The Bahamas

The Economic Consequences of the Value-Added Tax for the Bahamas

August 2013

Prepared by:
David Godsell, B.A., B.Comm, MBA, MSc, CMA
The Economic Consequences of the Value-Added Tax for The Bahamas

Executive Summary

As described by the White Paper released by the Bahamian government in February 2013, the Bahamas is poised to adopt value-added taxes (VAT) in July 2014. In this report we discuss the economic consequences of VAT adoption and elaborate on the welfare loss that can be anticipated for consumers, labourers, employers and the government. Consumers can expect a one-time increase in price levels and a loss of purchasing power. Labourers can expect a decline in real wages which will in turn lead to a decline in the labour supply. Businesses and employers with VAT-based sales can expect reduced demand for goods and services, which will in turn reduce their demand for labour. Under extraordinarily conservative estimates biasing towards heightened government revenues, we forecast VAT adoption will lead to a $165 million decline in government revenues. Simultaneously, we estimate VAT adoption will burden the private sector with $103 million in annually recurring compliance costs and an average of $4,300 in compliance start-up costs for each VAT registrant. The report concludes by pointing to failed VAT adoptions in countries similar to the Bahamas and by highlighting contemporary efforts to reduce budget deficits through reductions in government spending.
Table of Contents

Page 4 - Introduction
  Government Position
  Organization of this Report
  The Bahamas Context

Page 7 - VAT Stakeholders and Welfare
  Consumers
    Homeowners
    Informal Economy Participants
  Government and Taxpayers
  Labour
  Accounting Trade Groups
  Employers / Businesses
    Exporters
    Financial Services
  Economic Freedom Index

Page 15 - Government Revenues and Private Sector Compliance Costs
  Government Net Revenues
  Administration Costs
  Tax Revenues Replaced by VAT
  Private Sector Compliance Costs

Page 29 - VAT Adoption Elsewhere
  Malta
  Grenada
  Japan

Page 30 - Alternative: Spending Cuts

Page 31 - Conclusion

Page 32 - References Consulted

Page 42 - Author Biography
1.0 Introduction

The purpose of this paper is to list and describe the anticipated economic effects of value-added-tax (VAT) adoption in the Bahamas. First, we consider the effect of VAT adoption on consumption, government size and scope, employment and business activity. Additional effects are captured by describing how the Bahamas Economic Freedom Index Ranking will likely change. Second, we provide our analysis of incremental government revenues from VAT, and under a series of extraordinarily conservative assumptions we demonstrate that VAT adoption will lower, rather than increase, government revenues by $165 million. Third, we provide further analysis which estimates annually recurring private sector VAT compliance costs of $103 million and one-time start up costs of $4,300 per VAT registrant. Fourth, we present two cautionary tales of failed VAT implementation in two small island economies; and of the devastating and long-lived impact of a VAT rate increase in Japan. Fifth, we present contemporary evidence of OECD countries which, with low or no VAT, have chosen to curb government spending to bridge budget deficit gaps rather than increase or introduce VAT. A summary concludes.

1.1 Government Position

The White Paper on Tax Reform to Secure Adequate Revenues for the Future comes on the heels of a government funding crisis and the adoption of VAT in a small number of neighbouring Caribbean countries. Starting in France in 1954, VAT, or value-added taxes, have been adopted in 140 countries worldwide. Factors motivating VAT adoption include the presence of government funding crises and a copycat effect. Keen and Lockwood (2007) find strong evidence of a copycat effect wherein VAT adoption spreads in “regional bursts.”

On February 2013 the Bahamas Ministry of Finance released the White Paper. The report proposes the adoption of a VAT. In the report the Ministry contrasts the VAT with other tax vehicles (e.g., a sales tax, income tax); outlines what taxes may be replaced by the VAT and describes the anticipated economic impact of the VAT. In a subsequent presentation in April 2013, the Ministry of Finance suggests the goal of VAT is to increase government revenues from VAT by approximately $100-160 million or 2% of gross domestic product (GDP). In a June 15, 2013 speech by the Rt. Hon. Owen S. Arthur, it is noted that the VAT is intended to aid the government in meeting, “an evolving pattern of expenditure associated with its assumptions of all the obligations of nationhood.”

This report details effects of VAT adoption on consumers, labour, business and government.

Consumers will face a one-time price-level increase.

Labourers will experience a decline in purchasing power and real wages.

Private sector compliance costs are estimated at $103 million.

Enclosed estimates show government revenues declining by $165 million.
1.2 Organization of this Report

In the second section of this paper, we present arguments suggesting VAT adoption would lead directly to welfare losses for virtually all Bahamians. Drawing from a large theoretical and empirical literature, as well as reports of VAT adoption in other countries, we provide strong evidence that VAT adoption is welfare destructive. First, we demonstrate the devastating impact of VAT adoption on consumers who suffer higher price levels, while encouraging consumer engagement in the informal economy. Second, we provide evidence on the tendency for governments to grow in size and scope after VAT adoption; and on government impotency to eliminate deficits after VAT adoption. Third, we describe how VAT adoption lowers the real wages of Bahamians while simultaneously shifting public and private resources to accounting trade groups and the accounting profession. Fourth, we discuss the direct impact on Bahamian businesses, with consideration given to reduced international competitiveness of Bahamian exporters, as well as to the relatively benign effect on the financial services sector. Fifth, we further describe how VAT adoption will impede economic transactions by adopting the lens of the Economic Freedom Index Rankings.

In the third section of this paper, we compile information on the government revenues and expenses which could be expected from adopting VAT. This section relies on other-country data, which is generally available for OECD countries, but scarcer for peer-Caribbean and other highly-developed but developing countries. Using available other-country data, we estimate gross VAT revenues, VAT rebates and refunds, VAT administration costs and the taxes VAT may replace. In addition, we account for VAT leakage from non-compliance, the eight various forms of VAT fraud and uncollectible VAT owing. Under conservative assumptions with substantial bias toward heightened government revenues, the arithmetic produced by these estimates provide for an expected net loss to the government following VAT adoption of $165 million. In a subsequent section, we show that not only are government coffers diminished, but VAT adoption burdens the private sector with compliance costs of approximately $103 million.

In the fourth section, we draw cautionary tales from two countries comparable to the Bahamas which adopted VAT. Malta and Grenada are juxtaposed with the Bahamas and the non-trivial probability of implementation failure is addressed; thereafter the crippling economic effect of VAT rate increases in Japan is discussed. In the fifth section we describe how the proliferation of VAT is not universal and that more recently major countries are choosing not to increase or introduce VAT to bridge budget deficit; but rather are choosing alternative policies which including reducing government spending. A summary concludes.
1.3 The Bahamas Context

The Bahamas has many unique characteristics. It is a highly-developed developing nation which boasts the highest per-capita income in the Caribbean. It is well known for tourism and financial services and these service sectors make up the majority of Bahamian GDP and earn the majority of Bahamian foreign exchange. Like many countries, the Bahamas was adversely affected by the recent recession and GDP shrank at an average annual pace of 0.8% from 2007-2011. More recently, GDP growth was 2.5% in 2012, though the Bahamas is, “still muddling its way through the post-recession landscape.” This is evidenced by a 7% year-over-year revenue slump in hotel revenue as of April 2013 and tourist arrivals which have been declining since 2006. Furthermore, government expenditures in 2012 exceeded revenues by $300 million, creating a funding gap which has contributed to a growing public debt of $5.1 billion.

The Bahamas is also characterized by a considerable informal sector (by definition, unmeasured), an elevated unemployment rate, moderate income inequality (though, the highest in the Caribbean), an unhurried legal system, and government-protected industry. Furthermore, Bahamians may not own foreign currency accounts. Finally, the Caribbean is a “data-poor” region, a characteristic which obstructs inferences from empirical observations regarding other-country VAT adoption.

---

1 Tourism together with tourism-driven construction and manufacturing accounts for approximately 60% of GDP and directly or indirectly employs half of the archipelago’s labour force (CIA Factbook, 2013).
4 Source: http://www.tribune242.com/news/2012/sep/03/bahamas-becoming-increasingly-unequal/?opinion
5 “Despite its roots in the British judicial system, two centuries of Bahamian history, the many outstanding lawyers and a pervasive and prosperous Christianity, the Rule of Law does not carry the day in the Bahamas. Attorney General Alfred Sears is reported as “echoing the conclusion of the crime commission” with comments on ‘the pervasive culture of dishonesty that exists in the Bahamas.’” (Report on Trade Liberalization, p. 17; http://www.nassauinstitute.org/public/taskforce.pdf).
6 Source: “Doing Business in the Bahamas: 2011 Country Commercial Guide for US Companies”; “Despite recent efforts to reduce backlog of criminal and civil cases, resolution of court cases can be slow, sometimes taking years. The Embassy has received some reports of encounters with biased judges and malfeasance by attorneys.” The Embassy has also received reports of local defendants evading payment of Bahamian civil judgements or deliberately dragging out court disputes, especially in cases involving non-resident plaintiffs.”
9 The Exchange Control Regulations Act, 1952, has the objective of controlling and maintaining the country’s reserves of foreign currency and to assist in supporting the value of the Bahamian dollar. Residents require permission from the Exchange Control Department of the Central Bank of the Bahamas to operate foreign currency accounts.
2.0 VAT Stakeholders and Welfare

The VAT is a distortionary tax which affects the allocation of resources in society. In the following, we identify several groups in society and the ramifications of VAT upon each. Broadly speaking, the VAT reduces welfare due to its effect on gross domestic product (GDP).

The effect of tax on GDP growth is unambiguous. A tax increase of one percent of GDP lowers real GDP by roughly two to three percent (Romer and Romer, 2010). McBride (2012) reviews 26 studies and find that all but three, and all those written since 1997, provide evidence of a negative relationship between taxes and GDP. Consequently, were the Bahamian government to achieve its goal of increasing tax revenues by 2 percent of GDP, Romer and Romer provide evidence which suggests GDP would fall by between 4 and 6 percent. The Bahamas had a GDP of $8.043 billion in 2012. As a result, were the government to achieve its goal of increasing tax revenues by 2 percent of GDP, Romer and Romer provide evidence which suggests GDP would fall by between 4 and 6 percent. The Bahamas had a GDP of $8.043 billion in 2012. As a result, were the government to achieve its goal of increasing tax revenues by 2 percent of GDP, we could expect GDP decline from $8.043 billion to a range of $7.560 - $7.721 billion, a decline of $322 million - $483 million.

The White Paper suggests the goal of the government is to use VAT to generate “stronger economic growth” and later in the document quotes credible evidence that this economic growth does follow a tax regime switch from income taxes to VAT. However, the Bahamian context at hand is the shift from a VAT-free tax regime to a VAT-centric tax regime. Undoubtedly, economic growth will stagnate if not decline if VAT is adopted.

2.1 Consumers

As a consumption tax, the primary group affected is consumers. Aaron (1981) shows us that adoption of VAT increases price levels to the extent the VAT is incremental to replaced taxes. The White Paper did not reveal the extent and full nature of the taxes to be replaced by the VAT but we know the government is seeking to increases its revenues with the VAT, suggesting VAT tax revenues will exceed the revenues of the taxes it is scheduled to replace.

With an increase in price levels, easily intuited is the dampening effect of VAT adoption on consumption; more concerning is evidence from an Ernst & Young (2011) report suggesting that consumption decline is sustained in the long-run. With incomes unchanged, the adoption of a VAT effectively reduces Bahamian wages – Bahamian incomes will remain the same, but the purchasing power of the Bahamian dollar and incomes will decline. Elderly and retired individuals with lifetime savings are most adversely affected as the purchasing power of their savings declines the most during retirement, typically the highest-consumption period of their lives.

Consumers facing fixed bud-
get constraints will purchase less from VAT-affected vendors and will reallocate their income to VAT-free vendors, including but not limited to informal market goods and services, real estate and exempt foodstuffs. Furthermore, consumers implicitly face a “make-or-buy” decision with every purchase - in the presence of a VAT the consumer will more often choose to substitute consumption with self-supply (Piggott and Whalley, 2001). Combined, these factors dramatically reduce demand for VAT-affected market sectors.

Consumer anticipation of price changes leads to a pre-adoption surge in consumption. For example, retail sales in Australia increased 3.1 percent relative to trend prior to the implementation of VAT. Unayama and Cashin (2011) provide similar evidence for Japan. Miki (2011) confirms that consumption increases marginally in the period leading up to the VAT adoption date and declines dramatically thereafter. Furthermore, Aln and El-Ganainy (2012) show that a one percentage point increase in VAT leads to a one percent reduction in per person consumption.

2.1.1 Homeowners

Homeowners may see a boost in property values as consumers see greater value in VAT-exempt housing than in VAT-affected consumption. Generally, new housing is subject to VAT, which may slow down the construction industry as homebuyers evolve to prefer VAT-free resale homes over VAT-affected new housing. However, this benefit to buyers of resale homes will be diminished by the increased cost of furnishings and durable goods as they seek to outfit their homes. As a result of the foregoing, the construction sector will either languish under VAT adoption, or, as in the Canadian experience, clandestinely migrate to the informal sector after VAT adoption.

2.1.2 Informal Economy

The large literature discussing VAT adoption worldwide virtually ignores the implications of informal market presence. Like many countries, the Bahamas is host to a non-trivial informal market sector. The informal market sector, like exempt and zero-rated sectors, stand to gain the most from VAT adoption as Bahamian consumers reallocate their resources from VAT-affected sectors to VAT-free consumption.

A startling outcome of VAT adoption in a country with a large informal market sector is the incentive to reallocate resources from benign conventional goods and services to illicit informal market goods and services. A 2007 report published by the International VAT Association describes the European Union’s (EU) increasing concern about informal market transactions in a VAT setting. Along with the reallocation incentive, the reallocation itself puts conventional and complying retailers at a competitive disadvantage which can in turn force compliant firms to become non-compliant themselves.
The previously mentioned post-VAT evolution of the Canadian construction industry is an apt example.

2.2 Government and Taxpayers

As the recipient of VAT proceeds, the government aims to receive a large infusion of additional revenues. The government aims to increase revenues by $100 to $160 million, though later in this report we provide estimates that indicate this forecast is implausible. The adoption of a VAT which is intended to reduce deficit and debt would alleviate interest payments, thereby freeing up government revenues for additional debt repayment. As government debt is lowered, creditor risk may be lowered leading to lower interest rates charged on borrowed funds. Lower interest rates would further lower the deficit allowing for further repayment of the public debt.

However, governments adopting VAT and especially governments in the Caribbean do not have a strong track record of eliminating the budget deficit after adopting VAT. Worldwide, the increase in funding has been tied not with deficit and debt reduction, but with government spending. Becher and Mulligan (2003) and Keen and Lockwood (2006) that VAT adoption and increased reliance on VAT adoption leads to increased government spending by increasing the size and scope of government. For example, of the Caribbean countries listed in the White Paper which have adopted VAT, all failed to subsequently eliminate the deficit with 2012 budget deficits ranging from 1% of GDP in Trinidad and Tobago to 7% of GDP in Barbados. A discouraging example is Saint Kitts and Nevis, which quintupled the budget deficit from 1% to 5% of GDP after VAT adoption. In summary, VAT adoption cannot be credibly said to be a deficit solution.

Rather, the business sector has cause for concern in that funds raised may eventually increase because VAT rates, worldwide, have generally and persistently increased over time. Also important to consider is the probable future state in which the Bahamian government increases the VAT rate. Though the Rt. Hon. Owen S. Arthur suggested in a June 15, 2013 speech that it is, “almost politically impossible” to increase a VAT once instituted, dozens of countries worldwide have accomplished just that. For example, consider the changes in OECD country VAT rates listed in Table 1.

The Rt. Hon. Owen S. Arthur suggests it is better to implement a high VAT rate and to “right-size” it thereafter with the promise that decreasing it is less politically costly than increasing it. And yet, very few countries - possibly only two within the OECD - have decreased VAT. The most recent example is the United Kingdom, which decreased the VAT rate from 17.5% to 15% for a period of one year under economic duress during the recent Great Recession. More recently, the United King-

10 An exception being the several countries which have repealed VAT shortly after its initial adoption.
dom increased its VAT rate to 20%, making it the first OECD country to double its original VAT rate; Singapore has since more than doubled its VAT rate from 3% to 7%. The average VAT rate on adoption in France, Germany, Italy, the United Kingdom, Spain New Zealand, Japan, Canada and Australia was 10.7% and has increased substantially over time to an average of 16 percent.

Working against any sustained increase in government funds is political pressure borne by policy makers to exempt ever-increasing segments of the economy from VAT and / or to increase the level of VAT alleviation or program funding for low-income groups. Furthermore, governments often find enforcement difficult in the absence of an income tax and consequently may be compelled to increase enforcement power by gathering the information that would be made available by issuing an income tax. Broadway et al. (1994) find that governments can improve VAT collections in countries with informal sectors by adopting an income tax. Indeed, opposition to VAT in many countries is motivated by fear in the private sector of tax programme expansion to include income taxes.

2.3 Labour

A VAT decreases the purchasing power of income earners by increasing the cost of goods and services without increasing earnings. In effect, VAT adoption leads to a dramatic decrease in purchasing power, or real incomes. Consequently, more people choose to engage in leisure activities or seek employment outside of the Bahamas, rather than seek or continue employment at the now lower real wages. As a result, the labour pool is diminished. Widely available unskilled labour will bear the full brunt of the wage reduction, while skilled, non-expendable labour may be able to negotiate wage increases.

<table>
<thead>
<tr>
<th>Country</th>
<th>Year Enacted</th>
<th>Initial Rate</th>
<th>Current Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>1954</td>
<td>16.66</td>
<td>19.6</td>
</tr>
<tr>
<td>Germany</td>
<td>1968</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>Ireland</td>
<td>1972</td>
<td>16.37</td>
<td>21</td>
</tr>
<tr>
<td>Italy</td>
<td>1973</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1973</td>
<td>10</td>
<td>17.5</td>
</tr>
<tr>
<td>Spain</td>
<td>1986</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1986</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Japan</td>
<td>1989</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Canada</td>
<td>1991</td>
<td>7</td>
<td>5/13</td>
</tr>
<tr>
<td>Australia</td>
<td>2000</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: OECD, Consumption Tax Trends (November 2008) and European Commission, VAT Rates (May 2010)
Furthermore, due to the anticipated decline in business turnover, the demand for labour will decline. An important implication is that because both the supply and demand for labour declines, the unemployment rate may remain constant. The reality, however, is that fewer people are employed.

2.3.1 Accounting Trade Groups

VAT adoption in the Bahamas will face many obstacles in the absence of a pre-established culture of record-keeping, financial statement preparation, monitoring and control, financial reporting and transparency. The International Development Bank (2006) points out that the ex ante development of accounting and tax expertise is crucial for supporting a public sector tax administration, as well as ensuring adoption and voluntary compliance in the private sector. However, the current supply of accounting expertise in the Bahamas is trivial. To characterise the country, consider that five Canadians in 1,000 are designated accountants. In contrast, less than one Bahamian in 1,000 is a designated accountant. In summary, given the demand effects of VAT adoption, the accounting profession in the Bahamas is likely to gain tremendously.

2.4 Employers / Businesses

Due to the diminished supply of labour resulting from the labour market, employers will face greater hardships in attracting qualified labour. In addition to higher search costs for the best employees, firms may be pressed by non-expendable staff to increases salaries to compensate for employee purchasing power forfeited due to VAT adoption.

Private sector compliance costs are described in detail in Section 3.4, while the greatest implication will be the decline in consumption goods. Retailers will face the greatest consequential decline in revenues. For example, the International Monetary Fund (2010) records that when Ireland increased its VAT from 10 to 18%, private consumption fell by 7.1%. Aln and El-Ganainy (2012) provide further evidence suggesting significant consumption decline: a 1 percentage point drop in consumption for every 1 percent increase in VAT. Consequently, we can infer that consumption may decline by up to 15% upon adoption of a 15% VAT. A finer estimate is not available because the government has not accurately disclosed which taxes – that also affect consumer prices - will be repealed at the time of VAT adoption.

It is important to note that a VAT will not only decrease purchasing power and thereby the purchases made by Bahamian citizens, but it will also encourage Bahamians to purchase from exempt, zero-rated or informal market sectors instead of VAT-affected sectors. Consequently, VAT-affected retailers not only bear higher compliance costs, but also suffer declining sales due to a “poorer” customer and because the “poorer” customer chooses to allocate his or her resources in a market sector.
unencumbered with VAT.

In other-country VAT adoption experiences, businesses are a key partner in VAT implementation anywhere between 15 and 24 months prior to adoption.\textsuperscript{11} Australia, Canada and New Zealand expended considerable resources to educate, assist and register businesses. Suggesting the length of VAT implementation time in the Bahamas will be longer and the resources to educate, assist and register businesses greater is that these countries had pre-existing sales tax administration structures and business practices, and much higher populations of designated accountants and bookkeepers.

Finally, based on experience elsewhere, small businesses can expect government provided monetary assistance to facilitate their new bookkeeping and reporting responsibilities.

2.4.1 Exporters

Bahamian exports include, among other goods, crawfish, aragonite, crude salt and polystyrene products.\textsuperscript{12} As a subcategory of businesses which will be affected by VAT, exporters have little reason for concern under the assumption of an entirely efficient and effective VAT administrative authority. To understand the implication of this assumption it is important to consider that VATs are commonly, if not universally, constructed as destination-based taxes; i.e., the tax is owed in the jurisdiction in which consumption occurs. Consequently, exporters neither charge nor remit VAT on sales, though they can and will claim VAT refunds to recoup the VAT portion of expenditures incurred in the production and / or service delivery process. In summary, exporters are affected by VAT only through the refund process; consequently, they are only affected by the wait times involved in refund issuance – hence, the implication of tax authority efficiency, and more specifically, refund timeliness.

All businesses face a disadvantage when VAT refunds are late. Exporters, who face international competition can be placed at a major competitive disadvantage if forced to tie up working capital in the VAT refund process. Missing or late VAT refunds tie up cash and consequently increase the cost of working capital because international competitors without missing or overdue VAT refunds can use the refund to pay down costly debt, or can avoid borrowing if investing in new and profitable opportunities. This cost can be non-trivial: Desai and Hines (2002) find that these working capital hold up costs can lead to a material competitive disadvantage for exporting firms.

Tax administrators often have a service standard specifying the number of days to process and dispatch VAT refunds before being required to pay the VAT registrant interest. According to the Bahamian

\textsuperscript{11} In addition, the Barbados issued its VAT White Paper in 1992 and implemented VAT five years later in 1997.
\textsuperscript{12} Source: https://www.cia.gov/library/publications/the-world-factbook/geos/bf.html
government White Paper, this period is two months. In contrast, Australia, Canada and New Zealand have services standard timelines between 14 and 21 days.

Consequently, Bahamian exporters could be compelled to tie up capital for 40-45 days longer than international competitors in a best case scenario. Reality is likely to be different. In developing countries it often takes several months and sometimes more than a year to process refund claims (Barbone et al., 2012). This effect will be especially pronounced for exporting firms whose competitiveness will suffer. Barbone et al. (2012) further observes that though countries commonly have self-imposed refund issue deadlines, these deadlines are often not met by tax authorities. In addition, if they exist at all, prescribed interest rates on outstanding refunds are often well-below market rates. Refund issue delay is correlated with weak or absent government forecasting and monitoring systems, and delays are further exacerbated in the presence of budget deficits and unmet tax collection targets. The incrementally higher increase in the cost of capital will erode exporter competitiveness, possibly reducing their growth prospects and threatening the livelihoods of Bahamian workers domestically employed.

Small exporters will be further disadvantaged. Large businesses in other countries are required to file and remit VAT monthly, while smaller businesses remit quarterly or annually. For example, a Canadian firm with sales less than $6,000,000 has the option to file quarterly; a Canadian firm with sales less than $500,000 has the option to file annually. However, according to the White Paper, firms of all sizes which are above the $50,000 registrant threshold, will be required to file and remit VAT monthly. For smaller exporters (e.g., exporters with sales less than $6 million per year), this will mean higher administration costs than their international peers in addition to longer refund wait times, further eroding Bahamian exporter international competitiveness.

### 2.4.2 Financial Services

Most countries exempt financial services from VAT. For those countries that do not exempt financial services, applying a VAT to financial services has proved challenging (E&Y, 2011). Consider that determining the value added for each financial service is not a clear calculation. For example, ordering cheques may have a direct cost to the bank which can be shifted forward to the consumer. However, other services such as financial intermediation in the form of accepting deposits and making loans are

| Table 2: VAT Refund Timing and Performance for Three Countries and the Bahamas |
|---------------------------------|--------|--------|--------|--------|
| Days allowed for returns and refund processing | Australia | Canada | New Zealand | Bahamas |
| Percent of refunds processed on time | 93.6% | 98% | 96.2% | Unknown |

Bahamian exporters will face higher administration costs than their international peers.
harder to price. Rather than attempting to capture hard-to-define costs and charging a fee for a specific service, the institution pays lower interest rates on deposits and charges higher rates on loans than they otherwise would. To tax these services, the value of the services would have to be estimated; to the extent the estimation is inaccurate it would distort the market for services. Consequently, banks instead capture profit through the spread between interest paid and interest earned with the spread being a function of the overall costs of bank operations. Regarding deposits and interest thereon, interest is considered income, or return on investment rather than a service or good provided. Therefore, it is not subject to VAT.

Exempting financial services can lead to a consumer welfare-eroding distortion known as “tax cascading”. Tax cascading occurs when VAT paid is not refunded and consequently it is passed through to the next firm in the chain of value creation, the client firm. The client firm does not pay tax on financial services though the fee for financial services, implicit or explicit, includes the VAT originally paid by the bank for expenses incurred in its value creation process. If the client firm provides a taxable service, the typical VAT is not only charged to the consumer, but VAT is applied to the VAT earlier paid for by the bank. Said differently, this chain of events leads to a tax on tax. This is known as tax cascading and is an expected outcome of exempting financial services.

In summary it is likely were VAT adopted in the Bahamas as is proposed by the White Paper, banks would be exempt from an obligation to charge and remit VAT on services rendered; they would also be unable to claim VAT, or input tax credits, on expenses incurred to earn revenue.

2.5 Economic Freedom Index

The Economic Freedom Index13,

“measures the degree to which the policies and institutions of countries are supportive of economic freedom. The cornerstones of economic freedom are personal choice, voluntary exchange, freedom to compete, and security of privately owned property.”

The Index uses 42 variables in the construction of a score which changes from year to year and on average, has increased over the 30 years it has been recorded. For example, the average country score has increased from 5.30 in 1980 to 6.88 in 2007. The Bahamas score in 2010 (the most recent year available), was 7.36, putting it at the top of the second quartile of countries with the most economic freedom. The 42 variables used to calculate the score fall under broad categories of 1) Size of Government, 2) Legal systems and Property Rights, 3) Sound Money, 4) Freedom to Trade Internationally, and 5) Regulation.

VAT adoption will lower the

13 Source: http://www.heritage.org/index/
Economic Freedom ranking. For example, though dubious, if the government meets its goal of raising an additional 2% of GDP in tax revenues, it is likely that government consumption will increase (Keen and Lockwood, 2006). This would cause the score for the category, Size of Government to decrease. The score here would further lower in the presence of a Reverse Tax Credit for low-income persons, a Poverty Eradication Fund or a Social Enterprise Fund.

The Bahamas score under Legal System and Transfer Rights would be similarly afflicted as already congested courts are bedevilled by a new and substantial mass of tax cases. Within the category of Sound Money, it is a sure outcome that inflation will increase in the year of introduction as the prices of all goods and services increase. In contrast, under the category of Freedom to Trade Internationally, the score can be expected to improve as revenue from trade taxes decrease, average tariff rates decline and the compliance cost of importing and exporting decline. However, this effect is expected to be dominated by the combined effects of the forgoing and also the score-eroding effects captured under Regulation. Government administrative costs will increase and the cost of tax compliance will increase, both phenomena resulting in a lower score.

Overall, the impact of VAT adoption is expected to have a significantly negative impact on the Bahamas score and ranking within the Economic Freedom Index.

### 3.0 Government Revenues and Private Sector Compliance Costs

The first step to estimating the welfare effects of VAT adoption is to estimate gross VAT revenues. Second, from this amount one must subtract VAT rebates and refunds, as well as VAT paid by government departments. Third, one must subtract government and judiciary administration costs. Fourth, one must subtract the VAT revenue losses which can be expected from noncompliance. Fifth, one must subtract losses from VAT refund fraud, which is pervasive in the EU (Keen, 2007). Sixth, one must subtract assessed but uncollectible accounts. This arithmetic will yield the net revenue from VAT. To calculate net revenues from tax reform, one must subtract the revenues replaced by VAT revenues. The result is the increase (decrease) in net revenues from tax reform. To calculate the private sector cost of VAT adoption one needs to estimate the new tax compliance costs borne by corporate entities.

#### 3.1 Government Net Revenues

Will VAT adoption increase net government revenues? Up until recently the consensus on tax reform in developing countries has advocated for the adoption of VAT in lieu of trade taxes which may stifle international trade (e.g., Keen and Lighthart, 2002). More recently, Emran and Stiglitz (2005) show the consensus opinion is dependent upon the absence of an informal sector – an extraordinarily implausible assumption for any
country, least of all developing countries which are characterized by larger informal sectors. Emran and Stiglitz re-evaluate the economic effects of replacing trade taxes with a VAT and find that VAT adoption reduces welfare under more plausible conditions. In their own words:

“The results are, in general, sobering and they raise serious doubts about the validity of the current consensus that favors a reduction and eventual elimination of trade taxes, and almost exclusively relies on VAT as the instrument of indirect taxation in developing countries. The results show that the income coverage of VAT due to the existence of a large informal sector renders the results derived earlier in the literature unhelpful at best and potentially misleading as the basis of indirect tax policy reform in developing countries.”

Munk (2008) further shows how the former consensus regarding the replacement of trade taxes with VAT does not hold in the presence of administrative costs. The prior literature has assumed that market transactions can be taxed at no administrative cost. This paper supports Emran and Stiglitz (2005) in that an informal sector dramatically increases the need for an administrative system; together, these papers demonstrate how prior literature ignore factors which erode tax revenues and increase tax administration costs.

To better understand the economic implications of VAT adoption, we outline gross revenues and expenses in the following pages. First, we estimate gross revenues and then estimate the revenues in excess of expenses by estimating administrative costs and the replacement of existing taxes.

Gross VAT revenues can be estimated by calculating the tax base as a proportion of country-level GDP and multiplying the product of the tax base percentage and GDP by the VAT rate. The tax base can be broad or narrow depending on the extent to which policymakers zero-rate or exempt certain goods and services. In the extreme, New Zealand provides virtually no exemptions and zero-rates very few goods and services and its tax base is 95% of GDP. In contrast, the tax base in Italy is 39%. The OECD average is 49%. In the following analysis, we suggest 49% as a base-case tax base, with 57% as the broader-base case and 41% as the narrower base case. The narrower base case may be closer to the Bahamian reality given the reported significance of the informal sector.

Multiplying the GDP by the tax base yields the total tax potentially collectible. The difference between the total tax potentially collectible and the tax collected is called the “tax gap”. Though the tax gap is seldom

---

14 Recent estimates of the average size of the informal economy is 39% for developing countries and 12% for OECD countries (Emran and Stiglitz, 2005).

15 It is worth noting that after VAT adoption, Canada observed a large increase in the informal sector, especially in the construction industry.
VAT evasion and fraud has evolved into large-scale organized crime in the EU.

estimated, a large tax gap is believed to be common in OECD countries. The tax gap is expected to be larger in developing countries due to the presence of large informal sectors. From 2002 to 2007, the United Kingdom tax gap ranged from 12.4 to 16.1 percent. For the purposes of the calculations presented below, we estimate the tax gap in the Bahamas to be 20%. we note that only those most intimately aware of the Bahamian economy know if this is a sufficiently high estimate.

VAT evasion and fraud is a well-known phenomenon and has evolved into large-scale organized crime in the EU. Recent estimates put the revenue loss for EU countries at 2 to 30 percent of potential revenues, averaging 14% across member countries (Barbone et al., 2012). Senate (2011) argues that VAT fraud has become an “established industry” and systemic attacks by fraudsters threaten the functioning of the entire VAT system. Marcelo and Nevarez (2006) find evidence that deliberate fraudsters increase noncompliance after audits (due to an unlikelihood of being audited again, or, as is the case in Canada, the tacit prohibition on being serially audited). For this analysis, we estimate fraud costs of 14% of taxes assessed. This too may be a conservative estimate in that a 2006 memorandum issued by the European Commission estimates overall tax fraud at 2 to 2.5% of GDP, or a multiple of the tax fraud estimated here.

Taxpayers may confirm they owe tax and yet not pay it. Sources are scarce for country-level uncollected debt data, but the Canada Revenue Agency is reported to have an uncollectible expense ratio of 7% of cash receipts. For this analysis we estimate uncollected debt expense of 7% of taxes assessed.

Refunds and rebates are part and parcel with the VAT invoice-credit system. An intermediate goods supplier will remit VAT on sales but also claim VAT on purchases. With data again scare, we borrow from the Canadian context to estimate the ratio of claims to remittances at 40%. In many countries, refunds exceed 40% of gross collections (Barbone et al., 2012).

Furthermore, net VAT rev-
enues are lessened by the amount of VAT paid out by government departments and entities. VAT paid out by Canadian government departments and entities amount to 0.33% of total government expenditures. That this ratio hinges on a 5% VAT rate, applying the measure to the Bahamian context means multiplying this rate by three to pair with the Bahamas proposed 15% VAT rate. Consequently, we estimate this amount as 1 percent of total government expenditures of $1.8 billion, or $18 million.

The following table illustrates the calculations thus far. In summary, after factoring for the above, net revenues accruing to the government from VAT adoption amount to $189 million. From this number, we next consider and subtract the many and widely varying costs that are inherent in maintaining a VAT-based tax regime.

Thereafter, we estimate the foregone revenues owing to the repeal of taxes the VAT is intended to replace.

3.2 Administration Costs

An American institution carried out a cross-country study of VAT adoptions in countries with pre-existing consumption tax administrative structures (e.g., a structure administering a manufacturing sales tax) and found that even with an administrative foundation, each country devoted “considerable resources” to “educate, assist and register businesses” and to enforce compliance over a 15-24 month implementation period (GAO, 2008). The execution of the administrative system affects tax yield, incidence and efficiency. Tanzi (1970) writes, “tax administration is a difficult task even at the best of times and in the best of places, and

<table>
<thead>
<tr>
<th>Table 3: Net Government Revenues from Tax Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Base</strong></td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Total Consumption-Based GDP</td>
</tr>
<tr>
<td>Tax Base</td>
</tr>
<tr>
<td>VAT Rate</td>
</tr>
<tr>
<td>Total Potential Tax Collectible</td>
</tr>
<tr>
<td>Less: Noncompliance</td>
</tr>
<tr>
<td>Less: Rebate and Refund Fraud</td>
</tr>
<tr>
<td>Gross Taxes Assessed</td>
</tr>
<tr>
<td>Less: Uncollectible Accounts</td>
</tr>
<tr>
<td>Less: Refunds and Rebates</td>
</tr>
<tr>
<td>Less: VAT Paid Out By Departments</td>
</tr>
<tr>
<td>Net Revenue</td>
</tr>
</tbody>
</table>
conditions in few developing countries match these specifications.” Bird (2005) and the World Bank (1988), in a review of the lessons from VAT adoptions in developing and transition countries, finds that VAT administration costs are much higher in developing than in developed countries. The drivers of administrative costs in many tax systems include the number of taxpayers subject to tax, how often they file returns, and the percentage of taxpayers audited. Tax administration costs are widely varying and are seldom estimated with accuracy prior to VAT implementation. For example, the Canadian adoption of VAT saw actual recurring VAT administration costs which were 250% of the amount budgeted. In this analysis, administration costs include:

1. Leadership Team Administration
2. Compliance Programs
3. Taxpayer Services and Collections
4. Appeals
5. Legislative and Regulatory Policy
6. Information Technology
7. Finance and Administration
8. Public Affairs
9. Internal Audit and Evaluation
10. Senior Counsel Legal Services

The structure of a VAT-based tax administration may be graphically represented as in Chart 1.

The direct administration costs are more difficult to intuit. Studies report administration costs in OECD countries as a proportion of taxes collected. Barbone et al. (2012) survey EU countries and find that most such countries have administrative costs which range between 0.2 and 0.4 percent of GDP, with a high in the EU of 1.4 percent of GDP. Analogously, comparable numbers suggest a range of $16 to $32 million, while matching the EU’s most costly administration would suggest $112 million. Before considering these analogous proportions, caution suggests that the Bahamas’ smaller population, absence of a pre-existing VAT structure and more frequent filing would increase this ratio; while the absence of income tax would decrease the ratio of administrative costs to GDP. For the purposes of this analysis, we consider two estimates to capture the scale of administrative costs: one percent of GDP, or approximately $80 million, and in the following text, the total of a long list of tax administration expenditure estimates, which amount to $65.7 million.

A modern tax administration features more than a dozen function- and activity-based departments. For example, the core cost centres of a new Central Revenue Agency (CRA) would include, as pictured above, the CRA Commissioner’s Office; the Compliance Department (including Audit and Enforcement), the Taxpayer Services and Collections Department, Appeals Department, Legislative Policy and Regulatory Affairs Department, not to mention expenditures related to the Minister of National Revenues Office and the attendant Board of Management which would oversee the Commissioner. To attend to the needs of the growing bureaucracy, additional
bureaucracy is required. Cost centres required to service the CRA include Information Technology Department, Human Resources Department, Public Affairs Department, Internal Audit and Evaluation Department and Legal Services Department.

In the estimates discussed below, some forecasts are uninformed, such as the funding for leadership team administration (Minister of National Revenue staff, CRA Commissioner staff, and Board of Management), which is estimated at $800,000. Other and much more substantial expenses, such as those for Compliance Programs, are informed.
Rather than the expected 3,800 registrants, the government ought to expect 8,915 registrants.

by analogous tax administration measures from Canada.

The expense related to compliance programs depends upon the number of tax remittances. In the Bahamas context, the number of remittances is likely to be high because of monthly remittance requirements. Consequently, for the 3,800 registrants estimated in the Ministry of Finance White Paper, the CRA could expect to receive 45,600 remittances and/or refund claims per year from mandatory registrants. Experience in other countries (e.g., France and Canada) show that approximately 31.7-34.5% of businesses below the registration threshold become voluntary registrants. Consequently, we expect 33.1% of the 15,453 Bahamian firms not required to register for VAT to do so. This estimate suggests the total registrant number will be 3,800 mandatory registrants and 5,115 voluntary registrants, for a total of 8,915 registrants or 106,980 remittances and/or refund claims per year.

Taxpayer compliance programs depend on well-trained staff completing a certain number of audits per year within a prescribed number of hours. According to the government White Paper, current “enforcement results are consistently poor,” and there is, “significant revenue leakage” under the current customs-based tax administration, indicating the need for a new body of tax experts to administer the VAT. The importance of a vigorous audit function is reflected by the E&Y (2011) finding that, “if tax on inputs is understated by only 3 percent, while refunds on purchases are overstated by 3 percent, the net tax collections would be reduced by almost 30 percent.” Fraud types the Bahamian government will be working against are described in Table 5.

<table>
<thead>
<tr>
<th>Australia</th>
<th>Canada</th>
<th>The Bahamas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold (in domestic currency)</td>
<td>A$75,000</td>
<td>CDN$30,000</td>
</tr>
<tr>
<td>Total VAT registered businesses</td>
<td>1,937,907</td>
<td>2,834,360</td>
</tr>
<tr>
<td>Percentage of registered businesses with sales below the threshold</td>
<td>31.7%</td>
<td>34.5%</td>
</tr>
<tr>
<td>*Calculated as follows: 19,253 firms licensed in 2011 – 3,800 required registrants = 15,453 non-registrants x 33.1% = 5,115 voluntary registrants. Plus 3,800 required registrants equals total registrants. ** Monthly filing requirements suggest administration of 106,980 VAT forms per year.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20 In contrast, OECD countries typically permit quarterly or annual reporting depending on the size of the registrant.

21 This is the net effect. Evidence of a countervailing effect is provided by Onji (2009), who shows that firms above the threshold who wish to avoid VAT adoption will “masquerade” as many small firms by separately incorporating business segments.

22 During the past decade in Canada, another benchmark, “tax earned by audit” has fallen into disuse.
wide and are lower in jurisdictions in which both income tax and VAT is levied, due to ease of identifying high-risk registrants when income-tax information is also collected by the tax authority. VAT audit rates in countries without income tax are unknown. Consequently, estimates are required.

In this analysis, we estimate that 5% of all VAT remittances\textsuperscript{23} will be audited and 50% of all VAT refunds will be audited. Under the assumption that there are ten remittances for every refund claim, we estimate the audit rate at 10%. This estimate suggests that 10,698 remittances and refund claims will be audited annually. In the Canadian context, VAT auditors are allocated 70 hours to perform a VAT audit of a moderately-sized enterprise with revenues $4 million and less. We use this allocation as a base for all firm remittances.

\begin{table}[h]
\centering
\caption{Compliance Risks}
\begin{tabular}{|l|l|}
\hline
\textbf{Fraud} & \textbf{Under-collection of VAT} \\
\hline
Missing Trader Fraud & A business is created for the purposes of creating VAT on sales and disappears without remitting VAT. \\
\hline
Failed Businesses & A business fails or goes bankrupt before remitting VAT collected to the government. \\
\hline
Under-reporting Cash Transactions & A business either charges a lower, VAT-free price for cash transactions, or underreports cash sales and retains VAT. \\
\hline
Import Fraud & A business or individual imports items for personal consumption and under values them for VAT purposes. \\
\hline
Fraud & \textbf{Over-claiming of Input Tax Credits} \\
\hline
Fraudulent Refunds & A business or fraudster submits false returns requesting VAT refunds from the government. \\
\hline
Misclassifying Purchases & A business falsely claims input tax credits by misclassifying personal consumption expenses as business expenses. \\
\hline
Fictitious or Altered Invoices & A business creates or alters invoices to inflate the amount of input tax credits they can claim. \\
\hline
Export Fraud & A business creates fraudulent export invoices for goods that are not exported to claim input tax credits. \\
\hline
\end{tabular}
\end{table}


Barbone et al. (2012) note that VAT fraud is persistent in many countries because tax authorities focus primarily on VAT refunds without regard for entities seek through fraud VAT reduction rather than VAT refunds or VAT elimination.
required to serve the audit function is a product of the number of audits multiplied by the number of hours required to perform the audit. In this analysis, we anticipate 10,698 audits per year and 70 hours per audit. The product, 748,860 is the number of hours of audit staff time per year required to perform the audit function. From this product, we extract the number of full-time-equivalent employees. Audit employees are assumed to work 40 hours per week and to have training, outreach and record-keeping obligations which consume 15 hours per week. We assume the remaining 25 hours per week are allocated for audit activities. We further assume the auditor works 48 weeks per year, or 1,200 audit hours per year. To calculate the number of full-time-equivalent audit staff required to perform the audit function, we divide the total number of audit hours required by the total number of audit hours expended per audit staff member. The result, 624, is the number of full-time-equivalent staff required to perform the audit function.

To translate the number of full-time equivalent staff members into total compliance expenditures, we multiply the full-time-equivalent figure by the average annual salary of an auditor. A 2003-2004 Ministry of Finance publication on wages in the Bahamas reports that accountants earn $24 per hour or approximately $50,000 per year. Assuming a 2.5% inflation rate, the adjusted 2014 rate per hour is $31.50, or approximately $65,500 per year. This is likely to be a conservative estimate of auditor salaries given the discrete jump in (unmet) demand for auditors in the year the compliance program is established. Total audit staff expenditures amount to the product of full-time equivalent staff and annual salary. The product is $40,871,500.

Augmenting the audit department is an enforcement department.

Table 6: Compliance Costs

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of registrants</td>
<td>8,915</td>
</tr>
<tr>
<td>Number of monthly remittances</td>
<td>106,980</td>
</tr>
<tr>
<td>Audit rate</td>
<td>10%</td>
</tr>
<tr>
<td>Files audited</td>
<td>10,698</td>
</tr>
<tr>
<td>Number of hours per audit</td>
<td>70</td>
</tr>
<tr>
<td>Total number of audit hours</td>
<td>748,860</td>
</tr>
<tr>
<td>Total number of audit hours per Full-Time (FTE) staffer per year</td>
<td>1200</td>
</tr>
<tr>
<td>Required number of FTE</td>
<td>624</td>
</tr>
<tr>
<td>Average annual salary FTE</td>
<td>$65,500</td>
</tr>
<tr>
<td>Total salary cost per year</td>
<td>$40,871,500*</td>
</tr>
</tbody>
</table>

*Not including appeals, collections, management, and justice salaries and overhead.

Assumed inflation rate is the average of inflation rate from 2003 – 2011; source: CIA Factbook.
The enforcement department prepares criminal charges against tax noncompliers. While a critical function of any tax authority, and staffed with the most capable auditors, this department often requires only a small budget. In this conservative analysis we ignore the expense of the enforcement department. In contrast, the appeals department of a tax authority is a major expense. For example, the recurring administrative cost of the appeals department in Canada is 150% of the compliance budget. In the absence of a reliable method to intuit the cost of an appeals department in the Canadian context, we conservatively assume the appeals department requires a budget of 50% of the compliance department. We assume an expense of $20,000,000. Similarly linked to the audit department is the collections department. Again borrowing from the Canadian context, this expense can be as high as 25% of the audit expense. Consequently, we conservatively budget 10% of the audit expense, or $4 million for collections.

The audit department is also supported by a legislative policy and regulatory affairs department. Though this is a recurring expense, once the relevant tax act and forms are drafted, this expense may be minor. We conservatively assume an amount of zero. Finally, an expense which may not be incurred by the tax authority but by the national department of justice is the expense of bringing cases to court. Often audit assessments, and subsequently appeals, are not resolved to the satisfaction of the taxpayer. The taxpayer has the option to present his or her case to a judicial body. In this scenario, the department of justice will defend the tax authority’s position. Though this expense is not borne directly by the tax authority, it is an expense associated with undertaking a VAT. In this conservative analysis, we assume this expense is zero.

Bureaucratic expenses incurred to ensure the continued operation of the foregoing are also included in this analysis. These expenses include information technology, human resources, finance and administration, public affairs, internal audit and evaluation and senior legal services. Information technology expense is a major budget item for tax administrations and is a major up-front expenditure for new tax authorities. Furthermore, because of the scalability of tax authority information systems they may cost the same whether the tax jurisdiction has 5 million registrants or 5,000 registrants. By way of example, Canada spent $13.6 million on revising a pre-existing information system when it adopted a VAT in 1992–1993. We propose no estimate on the cost of establishing a completely new information system in the Bahamas context, though the Expression of Interest for such a system was dispatched in May 2013 and this expense may soon become known, if shared publicly. Human resources, finance and administration and internal audit

26 Forms development took about 2 to 3 months in New Zealand, where both VAT and VAT forms are relatively simple. Canada allocated 12 months to develop, test, print and distribute its forms.
and evaluation expenses will also be non-trivial for what may become one of the largest public agencies in the Bahamas. Without other-country figures available, we conservatively estimate this expense as zero. Public affairs expense is likely to be substantial in the first and second year of VAT. Countries adopting VAT have spent hundreds of millions of dollars to educate the public and detailed communication guidance exists for the country implementing VAT. For example, the Australian government expended A$500 million on education efforts at transition, while Canada spent approximately CDN$100 million (GAO, 2008). Despite the magnitude of this expense, we conservatively estimate the expense as zero for this analysis.

The total expenditures yielded by this conservative analysis amount to $65.7 million. The table on the preceding page enumerates this result. Were one to reliably numerate the expenses above which are assumed to be zero it is possible that the total administration cost may begin to approximate, or even substantially exceed, the 1% of GDP, or $80 million, estimate presented earlier.

Thus far, this analysis suggests that the government may collect as much as $188 million on $390 million business during VAT implementation of up to C$1,000.

<table>
<thead>
<tr>
<th>Table 7: Administration Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net Revenue</strong></td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Leadership Team</td>
</tr>
<tr>
<td>Minister of National Revenue Office</td>
</tr>
<tr>
<td>Board of Management</td>
</tr>
<tr>
<td>Central Revenue Agency Commissioner Office</td>
</tr>
<tr>
<td>Compliance Programs (Audit, Enforcement)</td>
</tr>
<tr>
<td>Taxpayer Services and Collections</td>
</tr>
<tr>
<td>Appeals</td>
</tr>
<tr>
<td>Legislative Policy and Regulatory Affairs</td>
</tr>
<tr>
<td>Information Technology</td>
</tr>
<tr>
<td>Human Resources</td>
</tr>
<tr>
<td>Finance and Administration</td>
</tr>
<tr>
<td>Public Affairs</td>
</tr>
<tr>
<td>Corporate Audit and Evaluation</td>
</tr>
<tr>
<td>Senior Counsel Legal Services</td>
</tr>
<tr>
<td>Total Administrative Expenses</td>
</tr>
<tr>
<td>Net Government VAT Revenues</td>
</tr>
</tbody>
</table>
in taxes assessed in VAT collections while expending between $65.7 and $80 million on administration. Table 7 shows that subtracting the administration costs ($65.7 million) from the taxes collected ($188 million) yields, net VAT revenues amount to $123 million. This amount approximates the VAT revenue estimate of $100 million presented by Michael Halkitis on February 22, 2013 in the Tribune242 publication.

3.3 Tax Revenues Replaced by VAT

However, this amount does not include the taxes being replaced by the VAT. For example, on page six of the Ministry of Finance April 17, 2013 presentation it is suggested that the government, as part of WTO ascension efforts, will lower the average rates of customs duties and excise taxes to make room for the 15% VAT on imported goods. Consequently, while it is expected that VAT revenues from the Bahamas annual $2.8 billion in imports will be quite large, it is also expected that the lowering of duties and excise taxes will lower the government revenues in equal proportion. Said differently, the government collects $552 million from $2.88 billion in imports or approximately 20% of the value of imports. Customs duties are applied on the cost, insurance and freight value of imported goods and are generally between 0-35% plus a stamp duty of 2-7%. As mentioned, the government will lower these duties and excise taxes after VAT adoption.

The extent to which duties will be lowered is still unclear. The extent to which excise taxes will be lowered is also unclear. For the purpose of this analysis, I conservatively assume duties and stamp taxes will decline by 50%. To hedge against this estimate overstating actual foregone government revenues, I ignore the effect of lowered excise taxes on government revenues. It should be noted this is a highly conservative assumption in that it ignores the impact of VAT adoption on excise tax revenues – which will certainly be much lower – and which amounted to an estimated $352 million in 2012-2013. In line with this, I assume the government will only receive 10%, rather than 20% of import value in the form of duties and taxes. Again, I ignore the erosion of excise tax revenues. The net effect will be such that by lowering duties, the government lowers its expected revenues from duties by 50%, from 20% of import value to 10% of import value; thus, lowering its income from duties by $288 million per year. A similar analysis could be performed upon excise taxes, which generate $358.1 million of total government revenues because further government revenue declines are expected from the lowering of excise taxes to make room for VAT taxation. To maintain the conservative nature of the analysis, we ignore the reduction in government revenue due to lower excise taxes. Other taxes which
have been said to be candidates for replacement by the VAT include Hotel Occupancy Tax ($45 million) and the Business License Tax (as currently structured; $107 million). Like foregone excise taxes, this analysis conservatively ignores these taxes.

The customs tax revenues foregone which we subtract from net VAT revenues amount to $288 million per year. Subtracted from net VAT revenues of $123 million, the government is estimated to lose $165 million per year by adopting VAT. Importantly, and conservatively, we provide no estimate for the cost of Reverse Tax Credit for low-income persons, a Poverty Eradication Fund or a Social Enterprise Fund, as suggested by the Rt. Hon. Owen S. Arthur in his June 15, 2013 speech to the Grand Bahama Chamber of Commerce. Consequently, were these or like programs instituted, the net cost of VAT adoption for the government would increase.

### 3.4 Private Compliance Costs

Private sector compliance costs are non-trivial. For example, Desai and Hines (2002) find that the cost of filing for VAT rebates may lead to a competitive disadvantage for exporting firms, despite the tax neutrality of exports. Grandcolas (2005) provides evidence that Maltese firms found compliance costs to be onerous after VAT adoption, motivating the subsequent repeal of VAT. A US institution surveyed the literature and found that private sector compliance costs are approximately 1% – 1.5% of GDP. Vaillancourt et al. (2010) review the literature and find that compliance costs average 3 percent of revenues collected, with the costs as high as 6 percent in low population Netherlands (Allers, 1994). Furthermore, Barbone et al. (2012) show that the compliance cost is regressive, i.e., the burden is greatest on the smallest businesses; and that compliance costs do not decline over time.

Characterizing the Bahamian context is an absence of widely-held accounting tools. It is difficult to imagine how a Central Revenue Agency might train the auditors it requires to audit remittances and refund claims; it is virtually impossible to conceive how the private sector might martial the personnel and resources to discharge its would-be new obligation to maintain proper books and records. Pricewaterhouse-Coopers issued a 2010 report entitled, “The Impact of VAT Compliance on Business” and determined that for the average business, not only does it take longer to comply with VAT adoption

<table>
<thead>
<tr>
<th>Table 8: Tax Revenues Replaced by VAT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Net Government VAT Revenues</td>
</tr>
<tr>
<td>--------------------------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Less: Taxes Replaced by VAT (15% of 2.8B in Imports)</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
than it takes to comply with corporate income tax, but it also takes on average 192 hours per year in the Latin America and Caribbean region. In Brazil, one of the first and consequently one of the most experienced VAT countries, time required to comply with VAT is 1,374 hours per year. A conservative estimate of the time to comply in a country new to VAT, which requires monthly filing and which is populated by many relatively small businesses, and new to the institution of maintaining credible books and records, may be twice the Latin America and Caribbean average. Thus, we estimate 384 hours of compliance time for the private sector. At the aforementioned rate for accounting staff of $31.50 per hour, and given the aforementioned estimate of 8,515 registrants, we can determine an estimate for total private sector compliance cost. Multiplying the number of hours of compliance time per registrant (8,515) by the number of hours of compliance time for the average firm (384 hours) and then multiplying the product by the rate per hour yields a private sector compliance cost estimate of $103 million per year.

This estimate ignores the cost of expertise purchased to assist with completion of tax activities (e.g., fees paid to external professional tax advisors), which some firms will bear. No available data suggests the magnitude of this expense, but it is worth mentioning that prior to VAT adoption in Australia, the Australian government spent AUD$500 million on education efforts, including business skills education. In the absence of government-funded skills education, businesses will be forced to bear these costs either through educating incumbent staff, hiring new staff, hiring consultants, or all of the above.

The estimate also ignores non-recurring but non-trivial expenses incurred to purchase tax-related computer software, postage, travel and training. Rametse and Pope (2002) survey businesses in Australia and find that VAT start-up compliance costs were AUD$7,600 or approximately $4,300 US. Notably, these costs were much higher than government estimates and the government subsidy provided (AUD$1,000). Also of note is that this cost tends to be a higher, relative to assets and sales, for smaller businesses. Finally, this estimate ignores the aforementioned cost of tying up firms’ working capital during refund administration.

3.5 Summary

In this section we attempted to estimate the costs and benefits of VAT adoption by assessing the effect of VAT adoption upon government revenues, upon the private sector. In Section 2, we enumerated the effect upon Bahamian gross domestic product. Findings include:

1. Total government revenues under a VAT are expected to decline by $165 million per year.
2. Private sector compliance costs amount to $103 million per year.
3. GDP would decline by $322 to $483 million if government reve-
nue goals were met; however, it is virtually impossible this goal will be met and more likely government revenues will decline as aforementioned. Under this more likely scenario, GDP may increase due to a smaller tax burden.

4.0 VAT Adoption Elsewhere

4.1 Malta

Like the Bahamas, Malta is an island nation with an economy built around freight transhipment, financial services and tourism. Population is similar, as is the literacy rate, inflation rate, GDP level, GDP growth, GDP per capita and GDP composition. Each nation is also characterized by a government deficit of $300 million, and the Bahamas gained independence from the UK less than a decade after Malta. In many ways, these countries are very similar; making juxtaposition a useful tool to gain insight into the effects of VAT adoption in the Bahamas. Among these similarities one notable difference is the Maltese adoption of VAT 14 years ago.

Malta adopted VAT on January 1, 1995. Two years later it was repealed. Three years later it was reinstated. Criticisms precipitating the failed VAT adoption included sentiment that the VAT was a disguised customs duty, compliance costs were high and zero rating of food and other goods made compliance too complex (Grandcolas, 2005). Validating a theme discussed earlier, after adopting VAT the Maltese government increased spending by 49%. In addition, Malta reinstated VAT in 1999, after a 1998 budget deficit of $338 million.  

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Bahamas</th>
<th>Malta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>319,031</td>
<td>411,277</td>
</tr>
<tr>
<td>Geography</td>
<td>Islands, Caribbean</td>
<td>Islands, Mediterranean</td>
</tr>
<tr>
<td>Literacy Rate</td>
<td>96%</td>
<td>92%</td>
</tr>
<tr>
<td>Independence from the UK</td>
<td>July 10 1973</td>
<td>September 21 1964</td>
</tr>
<tr>
<td>GDP</td>
<td>$8.043 Billion</td>
<td>$8.689 Billion</td>
</tr>
<tr>
<td>GDP Growth Rate (2011)</td>
<td>1.60%</td>
<td>1.70%</td>
</tr>
<tr>
<td>GDP Per Capita</td>
<td>$31,900</td>
<td>$27,500</td>
</tr>
<tr>
<td>GDP Composition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>7%</td>
<td>17%</td>
</tr>
<tr>
<td>Services</td>
<td>91%</td>
<td>81%</td>
</tr>
<tr>
<td>Labour Force</td>
<td>192,200</td>
<td>184,500</td>
</tr>
<tr>
<td>Government Revenues (2012)</td>
<td>$1.5 Billion</td>
<td>$3.52 Billion</td>
</tr>
<tr>
<td>Government Expenditures (2012)</td>
<td>$1.8 Billion</td>
<td>$3.81 Billion</td>
</tr>
<tr>
<td>Budget Surplus (Deficit)</td>
<td>-3.7% of GDP</td>
<td>-3.3% of GDP</td>
</tr>
<tr>
<td>Inflation Rate</td>
<td>2.80%</td>
<td>2.40%</td>
</tr>
</tbody>
</table>

Source: http://countryeconomy.com/deficit/malta
Though the VAT was expected to be a remedy for persistent government deficits, budget deficits remained large from 1999 – 2012, varying from a low of $128 million to a high of $418 million.

4.2 Grenada

Considerably less similar but still comparable to the Bahamas is Grenada. Grenada adopted VAT in 1986 and repealed VAT in 1995 after many and frequent amendments proved unsuccessful. Grenada re-introduced VAT in 2010. The 1986 adoption experience failed due to design and administrative weaknesses; low compliance which became self-perpetuating as discontent became widespread; lack of government or business preparation and an absence of taxpayer education (Grandcolas, 2005). Again, VAT adoption was motivated by spiraling government deficits and debt. Upon adoption, the government deficit declined from 5.0% of GDP in 2010 to 2.6% of GDP in 2011; however, the deficit returned to its pre-VAT levels in 2012 with a deficit of 4.6% of GDP.31

4.3 Japan

Makin (2008) points to the modest 1997 increase in VAT from 3 to 5 percent in economically moribund Japan as “Japan’s biggest policy mistake” in perpetuating its economic malaise, which persists today. Unayama and Cashin (2011) link the VAT rate increase and subsequent consumption decline to Japan’s “double dip” recession in the late 1990s. The lesson is that the adverse effects of VAT adoption can be economically incendiary if imposed in recession or

<table>
<thead>
<tr>
<th>Table 10: Bahamas-Grenada Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
</tr>
<tr>
<td>Population</td>
</tr>
<tr>
<td>Geography</td>
</tr>
<tr>
<td>Literacy Rate</td>
</tr>
<tr>
<td>Independence from the UK</td>
</tr>
<tr>
<td>GDP</td>
</tr>
<tr>
<td>GDP Growth Rate (2011)</td>
</tr>
<tr>
<td>GDP Per Capita</td>
</tr>
<tr>
<td>GDP Composition</td>
</tr>
<tr>
<td>Agriculture</td>
</tr>
<tr>
<td>Manufacturing</td>
</tr>
<tr>
<td>Services</td>
</tr>
<tr>
<td>Labour Force</td>
</tr>
<tr>
<td>Government Revenues (2012)</td>
</tr>
<tr>
<td>Government Expenditures (2012)</td>
</tr>
<tr>
<td>Budget Surplus (Deficit)</td>
</tr>
<tr>
<td>Inflation Rate</td>
</tr>
</tbody>
</table>

31 Sources: http://www.businessgrenada.com/burke.html & http://research.stlouisfed.org/fred2/series/CASHBLGDA188A
during a budding economic recovery.

5.0 Alternative: Spending Cuts

In February 2013 the Bahamian government declared a commitment to reduce public spending by 10%. In light of the related declaration of VAT adoption, we contrast these two forms of deficit reduction. Fiscal consolidations based exclusively upon spending cuts and absent tax increases are much more likely to succeed in reducing and eliminating the deficit without an arresting effect on GDP growth. The IMF reviewed 170 cases of austerity in fifteen countries over the last three decades and provides evidence that spending reductions do not carry the negative GDP effects associated with tax increases. Specifically, they find that a 1% cut has no effect on GDP growth, while a similarly sized tax increase reduces GDP by 1.3%.

That most affected by adoption of a VAT, consumption, is benignly affected by a reduction in government spending. A 2011 E&Y report provides evidence that consumption decline is 7.5 times larger when fiscal consolidation is achieved under VAT adoption rather than a reduction of government spending.

Canada, for example, has been progressively decreasing a steady series of federal budget deficits not by increasing the existing 5% federal VAT rate, but through repeated and expedient cuts in spending. For example, the government recently announced that the budget for its tax authority is being cut by $300 million over the next three years. In the United States, fiscal consolidation has long been led by government spending cuts; for example, the Deficit Reduction Act of 1984, the Omnibus Budget Reconciliation Act of 1990 and the Omnibus Reconciliation Act of 1993 bridged the majority (i.e., 55-70%) of the target funding gap using government spending reductions rather than tax increases. In summary, rather than install or increase a distortionary VAT which adversely affects consumption and private sector employment, the Canadian and US government have chosen to instead achieve fiscal consolidation through reductions in government spending.

6.0 Conclusion

The Bahamas is currently faced with a swelling budget deficit, a moribund economy and elevated unemployment. This paper has shown that if enacted, VAT adoption will not only adversely affect GDP growth, domestic consumption and domestic employment, it is also unlikely to achieve government revenue targets; all the while burdening the private sector with substantial compliance costs. The negative effects of VAT adoption, in the current economic climate, may force the Bahamian economy into further decline. VAT adoption, rather than restoring the economic foundation of the Bahamas through deficit and debt reduction, would only raise additional economic concerns.
References Consulted

Andrade, F. 2012. An analysis of the effectiveness of the state tax administration in India with particular reference to the value-added tax.


Ahmad, E. 2010. The political economy of tax reforms in Pakistan: The ongoing saga of the GST. Discussion papers on development policy.


Barber, C.T.A. The determination of value added tax in the financial services industries. Raad Afrikaans University. Edmiston, K. Fox WFW.


Bergervin, P. 2007. A primer on federal consumption taxes. Parliamentary information and research service.


Bird, R.M. Value added taxes in transitional and developing countries. Lessons and questions. International tax program.


Boeters, S. Bohringer; C. Buttner; T. and Kraus, M. 2006. Economic effects of VAT reform in Germany. Discussion paper.


Cashin, D. and Takashi, U. Short-run Distributional effects of VAT rate change: Evidence from a consumption tax rate increase in Japan. RIETI Discussion paper series.

Cashin, D and T. Unayama. 2011. The Intertemporal Substitution and Income Effects of a VAT Rate Increase: Evidence from Japan. The University of Michigan Kobe and University


Cnossen, S. 2010. Three VAT studies. CPD Netherlands Bureau for economic policy Analysis.


Cooper, G. 2007. The discrete charm of VAT. Legal studies research paper.

Corthay, L. and Loeprick J. 2010. Taxing Tourism in Developing Countries Principles for improving the investment climate through simple, fair, and transparent taxation.


Distribution of Software and Value Added Tax (VAT) in Russia Vaslex (Law Firm).


Ernst & Young. 2012. Indirect tax alert. EYGM Limited.

Ernst & Young. 2013. Global VAT forum. VAT newsletter.


Edmiston, K. And W.F. Fox. A Fresh Look at the VAT.

Ellis, R. 2010. Baros Maldives. Ebooks Disclaimer


Ernst & Young LLP’s. 2012. VAT News letter for the US.


European Union. 2007. Study on reduced VAT applied to goods and services in the Member States of the European Union Final report. Copenhagen economics.


Gachewa, D. 2012. Thinking beyond boarders, Tanzania. KPMG.


bank policy research working paper.
Goldberg, S.D. 2007. The Aches and pains of transition to a consumption tax: can we get there from here? Legal studies research paper.
Goorochurn, N. Tourism taxation: A theoretical and empirical investigation. Economic division Nottingham University Business School.
Institute for Economic Research Working Papers 18
Jantscher, C.M. 1986. Problems of administering a value added tax in developing countries. IMF working paper.
Johnson, H. C. 2013. We don’t need no stinking VAT. Public Law and Legal Theory Research Paper Series.
Johnson, H.C. 2010. How to raise $1 trillion without a VAT or a rate hike. University of Texas at Austin school of law.
Kassera, P. 2006. TAXATION IN TANZANIA Presentation by the Commissioner for Large Tax Payers of the Tanzania Revenue Authority. Tanzania Investment Forum.
Keen, M. 2007. VAT attacks! International Monetary Fund working paper.
Keen, M. 2008. VAT tariffs, and withholding: border taxes and informality in developing countries. Republic Economics.
Keen, M. 2009. What do (and don’t) we know about the value added tax. Economic Literature.
Keen, M. 2013. The Anatomy of the VAT. International Monetary Fund
Keen, M. and S. Smith. 2006. VAT Fraud and Evasion: What Do We Know and What Can Be Done? National Tax Journal
Keen, M. 2013. The Anatomy of the VAT. International Monetary Fund working paper
Keen, M. 2013. The Anatomy of the VAT. International Monetary Fund
Management.
Office for Budget Responsibility. 2010. The impact of the increase in the standard rate of VAT on GDP.
Pricewaterhousecoopers. 2010. The impact of VAT compliance on business.
PricewaterhouseCoopers. 2011. How the EU VAT exemptions impact the Banking Sector. Study to assess whether banks enjoy a tax advantage as a result of the EU VAT exemption system.
Puddington, A. 2013. Value added tax, standard for WWTS Countries.
Republic of Cape Verde, Ministry of finance and planning. Growth and poverty reduction strategy paper.
New Measure of Fiscal Shocks. The American Economic Review.
Romer, C.D And D.H. Romer.2007. The Macroeconomic Effects of Tax Changes: Estimates Based On a
of St. Louis.
Rufil Consulting. 2013. Accounting& Taxation In Russia. Rufil Consulting ,Accounting & Management in
Russia.
Saeed, A., A. Ahmad and K. Zaman.2012. Validity of the Value Added Tax in the SAARC.
Saeed, A, Ahmad, A, and Zaman,K.2012. Validity of the Value Added Tax in the SAARC region. The
Romanian Economic Journal.
centre(CARTAC).
Santos, P. 2002. Caribbean Regional Technical Assistance Centre Cartac Vat Introduction—Administrative
Issues. CARTAC.
Schatan, R. 2003. VAT on Banking Services: Mexico’s Experience. VAT MONITOR. International Bureau of
Fiscal Documentation.
Schenk, A. 2008. The credit crises and the VAT Administrative rules. Wayne State University Law School
Legal Studies Research Paper Series.
Schenk, A. 2009. Taxation of financial services (including insurance) under a United States value added tax.
Science.
Smart, M. 2012. Departures from neutrality in Canada's goods and services tax. SPP research papers.
Smart. M. and Bird .R.M. 2009. The Impact on Investment of Replacing a Retail Sales Tax with a Value-
Added Tax: Evidence from Canadian Experience. National Tax Journal
of Bangladesh VAT. Working paper series.
Journal, Vol. 44, No. 1
Sonnenbergs, E.N 2013. general corporate information for foreign clients: establishing a business in south
Africa. Africans in Africa for Africa.
South Dakota Department of Revenue. 2011. Tourism Tax.
Developments. Latham & Watkins.
Strategic consultancy. Taxation in Syria. MK

Tait, A. Value-added tax, national. Broad-based tax on business designed to measure net dollar value generated in a country. International Monetary Fund.

Tait, A. Value-added tax, national. International Monetary Fund


Tax revenue panel. 2009. Goods and services tax (GST). Ministry of finance


The President's Advisory Panel on Federal Tax Reform Value-Added Tax


Valadao, M. Comparative Analysis of the Value Added Tax (VAT) and Retail Sales Tax (RST): A Contribution to Tax Reform Studies in the U.S.


Whalley, J. and Zhang, S. 2005. VAT base broadening when the location of some consumption is mobile. Elsevier B.V.


Zodrow, R.G. 1999. The sales tax, the VAT, and taxes in between--or, is the only good NRST a “VAT in drag”? National Tax Journal

Author Biography

David Godsell is a third-year PhD student at Queen's University Queen's School of Business. Based in Kingston, Ontario, Canada, David is an advisor to public and private clients on accounting, tax and finance policy issues. David recently co-authored a study of equity tax credit programs available in Atlantic Canada and has co-authored an article in CA Magazine titled, “The Economic Consequences of IFRS Adoption in Canada.” David is an ad hoc reviewer for the Journal of Business Ethics, has received acknowledgements in several top-tier publications and has served as a discussant at several international accounting research conferences. David's research interests include the interaction between financial reporting and capital market dynamics; the impact of IFRS adoption on product market competition and the use of earnings management in import relief investigations.

Before joining Queen's School of Business as a PhD student, David worked as a corporate tax auditor with the Canada Revenue Agency and also delivered a personally-designed GMAT Preparation Course to would-be MBA candidates. In addition, David has served as Treasurer of the Youth Canada Association based in Ottawa, Canada for eleven years. He is a Certified Management Accountant and holds a Master of Business Administration degree and a Master of Science in Management degree. His baccalaureate degrees include a Bachelor of Arts in Economics and a Bachelor of Commerce (Honours) in Accounting. David holds the Social Sciences & Humanities Research Council Award, the CMA-Canada Doctoral Award, the CMA-NL Doctoral Award, the Queen’s Graduate Award, the Queen's School of Business Award and is a two-time recipient of the Ontario Graduate Scholarship Award; all of which were awarded for academic excellence.
Disclaimer

*Inherent Limitations*

This report has been prepared as outlined in the engagement letter of June 2013 between David Godsell and the Nassau Institute.

No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by, the Nassau Institute consulted as part of the process. David Godsell has indicated within this report the sources of the information provided. He has not sought to independently verify those sources unless otherwise noted in the report.

David Godsell is under no obligation in any circumstances to update or review the observations made in this report, in either oral or written form, for events occurring after the report has been issued in final form. However, should additional documentation or other information become available which impacts upon the observations reached in this report, we reserve his right to amend his observations accordingly.

The findings in this report have been formed on the above basis.

*Third Party Reliance*

This report has been prepared at the request of the Nassau Institute in accordance with the terms of engagement letter dated June 2013. Other than his responsibility to the Nassau Institute, neither David Godsell nor any employee of David Godsell undertakes responsibility arising in any way from reliance placed by a third party on this report. Any reliance placed is that party’s sole responsibility.

*Electronic Distribution of Reports*

We understand that the Nassau Institute intends to use our deliverables internally and in consultation with stakeholders, and may wish to release the report, or part of the report, to the public. In the case of partial disclosure, the Nassau Institute must make available the full report on its website and accompany any excerpt of the report with a web address linking the reader to the full report.

Responsibility for the security of any electronic distribution of this report remains the responsibility of the Nassau Institute and David Godsell accepts no liability if the report is or has been altered in any way by any person.
Founded in 1995 The Nassau Institute is a Bahamian public policy research organization dedicated to libertarian principles of individual liberty, limited government and the rule of law. In order to maintain its independence, the Institute accepts no government funding and is supported by Bahamians and others with the same objectives.

Offices of the Nassau Institute  
The Business Centre  
P.O. Box N 1688  
Bay & Deveaux Streets  
Nassau, Bahamas  
T: 1.242.326.5728  
F: 1.242.323.7272  
E: info@nassauinstitute.org
This page intentionally left blank.
This page intentionally left blank.