td>Caa1</td>
<td>CCC+</td>
<td>Substantial risks</td>
</tr>
<tr>
<td>Caa2</td>
<td>CCC</td>
<td>Extremely speculative</td>
</tr>
<tr>
<td>Caa3</td>
<td>CCC-</td>
<td>Default imminent with little prospect for recovery</td>
</tr>
<tr>
<td>Ca</td>
<td>CC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>In default</td>
</tr>
</tbody>
</table>
All of this suggests that, while The Bahamas does have credibility based on its history, there is a danger of that dissipating, and The Bahamas should take action not just to put forward a plan to achieve long-term fiscal sustainability, but also to do what it can to bolster the credibility of that plan.

3. **Economic Growth and Employment**

The Bahamian economy, while growing, remains weak compared to its performance before the 2008 global financial crisis and ensuing recession. In particular, the Bahamian unemployment rate remains at substantially elevated levels. As of the last report in November 2013, the unemployment rate in The Bahamas stood at 15.4 percent, and the IMF expected it to average 16.2 percent for 2013 and 15.5 percent for 2014. As previously noted and illustrated in the graph below, this is as compared to an average unemployment rate of around 9 percent in the five years prior to the financial crisis. In short, given this high unemployment rate, the economy in The Bahamas appears to operating substantially below its potential.

---

**Bahamian Unemployment Rate 2001-2013**

<table>
<thead>
<tr>
<th>Year</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>10%</td>
</tr>
<tr>
<td>2002</td>
<td>11%</td>
</tr>
<tr>
<td>2003</td>
<td>12%</td>
</tr>
<tr>
<td>2004</td>
<td>14%</td>
</tr>
<tr>
<td>2005</td>
<td>15%</td>
</tr>
<tr>
<td>2006</td>
<td>16%</td>
</tr>
<tr>
<td>2007</td>
<td>17%</td>
</tr>
<tr>
<td>2008</td>
<td>18%</td>
</tr>
<tr>
<td>2009</td>
<td>16%</td>
</tr>
<tr>
<td>2010</td>
<td>14%</td>
</tr>
<tr>
<td>2011</td>
<td>13%</td>
</tr>
<tr>
<td>2012</td>
<td>12%</td>
</tr>
<tr>
<td>2013</td>
<td>11%</td>
</tr>
</tbody>
</table>


---

37 International Monetary Fund World Economic Outlook.
To be clear, The Bahamas economy has been growing, but more slowly than is needed to fully recover from the recession. As shown in the below graph, the Bahamian economy has not yet recovered to its pre-recession level, adjusted only for inflation. Such a result does not take into account items like the underlying normal rate of output growth and reflects the significant drop in output during the recession (negative real growth in 2008 and 2009 of -2.3 percent and -4.2 percent, respectively), followed by years of real growth below 2 percent annually.

The Bahamian economy remains vulnerable, but there are prospects for faster growth ahead. In particular, growth in the Bahamian economy is highly correlated with growth in the U.S. economy. Since the financial crisis, growth in the U.S. economy has been tepid, but forecasters are expecting some acceleration compared to recent years, with a consensus of real annual growth averaging about 3.0 percent of GDP in this year and next—compared to an average of 2.3 percent since the economic recovery began.\(^{38}\) Furthermore, the resort of Baha Mar is nearing completion, and, while the drop off in investment as the resort completes may be a temporary drag on growth, its operations should increase the economy’s long-term capacity. In sum, there are reasons to think that the economy in the next several years should be stronger than it is today, although there is considerable uncertainty surrounding that outlook.

\(^{38}\) February 2014 Blue Chip Economic Indicators, Aspen Publishers, Inc.
III. OPTIONS FOR TAX REFORM

The Bahamian government needs to put its revenues on a more robust and secure footing, and it has opportunities to do so. At present, taxes in The Bahamas are regressive, inefficiently administered, and apply to a very narrow base. The IMF has estimated that The Bahamas collects only 40 percent of its maximum attainable tax-to-GDP ratio as determined by the economic structure of the country, a metric on which it ranks 92nd out of 98 nations. In comparison, Sweden and Denmark collect 98 percent of their “tax capacity.”39

Interested parties have made proposals to reform the Bahamian tax system. The IMF, for instance, has recommended the introduction of a VAT, reform of real estate taxes, reduction of tax expenditures, and the reduction and partial standardization of tariffs.40


40 Id.
For its part, The Bahamas Chamber of Commerce and Employers Confederation has, as an alternative, suggested a 5 percent payroll tax on up to B$78,000 of annual earnings, a 10 percent corporate income tax on Bahamian corporations, and a capital gains tax on property sales of foreign investors, along with a series of new or increased fees and changes in tax administration.\textsuperscript{41}

In this part, we review the disadvantages of the present system as well as the advantages and disadvantages of proposed tax changes, including personal income taxes, corporate income taxes, payroll taxes, sales taxes, and value added taxes. We find that the VAT provides the best combination of revenue generation, enforceability, efficiency, and fairness, and it could be structured to be less regressive than many of the taxes currently in force.

A. **Strengthens Existing Tax System**

1. **Weaknesses of the current system**

   (a) *International trade and transactions taxes*

As shown in Table 1, The Bahamas raises a majority of revenue from taxes on transactions and international trade.

Bahamian import tariffs are complex, inefficient, and inconsistent with Bahamian obligations under international treaties. The country presently has a number of different rates, which range widely. Meanwhile, tariff laws exempt a wide variety of goods, especially inputs for agriculture and light industry. While protecting these sectors from international competition, the existing tariff schedule also raises the cost of living and doing business for resident Bahamians while encouraging investment in less productive industries.\textsuperscript{42} Bahamian tariffs also do not comply with anticipated WTO requirements.

\textsuperscript{41} Bahamas Chamber of Commerce and Employers Confederation, “Alternative Tax, Revenue, & Expenditure Considerations,” n.d.

\textsuperscript{42} International Monetary Fund (2013), pp. 65-66.
### Table 1: Bahamian Recurrent Revenues by Category (Millions of Bahamian $)

<table>
<thead>
<tr>
<th></th>
<th>Business Fees</th>
<th>Transactions</th>
<th>Domestic Consumers</th>
<th>Property and Vehicle</th>
<th>International Trade</th>
<th>Other</th>
<th>Non-Tax</th>
<th>Recurrent Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 1999/2000</td>
<td>$38</td>
<td>$176</td>
<td>$20</td>
<td>$50</td>
<td>$532</td>
<td>$2</td>
<td>$121</td>
<td>$939</td>
</tr>
<tr>
<td>FY 2000/2001</td>
<td>$35</td>
<td>$197</td>
<td>$17</td>
<td>$58</td>
<td>$530</td>
<td>$2</td>
<td>$134</td>
<td>$973</td>
</tr>
<tr>
<td>FY 2001/2002</td>
<td>$37</td>
<td>$166</td>
<td>$16</td>
<td>$55</td>
<td>$483</td>
<td>$1</td>
<td>$117</td>
<td>$875</td>
</tr>
<tr>
<td>FY 2002/2003</td>
<td>$39</td>
<td>$175</td>
<td>$13</td>
<td>$58</td>
<td>$516</td>
<td>$2</td>
<td>$115</td>
<td>$918</td>
</tr>
<tr>
<td>FY 2003/2004</td>
<td>$38</td>
<td>$189</td>
<td>$14</td>
<td>$58</td>
<td>$517</td>
<td>$1</td>
<td>$144</td>
<td>$960</td>
</tr>
<tr>
<td>FY 2004/2005</td>
<td>$46</td>
<td>$248</td>
<td>$25</td>
<td>$79</td>
<td>$520</td>
<td>$1</td>
<td>$135</td>
<td>$1,053</td>
</tr>
<tr>
<td>FY 2005/2006</td>
<td>$44</td>
<td>$296</td>
<td>$11</td>
<td>$81</td>
<td>$605</td>
<td>$2</td>
<td>$173</td>
<td>$1,212</td>
</tr>
<tr>
<td>FY 2006/2007</td>
<td>$57</td>
<td>$371</td>
<td>$14</td>
<td>$107</td>
<td>$624</td>
<td>$4</td>
<td>$177</td>
<td>$1,354</td>
</tr>
<tr>
<td>FY 2007/2008</td>
<td>$58</td>
<td>$408</td>
<td>$13</td>
<td>$107</td>
<td>$652</td>
<td>$3</td>
<td>$204</td>
<td>$1,445</td>
</tr>
<tr>
<td>FY 2008/2009</td>
<td>$65</td>
<td>$210</td>
<td>$201</td>
<td>$115</td>
<td>$488</td>
<td>$3</td>
<td>$249</td>
<td>$1,331</td>
</tr>
<tr>
<td>FY 2009/2010</td>
<td>$56</td>
<td>$190</td>
<td>$199</td>
<td>$120</td>
<td>$459</td>
<td>$1</td>
<td>$268</td>
<td>$1,293</td>
</tr>
<tr>
<td>FY 2010/2011</td>
<td>$56</td>
<td>$274</td>
<td>$272</td>
<td>$129</td>
<td>$511</td>
<td>$1</td>
<td>$210</td>
<td>$1,452</td>
</tr>
<tr>
<td>FY 2011/2012</td>
<td>$28</td>
<td>$192</td>
<td>$342</td>
<td>$134</td>
<td>$508</td>
<td>$1</td>
<td>$228</td>
<td>$1,452</td>
</tr>
</tbody>
</table>

Source: Government of The Bahamas, Budget Documents, Summary of Revenues, Capital Revenues excluded.

With that said, tariffs do have one significant advantage relative to other tax instruments: They are relatively easy to collect, since the government can readily monitor products entering the country. There is now a growing literature suggesting that, in countries with large underground economies and limited government capacity, switching to other tax instruments that would otherwise be more fair and efficient if properly administered can end up producing a worse tax system and less revenue.\(^{43}\) That is because these other instruments are harder to administer and can be more easily avoided by moving transactions into the informal economy. Given that The Bahamas is a relatively advanced economy with a strong formal sector,\(^{44}\) these are not severe risks for The Bahamas, but, nonetheless, the experiences of less developed countries should be kept in mind in undertaking tax reform.

---

\(^{43}\) For one of the first papers to make this argument, see Emran, M. Shahe, and Joseph E. Stiglitz, “On Selective Indirect Taxes in Developing Countries,” *Journal of Public Economics* 89, no. 4 (2005), pp. 599-623.

\(^{44}\) The IMF reports that, in the early 2000s, The Bahamas had the smallest informal economy relative to total output in all of Latin America and the Caribbean. Vuletin, Guillermo, “Measuring the Informal Economy in Latin America and the Caribbean,” International Monetary Fund Working Paper, no. 08/102 (2008).
(b) Property taxes

Meanwhile, The Bahamas is not realizing anywhere near its potential revenue on property taxes. The government presently exempts the first B$250,000 on owner-occupied housing and does not means test this exemption, while it also gives breaks to hotels, time shares, and other tourist-related investments. In addition to having a narrow tax base, the Bahamian property tax is inconsistently applied. Government property rolls have a coverage rate of about 70 percent, and the government receives payment on only 40 percent of the property tax bills it issues.\(^{45}\) Enforcement against noncompliance has been weak to nonexistent.

2. Reforms under way

(a) Customs administration

Reforms are under way to rectify these problems. The Bahamas has committed itself to the implementation of the Framework of Standards to Secure and Facilitate Global Trade of the World Customs Organization and the Economic Partnership Agreement with the European Communities. These agreements require that The Bahamas’ Customs Department bring its procedures in line with international standards. Consequently, in 2012, The Bahamas Customs Department initiated a business process reengineering project at an estimated cost of B$6,745,000 over three years. Reforms include the development of a new computerized system for the processing of transactions, training for staff in the implementation of the new trade agreements, the introduction of a new K9 unit, and the enhancement of the existing marine unit. These measures are expected to improve enforcement capabilities, decrease fraudulent activities, and reduce the cost of collecting revenue by 15 percent.\(^ {46}\)

---


\(^{46}\) Trade Sector Support Program Annual Operations Plan, Year 2, November 29, 2013; Project Charter, Bahamas Customs Modernization Project.
(b) *Tariff rates*

At the same time, The Bahamas is expecting to lower tariff rates as part of its treaty with the WTO. While negotiations are still ongoing, the Bahamian government has indicated that it is considering reducing the weighted average tariff rate to 10 percent, a reduction of about 15 percentage points.\(^{47}\) The size of any such tariff remains under negotiation and may be changeable depending, for instance, on the size of any VAT that replaces it.

(c) *Property taxes*

The Bahamian government is taking several measures to improve the collection of property taxes. These include sending assessors into the field to add properties to the tax rolls, implementing a tax amnesty program, reassessing property values by indexing or trending existing valuations, and upgrading information technology systems. These reforms are expected to increase the coverage of the property tax roll, decrease arrears, improve the accuracy of tax information, get valuations more up to date, and enhance the efficiency of revenue collection.\(^{48}\)

(d) *Impact on revenue*

According to government estimates, customs reforms are expected to increase government revenue by 0.6 percent of GDP by 2016/17, while tobacco excise stamps and property tax modernization will add 0.3 percent and 1.0 percent of GDP, respectively.\(^{49}\)

**B. PROPOSALS FOR NEW TAXES**

We conclude that, of the reform options that could generate considerable new revenues for the Bahamian government—and, in part, replace the current system of tariffs—the VAT is likely to be the best performing option. This is for two broad reasons: First, the VAT is more easily administered—leading to less avoidance and evasion—than many of the leading alternatives. Second, it is fairer—with tax liability better reflecting people’s ability to pay—than many of the alternatives.

\(^{47}\) International Monetary Fund (2013), p. 67.

\(^{48}\) Commonwealth of The Bahamas, Department of Inland Revenue Strategic Plan, n.d.

\(^{49}\) “The Medium-Term Revenue Forecast: 2013/14 Budget,” n.d.
This section starts with a summary of the effects of a VAT and why we believe that the government’s current approach in pursuing a VAT is the right one. The section then continues by comparing the VAT to alternative revenue policies.

1. Value added tax

Value added taxes are levied upon the sale of goods and services, and, to ease administration, they are imposed at every stage of the production process. Thus, a yarn-spinning factory would pay taxes upon its purchases of cotton; a textile manufacturer would pay taxes upon purchases of yarn, and a T-shirt producer would pay taxes upon purchases of fabric. At every stage, producers can credit the taxes they pay on their inputs toward the taxes they must pay upon their sales, so there is no “double tax.”

Value added taxes have several advantages. Because all firms whose annual turnover exceeds a threshold must pay, rather than only firms that make final sales to consumers, there is a broader base upon which to earn revenue. The netting of taxes through the production process prevents double taxation of some items while still focusing the tax on final consumption, rather than production. This makes value added taxes less distortive of production decisions. Value added taxes also provide built-in defenses against cheating. VAT registrants expect to credit the taxes they pay on inputs toward the taxes they owe, so their suppliers have little incentive to avoid including value added taxes in their prices.

To be clear, a VAT, like most tax instruments, does produce distortions in the economy; these are just less than many of the alternatives. In particular, the VAT reduces the returns to labor income, and so can discourage work in this way. However, the overall distortionary effects on the economy are generally less than many of the leading alternatives scaled to produce the same amount of revenue.

Value added taxes have been criticized as regressive and costly to implement. With respect to the first criticism, it is important to consider the alternatives. While payroll and personal income taxes could in theory be structured to be more progressive, there are significant problems with administrability that could allow for easy avoidance, especially by high-income Bahamians. Sales taxes too suffer from problems of administration, especially at higher rates. Finally, the Bahamian government has committed itself to
mitigating the impact of the value added tax on the poor through the protections of the social safety net.\textsuperscript{50}

2. **Personal income tax**

As the name implies, personal income taxes are levies that vary according to the wages, interest, and profits earned by individuals. They are often graduated so that taxpayers are assessed higher rates at higher levels of income. For example, under a progressive tax schedule a taxpayer may owe 10 percent on the first B$10,000 of income, 20 percent on the next B$20,000, and 30 percent thereafter. If a taxpayer made B$100,000 in a year, the taxpayer would pay B$26,000 in taxes.

On the one hand, the relation between tax liability and the ability to pay is an attractive feature of the personal income tax. On the other hand, these taxes impose a higher tax burden on those who choose to save more and consume less today, potentially reducing the savings rate to some degree. More importantly, the individual income tax would be difficult for The Bahamas to administer. Income taxes place an administrative burden on individual taxpayers, who must keep careful track of their earnings, with each person (or each person over a certain income level) filing a tax return. In addition, effective income taxes require widespread tax withholding at the source of the income and information reporting as well so that the government can track income items. These administrative barriers can be overcome, as has been done in the numerous countries with an income tax, but doing so is generally thought to be significantly more difficult as an administrative matter than implementing a VAT. Even with protections in place, high-income taxpayers would be able to better avoid or reduce personal income taxes than those with lower incomes because they have access to legal devices that can delay income or move it to other jurisdictions. The same devices would not available to the same degree under a VAT.

\textsuperscript{50} Commonwealth of The Bahamas, 2013/14 Budget Communication (2013), 29.
3. Corporate income tax

Corporate income taxes are an assessment on the revenues of businesses that the government has chartered as corporations. These taxes have been justified as compensation for the benefits of limited liability and other privileges that the legal status confers, or as a backstop to an individual income tax system—among other arguments for the tax.

The actual economic incidence of the corporate income tax is a matter of considerable dispute. The tax could be borne by the owners of corporations or workers, among others. The weight of the evidence suggests that, at least in countries like the United States, it is largely borne by the owners of capital—but that same result may not apply to a small country such as The Bahamas where capital could more easily escape taxation by shifting investment outside international borders, in which case it might fall more on workers. This is one downside of a corporate income tax; it is not clear who actually bears its burden—and the actual result may not be as progressive as it might seem.

In addition, the corporate income tax probably distorts economic activity more than alternative instruments, and these distortions are both harmful economically and can reduce its revenue-generating capacity. These distortions include affecting the form in which businesses operate. A corporate income tax, especially in the absence of any personal income tax, can push businesses to do activity in a non-corporate form—thereby avoiding the tax altogether. Furthermore, as suggested above, it can lead investors to invest more capital in foreign companies rather than investing domestically.

Finally, the corporate income tax would be challenging to administer. While the number of tax returns would not be large, the returns could be complex, and, to the extent the corporations had operations outside The Bahamas, the corporations could use tax-planning devices to offshore profits to an even lower tax jurisdiction. Some proponents of a corporate tax option seem to recognize this problem and would limit the corporate income tax to Bahamian corporations as opposed to foreign corporations reporting profits in The Bahamas, since the foreign corporations could readily shift the profits elsewhere. Still, such planning devices could be available to Bahamian corporations, and this
“solution” generates the problem of taxing Bahamian corporations more than foreign corporations on profits reported in The Bahamas.

3. Payroll tax

With payroll taxes, the government requires employers to withhold and tender a portion of their employees’ wages. In terms of its long-run economic effect, the payroll tax is, theoretically, similar to the VAT in important ways. Both the payroll tax and the VAT tax the return to labor, with the payroll tax doing so while those returns are earned and the VAT doing so when those returns are eventually consumed. Furthermore, neither taxes the ordinary returns to saving, so (unlike an income tax) neither tax reduces the incentive to save and invest for future consumption.

However, in practice, there are some key differences between the payroll tax and the VAT. First, the VAT would be considerably more progressive than the payroll tax if the payroll tax applies to a capped amount of earnings—as has been suggested by those, such as The Bahamas Chamber of Commerce, who have proposed the payroll tax as an alternative to the VAT. In particular, the Chamber of Commerce, in a letter to the Ministry of Finance, suggested applying a 5 percent payroll tax to the first $78,000 of earnings. That means those with the highest earnings in The Bahamas would escape the full effect of the payroll tax, even as middle- and low-earning Bahamians pay the full 5 percent. By contrast, the highest-earning Bahamasians would pay the VAT when they

51 We should note that more recent proposals from the Chamber of Commerce did not include a cap on the payroll tax. In a recent report, the Chamber of Commerce retained Oxford Economics to analyze the macroeconomic implications of various tax proposals, including different levels of a VAT and two payroll tax proposals (neither of which included a cap on earnings). We agree with one of the key findings in the Oxford Economics study: “the choice of deficit reduction is likely to have a fairly small impact on long-term output.” Oxford Economics, “An Assessment of the Macroeconomic Implications of Alternative Strategies for Deficit Reduction in the Commonwealth of The Bahamas,” May 2014, p. 6 (“Oxford Economics”). As a result, we believe that the choice of tax instrument should largely be driven by which tax instrument can be most easily administered and is fairest. Note that, in terms of its empirical findings comparing various VAT scenarios and two payroll tax options, the results are challenging to interpret. That is because the study allowed assumptions to vary significantly across scenarios (see, for example, Table 2.1), and so there is not a direct, apples-to-apples comparison of a VAT raising the same amount of revenue as a payroll tax with all else held constant.
consume their earnings—and without a cap above which the tax does not apply. In short, VAT liabilities much better reflect ability to pay than a capped payroll tax with a flat rate.

Second, the VAT taxes existing wealth—as that wealth is consumed—while the payroll tax does not. In taxing this existing wealth, the VAT is relatively efficient. Whether this is fair is a more complex question and beyond the scope of this report. However, what is clear is that those with current high wealth would tend to pay more under a VAT than under a payroll tax, even a payroll tax without a cap.

Finally, the VAT is less subject to avoidance and evasion than a payroll tax, especially by high earners with access to tax-planning devices. Among other problems with a payroll tax, business owners can recharacterize their own wages as business profits and thereby try to avoid the payroll tax altogether. It would place a considerable burden on tax administrators to try to stop this and litigate what is a “reasonable” salary for the business owner. By contrast, the VAT taxes the business owner when she goes to consume the returns to her work in the business, irrespective of whether the returns are characterized as wages or profits.

4. Retail sales tax

Retail sales taxes are levies imposed upon purchases of goods and services at the point of sale. Putting to the side tax administration, retail sales taxes and the VAT can be made to be economically equivalent. Both are taxes on the consumption of goods and services. So, the decision between these two forms of tax comes down almost entirely to administrability.

There is at least one key difference between the administration of a VAT and that of a sales tax. Unlike the credit method VAT, the retail sales tax does not impose tax at each stage of production. Rather, the sales tax is imposed only at the last stage—at the stage of retail sale. To be clear, this does not change the total amount of tax liability legally owed, only the stages at which that liability is collected. On the one hand, this means that compliance costs are less for a retail sales tax than for a VAT. On the other hand, this makes it much easier to evade the retail sales tax than the VAT—since the sales tax is
collected at only the final stage, whereas with the VAT is collected at each stage with businesses having an incentive to check each other.

Simply put, the retail sales tax is not a credible mechanism for generating substantial new revenue in The Bahamas. While the retail sales tax can be successfully deployed at relatively low rates, evasion becomes a much larger problem as rates rise. Even if the VAT is started off at a relatively low rate, it is a credible mechanism for generating more revenue if the need arises—and this credibility could be key in assuaging credit markets. The same is not true of the retail sales tax. It has a much more limited revenue-generating capacity, despite being economically equivalent to the VAT in theory.

IV. IMPLEMENTATION OF A VALUE ADDED TAX

The implementation of a value added tax raises the question of the correct rate at which to assess it. We find that under reasonable assumptions derived from empirical studies a rate of 15 percent, raising over 2 percent of GDP in revenue, is greater than what is needed to put the budget on a sustainable path and is likely to be a substantial drag on economic growth in the short and medium terms. However, because of credibility considerations mentioned above, we recommend that a VAT be implemented raising approximately 1 percent of GDP on net. That can be achieved with a VAT with a rate in the range of 5 to 10 percent, with the exact rate needed depending on the breadth of the tax base and the size of offsetting tax cuts. We recommend that this be combined with a fiscal rule establishing a target for The Bahamas debt-to-GDP ratio. That fiscal rule would be enforced with a trigger that would automatically raise VAT rates if debt-to-GDP targets are not met.

A. Rates

1. Revenue

The government estimated that, at a rate of 15 percent, the VAT would generate revenues in the range of 2 percent of GDP. Table 2 shows the revenue generated based on Ministry of Finance estimates for 2011 prorated for 2013.
This report will run two additional scenarios beyond this base case: First, a scenario in which the VAT generates 1.5 percent of GDP in revenue on net (or approximately two-thirds of the government’s base case) and, second, a scenario in which the VAT generates 1 percent of GDP in revenue on net (or roughly 40 percent of the government’s base case).

These scenarios are roughly consistent with VAT rates in the range of 5 to 10 percent, depending on the breadth of the VAT revenue base and the size of offsetting tax reductions. For instance, based on the government’s estimates, a VAT rate of 7.5 percent could produce revenues in excess of 1 percent of GDP with the same revenue base as the government originally proposed and assuming the offsetting tax cuts scaled down proportionately. However, the Ministry of Finance has indicated that offsetting tax cuts may not scale down proportionately, and the amount of revenue loss is dependent on the outcome of WTO negotiations. In fact, under one scenario that the Ministry of Finance suggested as realistic, a VAT with a 7.5 percent rate—and the same tax base that the government originally proposed—could produce roughly no net revenue. However, even assuming the same amount of revenue loss from tariff reductions and other tax cuts, a VAT with a 7.5 percent rate could still produce net revenue equal to about 1 percent of GDP if the base were broadened considerably as compared to what the government originally proposed.

In sum, to achieve any given level of revenue, there is a trade off among the VAT tax rate, the breadth of the tax base, and the size of offsetting tax cuts, including those for WTO accession. The optimal balance among these factors in part depends on the status of WTO negotiations and also on the government’s ability to offset the negative distributional consequences of a broader revenue base. This goes beyond the scope of this report, which is focused on whether to adopt a VAT and what amount of revenue to target.
Table 2: VAT Revenues in 2013

<table>
<thead>
<tr>
<th>VAT Case</th>
<th>VAT Tax Base (B$ Millions)</th>
<th>VAT Revenues (B$ Millions)</th>
<th>Tax Cuts (B$ Millions)</th>
<th>ΔT (B$ Millions)</th>
<th>ΔT (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15% (Govt. Base Case)</td>
<td>$3,792</td>
<td>$569</td>
<td>($376)</td>
<td>$192</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

2. **Effect on economic growth**

To estimate the impact of the increase of tax revenues on output, we examine the economic literature and try to identify tax multiplier assumptions that are most suitable for the Bahamian economy. Boussard et al. (2012) provide a summary of multiplier estimates for the effect of increases in net taxes on GDP.\(^{52}\) While there are other literature surveys on this topic,\(^{53}\) we consider the summary from Boussard et al. (2012) to be most relevant to the policy decision at issue because it focuses specifically on the effect of tax increases and provides estimates for both short- and medium-term multipliers. Table 3 below reproduces the summary from Boussard et al. (2012).\(^{54}\) We also calculate averages across all studies—in doing so we exclude outliers defined as estimates in the bottom or top 5 percent of the distribution.\(^{55}\)


\(^{54}\) Because the multipliers reviewed in this study consider only increases in taxes, their expected signs are negative.

\(^{55}\) For example, the Perrotti (2004) study finds a multiplier of -23.87, which is clearly nonsensical.
Based on the estimates presented in Boussard et al. (2012), we consider a set of assumptions for the short- and medium-term multipliers. For the short run, we consider a Low (-0.1), Middle (-0.3), and High (-0.7) multiplier cases. The choice of -0.1 as the Low case is predicated on the notion that the multiplier would generally be expected to be negative. The Middle case (-0.3) is derived from the average across all studies. We limit the High case to -0.7 because estimates for the short-term multiplier rarely exceed that value. For medium-term multipliers we use the following assumptions: Low (-0.2), Middle (-0.6), and High (-1.4). This choice is based on the idea that the cumulative effect in the medium term is unlikely to be more than double the short-term effect. This is
supported by the medium-term average multiplier we calculate from the estimates in Boussard et al. (2012), which is about twice as large as the short-term multiplier.

Using our estimates for VAT revenues, and applying the tax multipliers assumptions identified above, we calculate the following growth effects. To be clear, these effects represent short- and medium-term effects on economic growth via a reduction in aggregate demand. As noted before, research suggests such effects may be particularly pronounced in periods of economic weakness, and it is in such periods that lower growth seems likely to have particularly deleterious effects on the economy and labor market. The long-run effects of these policies would be quite different. The additional revenue would reduce government deficits and debt. This would reduce the probability of a deleterious credit event and also increase national saving—thereby increasing economic growth. Policymaking should take into account both effects and try to minimize the short-term effects on growth while also doing what is needed to place the country on a sustainable fiscal path.

Table 4: Impact on GDP, VAT 15% and Revenue of 2.3% of GDP (Government Base Case)

<table>
<thead>
<tr>
<th>Multiplier Assumptions</th>
<th>Impact on GDP Short Run</th>
<th>Impact on GDP Medium Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (Multiplier = -.1 in SR; -.2 in MT)</td>
<td>-0.2%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Middle (Multiplier = -.3 in SR; -.6 in MT)</td>
<td>-0.7%</td>
<td>-1.4%</td>
</tr>
<tr>
<td>High (Multiplier = -.7 in SR; -1.4 in MT)</td>
<td>-1.6%</td>
<td>-3.2%</td>
</tr>
</tbody>
</table>

Table 5: Impact on GDP, VAT Generating 1.5% of GDP

<table>
<thead>
<tr>
<th>Multiplier Assumptions</th>
<th>Impact on GDP Short Run</th>
<th>Impact on GDP Medium Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (Multiplier = -.1 in SR; -.2 in MT)</td>
<td>-0.2%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Middle (Multiplier = -.3 in SR; -.6 in MT)</td>
<td>-0.5%</td>
<td>-0.9%</td>
</tr>
<tr>
<td>High (Multiplier = -.7 in SR; -1.4 in MT)</td>
<td>-1.1%</td>
<td>-2.1%</td>
</tr>
</tbody>
</table>
### Table 6: Impact on GDP, VAT Generating 1.0% of GDP

<table>
<thead>
<tr>
<th>Multiplier Assumptions</th>
<th>Impact on GDP Short Run</th>
<th>Impact on GDP Medium Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (Multiplier = -.1 in SR; -.2 in MT)</td>
<td>-0.1%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Middle (Multiplier = -.3 in SR; -.6 in MT)</td>
<td>-0.3%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>High (Multiplier = -.7 in SR; -1.4 in MT)</td>
<td>-0.7%</td>
<td>-1.4%</td>
</tr>
</tbody>
</table>

### 3. Recommended timing and revenue

In light of the current economic conditions in The Bahamas and the country’s fiscal trajectory, we recommend that the government move forward in its implementation of a VAT. However, we recommend a number of changes relative to the original proposal. In particular, we recommend:

- **Delayed start.** To avoid undermining economic growth in this time of relative weakness and to give more time for implementation, we recommend that the VAT be implemented no sooner than January 1, 2015.

- **Lower revenue and rate.** We further recommend that the VAT be implemented raising approximately 1 percent of GDP in additional revenue. That should be achievable with a VAT rate between 5 and 10 percent initially, with the necessary rate dependent on the size of offsetting tax cuts and the breadth of the tax base. The chart below shows the government projections of debt-to-GDP assuming a VAT that raises no revenue in FY2014/2015 and then raises 1 percent of GDP thereafter.

- **Fiscal rule.** As discussed further in the section below, we recommend that a new, permanent fiscal rule be put into place to ensure that The Bahamas maintains fiscal discipline over the medium to long term.
V. IMPLEMENTATION OF A NEW FISCAL RULE

At the same time as the government implements the new VAT, we recommend that the government also establish a new, permanent fiscal rule. As described above, fiscal rules have been found to help governments shift to sustainable fiscal policies, while enhancing the government’s credibility with credit markets. The issue of credibility is especially important for the current government, since our recommendation would represent a change from the government’s announced VAT policy. Changing the VAT policy at this point may be seen by some market actors as an indication of a lack of commitment to fiscal sustainability, and enactment of a fiscal rule like that suggested here could help offset this effect.

Source: Author’s calculations based on Bahamian government projections—with these extended out beyond 2016/17 by assuming that all non-interest figures (revenues and spending) remain constant as a share of the economy.
A. THE FISCAL TARGET

We recommend a fiscal rule that sets two targets:

1. A maximum debt-to-GDP ratio above which debt would not go under any circumstances without triggering the enforcement mechanism described below. This reflects the concern that, above certain debt-to-GDP ratios, there is probably an increased chance of a sudden and deleterious credit event. We would recommend a maximum debt-to-GDP ratio of 65 percent.

2. A target for debt reduction as a share of the economy. This would establish a minimum fiscal target but would be waivable under certain “emergency” circumstances. In particular, under this target, we would recommend that the central government’s debt-to-GDP ratio should begin falling by FY 2015/16, as deficit reduction phases in, and then fall at a rate of no less than 1 percentage point of GDP per year in the years thereafter, until that ratio is below 50 percent of GDP. This should be seen as a minimal target. Faster reduction in the debt-to-GDP ratio over the long term would be beneficial. The target could be waived if the economy were in recession (e.g., the unemployment rate were above a certain percentage) or in any year in which the government affirmatively declared a natural disaster. Such “safety valves” would provide the government flexibility in the face of economic downturns and natural disasters. This target provides the government sufficient time to implement its proposed deficit reduction measures before a higher VAT rate may be implemented.

Note that, with a VAT beginning to raise revenue of 1 percent of GDP in 2015/16, the government would achieve these fiscal targets based on the government’s projections. In 2015/16, debt would fall by about 1 percentage point. Debt reduction as a share of the economy would grow in the next fiscal year to nearly 2 percentage points of GDP. But, this is only the case if all other deficit reduction measures are fully implemented and achieve the targeted savings and the economy grows as expected. Notably, the most recent IMF projection shows debt-to-GDP falling by smaller amounts than in the government’s official projections. The IMF’s pessimism largely results from the IMF assuming that the government’s other revenue measures (like property tax reform) raise
significantly less than the government projects. In sum, the target is achievable based on the government’s current projections and without a VAT of 15 percent, but there is a real risk that the extant measures discussed so far prove insufficient in achieving the fiscal targets and a higher VAT will be needed.

**B. ENFORCEMENT**

If the government failed to achieve the fiscal target, the VAT rate would automatically increase by an amount set in the law in order to put the country on a more sustainable trajectory. For instance, the VAT rate could automatically rise 2 percentage points (producing in the range of 0.8 percent of GDP in additional revenue with the VAT tax base the government has proposed) every year that the fiscal targets are missed; that is, the VAT rate may permanently increase from 8 to 10 percent if the debt-to-GDP ratio target is not met. If in the following year, the target had not been met again, the VAT rate could be increased again by 2 percentage points. That process would continue until the target is met.

**C. MONITORING**

The government could create a new independent budget enforcement bureau to monitor compliance with these fiscal targets. The bureau’s tasks could include projecting budget outcomes and warning when the fiscal targets may not be met. The bureau could then be charged with presenting deficit reduction options to policymakers if it projects that fiscal targets would be missed. This would further enhance the transparency of The Bahamas budget and the credibility of the target.