FISCAL DISCIPLINE IN THE ACHIEVEMENT OF FISCAL & DEBT SUSTAINABILITY AND GROWTH IN THE BAHAMAS

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Abstract

Fiscal policy has been and continues to be an important facet of macroeconomic performance. For the past two decades the Bahamian economy has been experiencing economic stability but faces some fiscal challenges. The fiscal position in the country has deteriorated in recent years, resulting in a rise in the national debt. Therefore, this paper seeks to examine the casual relationship between Government spending, growth, and debt sustainability as it relates to GDP. Preliminary findings suggest that there is a strong positive relationship between Government expenditure composition and growth, with some lag effects. In the context of the national debt, there is an inverse relationship between growth and the accumulation of debt. Moreover, national debt in The Bahamas appears to be sustainable at its current level of 46.6% of GDP.

[1] The views expressed in this paper are those of the authors and do not necessarily represent the Central Bank of The Bahamas. The paper should be considered a work in progress and as such the authors would welcome any comments on the written text.

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SECTION 1: INTRODUCTION

Fiscal policy is one of the most vital mechanisms used by Governments to pursue their goals for the economy. Therefore, the influence of Governments within an economy is expressly visible via their fiscal policy initiatives. According to Dorinnie (2003), Governments utilize fiscal policy as a tool to achieve short run efficiency in the form of stabilization and long run efficiency in the form of economic growth and development. In its most basic form, fiscal policy can be utilized to influence real GDP, inflation, the level of economic growth and employment through Government taxation and expenditure (McConnell & Brue 1999). Moreover, experiences have shown that during times of recession, countries tend to adopt expansionary fiscal policy, mainly in the form of increased Government spending, tax reduction, or a combination of both methods, in a bid to revive the economy. Conversely, contractionary fiscal policy is embraced during periods of growth and expansion.

More specifically, over the years the fiscal position of some Caribbean countries has deteriorated, resulting in rising public debt and concerns about debt sustainability. Hence, fiscal policy in the region is affiliated with increased public debt. However, the specific reasons for debt accumulation vary among countries. Most commonly, the acquisition of public debt is associated with the financing of war, investment in large developmental projects, the availability of cheap credit, the influence of Government in the local banking arena, Government assumption of private sector debt and current expenditure financing (Arrow & Boskin, 1988). Additionally, as mentioned by Kufa, Pellechio and Rizavi (2003), inadequate administration that prevents adequate revenue collection and fails to efficiently curtail expenditure, results in debt accumulation to levels

beyond the Government's ability to produce the surplus needed to sufficiently counter growing debt. It was Samuelson (1980) who postulated that, public debt has the potential to place a burden on future generations if countries consume all of its available stock of capital or refuse to continually augment its existing capital.

Therefore, given the significant impact on the economy of Governments' fiscal stance, it is necessary for Governments to exercise fiscal prudence since the lack thereof, has implications for economic growth and debt sustainability. Thus, the aim of this paper is to examine fiscal developments in The Bahamas, as it relates to economic growth and debt sustainability. More specifically, the paper focuses on fiscal discipline and its implications for economic growth and debt sustainability within the Bahamian economy. Following the introduction, section II gives a general overview of the evolution of fiscal policy in Caribbean economies. Section III highlights the impact of fiscal policy on macroeconomic policy objectives. An analysis of fiscal stability and debt sustainability, together with an empirical analysis of fiscal policy and debt sustainability on economic growth comprise section IV. Recommended fiscal guideline measures are expounded upon in section V, while section VI incorporates the general findings and concludes the paper.

SECTION 2: EVOLUTION OF THE CARIBBEAN'S FISCAL POSITION

Prior to the onset of the late 1990's, Caribbean economies exhibited healthy fiscal performances. Evidence of this was featured in a survey conducted by The Economic Commission For Latin America and The Caribbean (1997), where they cited data showing that Caribbean countries experienced favourable fiscal performance during the period 1987-1996. The survey analysis was based on the average of

indicators for 1987-1989, in comparison with the average for the last three years in the period, 1994-1996. The study revealed that the average deficit declined by almost 2 percentage points of GDP, while total revenue tapered by 3.5 percentage points for the period 1987-1989. The survey analysis further suggested a falloff in total public expenditures to 5.4% of GDP. Furthermore, the results reflected improved Government spending which countered the decline in revenues. Moreover, there was a reduction in the national debt for some countries, however, their internal debt obligations increased.

Nevertheless, the last decade has featured a deteriorating fiscal position within several countries of the Caribbean, as imprudent Government spending and reduced revenue collection, have given rise to heavy debt burdens in many economies. Specifically, since the mid to late 1990's, elevated public debt has characterized many of the economies in the region. According to the International Monetary Fund (IMF 2005), seven of the world's ten most indebted emerging market economies are found in the Caribbean[2], an indication of the serious challenges faced with regards to debt sustainability.

According to Caldentey (2005), the increase in the deficit is due to a constant tax structure in the region, whereby the tax rate remains unchanged and hence the same number of dollars is paid by the same taxpayers, coupled with higher recurrent expenditures. For most Caribbean economies, the tax effort as measured by the level of the tax to GDP ratio has remained steady throughout the 1990's. The notable exception is Barbados where the tax to GDP ratio increased from 27% to 32% following the introduction of the value added tax in 1997. Meanwhile, there has been growing importance of recurrent

[2] The seven most indebted Caribbean countries that have public-debt-to GDP ratios in excess of 90% are Antigua & Bermuda, Belize, Dominica, Grenada, Guyana, Jamaica and St. Kitts & Nevis

expenditure in all countries. For instance, in the case of The Bahamas recurrent expenditure grew from 19.1% of GDP in 1985 to 60.1% in 2005. Similarly, for the OECS recurrent expenditure increased from 23.0% to 31.4% of GDP between 1985 and 2005, while in the same period both Belize and Jamaica recurrent outlays each rose from 15.0% to 25.4% and 31.1% of GDP respectively. Also, between 1990 and 2005 Barbados recurrent expenditure increased to 29.8% from 29.0% of GDP.

Note that, the behaviour of the fiscal stance mirrors the behaviour of the deficit. Godley (1983) defines the fiscal stance as Government expenditure divided by the tax ratio, that is, revenue over GDP. Therefore,

$$FS = G/(T/GDP) \quad (1)$$

Where, FS is the fiscal stance; G refers to Government expenditure; T is total tax revenue and GDP is gross domestic product.

Hence, the fiscal stance is said to be neutral when tax revenue covers Government expenditure (G=T) and the fiscal stance is equal to GDP (FS=GDP). The fiscal stance is deemed expansionary when G>T and FS>GDP and restrictive if G<T and FS<GDP. In the case of all countries in the region the fiscal stance has been expansionary for more than two decades, resulting in widening fiscal deficits. As a consequence of having to finance the increasing fiscal deficit the debt burden has grown, giving rise to debt sustainability concerns. Appendix Table 1 shows the fiscal stance for The Bahamas for the period 1985-2005.

For The Bahamas, the tax ratio expanded faster than expenditure in 2005 because this was the year that the Government embarked on enhanced revenue collection measures. Government's enhanced measures included improved revenue administration by replacement of manual receipting of revenue with cash receipting systems, the introduction of the Customs Department Trade Information System software, improvement to the assessment process of real property tax, by adding more properties onto the assessment register and introduction of Compliance Officers to undertake review and analytical work in connection with revenue administration in the area of hotel room tax, stamp tax, business licence and ticket tax.

Sahay (2005), in his study examined the macroeconomic performance of Caribbean countries for two sub-periods, namely, 1990-1997 and 1998-2003 in a bid to highlight public sector debt in the region. Sahay's evaluation was based on the primary fiscal balance of these countries. The primary fiscal balance is the total deficit or surplus less interest payments. The primary fiscal balance shows the end result of Government's operations for the period, independent of costs connected with previous deficits. In the analysis, Sahay (2005) discovered that an overwhelming majority of Caribbean nations have accumulated high levels of public debt, which were fuelled by weakening fiscal balances.

During 1998-2003, the fiscal account position of Caricom countries worsened with declines being recorded in the fiscal balance of each country. Sahay (2005) noted that the average public debt to GDP ratio in the Caribbean climbed from 56% in 1997 to an excess of 90% by 2003, with fixed rate regimes experiencing the worst performance compared to flexible regimes[3]. In an effort to explain the deteriorating

[3] This ratio is significantly above the level of debt sustainability which should be no more than 50% of GDP according to some theories.

overall fiscal position of the Caribbean, Sahay attributed the public debt burden borne by these countries, to several factors, namely to increased interest expenditures, deteriorating primary fiscal balances, rising Government current and capital expenditure and country specific exogenous shocks, such as the removal of preferential trade agreements and natural disasters.

Using the following equation (2) the author describes the accumulation of pubic sector debt as:

$$S_{t+1}D_{t+1} + F_{t+1} = (1+i_t)S_{t+1}D_t + (1 + r_t)F_t - GBAL_t - GRANTS_t + EVT_t \quad (2)$$

In equation (2), respective F_t and D_t are foreign and domestic public debts at the beginning of period t, with the latter denominated in domestic currency. S_{t+1} represents the nominal exchange rate at the beginning of period $t+1$ measured in units of foreign currency per unit of domestic currency. $GBAL_t$ is the Government's primary fiscal balance during time t, while $GRANTS_t$ refers to the grant component of Government revenue, which can be used to finance deficits without creating new debt. The interest on domestic currency denominated debt is denoted by i_t, while r_t represents the interest rate on foreign currency denominated debt. $EVT_{t,}$ which refers to 'event', denotes any event that does not appear in the fiscal accounts but modifies the public debt at time t.

It was Carl Walsh (1998) who posited that the consolidated budget constraint of the public sector and central bank provides the framework for examining sustainability. The dynamic budget constraint is denoted as follows:

$$-(T - E) + rB = db/dt + dM/dt \quad (3)$$

Where T is public revenue; E is public primary expenditure, that is, total expenditure excluding interest payments on public debt; r is the interest rate on the stock of public sector debt; B is the debt; and M is the monetary base. The left hand side of the equation (3) is the overall public sector deficit (defined as a positive number), consisting of the primary balance, $-(T - E)$ and interest payments on public debt, rB. The deficit can be financed by issuing debt, db/dt, or increasing the monetary base, dM/dt. However, in the interest of stability of prices and exchange rate peg to the U.S. dollar, some countries, such as The Bahamas, have precluded use of the monetary base that is, seigniorage, to finance fiscal deficits, which takes dM/dt out of the budget equation. Therefore, the budget constraint is rewritten in terms of the ratio of its variables to GDP.

$$-(\tau - e) + (r - g)\, b = db/dt \qquad (4)$$

Where τ is the ratio of public revenue to GDP and e is the ratio of primary public expenditure to GDP; g is the GDP growth rate; and b is the ratio of the stock of total debt (domestic and external) to GDP and db/dt, is its change. Therefore, the primary balance as a share of GDP that stabilizes the ratio of public debt to GDP $(bd/dt = 0)$ is:

$$\tau - e = (r - g)\, b \qquad (5)$$

Consequently, the path of Government spending will eventually lead to borrowing in order to service existing debt. Thus, the “No-Ponzi-Game (NPG) condition”, used mainly in the basic infinite horizon model for family consumption, is imposed so that the debt does not increase faster than the interest rate. Hence, the debt stabilizing primary surplus matches interest payments net of the effect of GDP growth on

the debt-to-GDP ratio. If the primary balance[4] falls short, the Government is not inevitably headed towards insolvency, since this is dependent on the future course of growth, debt, interest payments and primary balances.

According to Phebby Kufa, et al (2003), the computation of debt-stabilizing primary balances is sensitive to the specification of variables. The average interest rate applicable is likely to be less than the current or marginal interest rate on newly contracted debt, thereby imparting a downward bias to the computation of the debt-stabilizing primary surplus. The average interest rate spoken of equals interest payments on public debt divided by the public debt stock. The relevant interest rate is the effective interest rate on public debt taking into account all terms of repayments, calculated in present value terms.

Moreover, Blanchard & Fischer (1993) in their model endorsed the need for fiscal and monetary co-ordination in debt management. The model features components of monetary policy (money and interest rates) and components of fiscal policy (deficits and debt). As a ratio of Gross National Product (GNP), the fiscal deficit (δ), is comprised of two parts, namely the primary deficit (δ_0) and the interest expense on existing debt *(rb)*, to derive:

$$\delta = \delta_0 + rb \qquad (6)$$

[4] The fiscal deficit is where Government's expenditure exceeds Government revenue, while the primary balance is calculated as the fiscal deficit less interest payments on the outstanding debt stock. The importance of the latter is that it separates the net discretionary expenditure of Government. It depicts the end result of Government's operations for the period, independent of the costs associated with previous deficits.

In general, fiscal deterioration in the Caribbean since the late 1990's has raised concerns about the sustainability of Caribbean countries' fiscal positions. For most countries, the achievement of a balanced budget seems unattainable since fiscal developments have been marked by growing overall deficits and accumulations of public debt, which have negatively impacted economic growth. Moreover, empirical research has shown that there is a strong correlation between fiscal austerity and economic growth. Thus, the rapid increase in fiscal expansion over the years appears to be related to policy slippages, insufficient planning for anticipated adverse shocks and, to some extent, unanticipated developments. Therefore, acquiring debt-stabilizing primary balances is necessary for countries within the regions in order to address their debt problems.

Stabilization of the debt ratio is necessary in order to achieve a sustainable level of debt. A country's debt ratio is sustainable if future primary balances are sufficient to meet the service obligations on existing and future debt. Thus, the debt-stabilizing primary surplus is often used to assess current fiscal policy by judging whether the existing fiscal surplus is consistent with a stable debt-to-GDP ratio and to indicate how much effort is required to achieve a stable debt ratio.

SECTION 3: IMPACT OF FISCAL POLICY ON MACROECONOMIC POLICY OBJECTIVES

Over the years fiscal issues have been and continue to be a major facet of macroeconomic performance. One of the central tenets of macroeconomics is that fiscal policy can be effective in stimulating aggregate demand and reviving a stagnant economy. Hence, fiscal issues are becoming more prominent in central bank discussions as it relates to the role of fiscal and monetary policies as stabilization tools

and a reassessment of the role played by public sector imbalances in some emerging market crises.

A growing body of research indicates that there are circumstances in which expansionary fiscal policy cannot be used to pull an economy out of a recession. More specifically, when levels of public debt are already high, increasing the budget deficit may in fact lead to lower private sector investment and private consumption, negating the effect of higher public sector spending or tax cuts on aggregate demand. In fact, numerous studies of OECD countries have shown that reducing fiscal deficits can accelerate growth when the level of public debt is high and unsustainable. Generally, reducing Government borrowing in order to finance deficit spending contributes to a softening in interest rates, thereby spurring investment. Moreover, shrinking deficits lead the private sector to reduce its estimates of current and future tax liabilities, providing a further boost to investment and consumption.

Additionally, some studies have shown that where macroeconomic imbalances exist, fiscal consolidation had a positive impact on growth. In a study conducted by Gupta, Clements, Balducci and Mulas-Grandas (2002) on the casual relationship between expenditure composition, fiscal adjustment and growth, it was indicated that a reduction of one percentage point in the ratio of the fiscal deficit to GDP is estimated to lead to an average increase in per capita growth of ¼ to ½ percent. It was also stated that shifting the overall composition of public expenditure towards more productive uses was important for boosting growth and achieving sustained fiscal adjustment. Therefore, expenditure composition was critical, with an increase in spending on Government wages and salaries negatively

impacting growth, while outlays on goods and services along with capital projects raised the growth rates appreciably.

Moreover, how deficits are financed is very important. Internal financing can hamper growth, with Government crowding out of the private sector occurring, thus curtailing investment. Fiscal tightening, depending on how it is achieved, can have expansionary or contractionary effects on the economy. Fiscal tightening achieved mainly through a reduction in subsidies, transfers and the Government's wage bill tends to last longer and can promote future growth, while tightening achieved by increasing taxes and cutting public investment tends to be contractionary and slowdown growth. Thus, in Government's pursuit of fiscal sustainability, caution is needed with regards to fiscal tightening, since expansionary or contractionary fiscal policies can pose a threat to debt sustainability.

SECTION 4: FISCAL & DEBT SUSTAINABILITY AND ECONOMIC GROWTH IN THE BAHAMAS

4.1 *Fiscal Policy in The Bahamas*

The tourism sector is the main driver of the country's economy, accounting for approximately 40.0% of GDP, followed by international financial services, which adds some 10.0%-15.0% to GDP. The remaining 45.0% of total GDP is linked to Government, construction, agriculture, manufacturing and other miscellaneous services. Over the years, The Bahamas has experienced economic stability, but faces some fiscal challenges similar to those seen in both developed and developing countries.

Over the past two decades, the Bahamian Government's overall deficit widened from 1.5% of GDP in 1985 to 2.8% at the end of 2005 (see Appendix Figure 1). The development reflected deterioration in

Government's finances due to increased current expenditure, particularly with respect to wages and transfer payments. Current outlays rose from an annual average of 16.9% of GDP during 1985-1994 to 17.5% of GDP during 1995-2005. However, capital expenditure grew at a slower rate averaging 2.0% over the period 1995-2005 from 2.5% of GDP during 1985-1994. Hence, the fiscal stance over the review period, 1985 to 2005 has been expansionary (see Appendix Tables 1 & 10). Moreover, Government and Government guarantee debt, which averaged 36.7% of GDP during the period 1985-1999, advanced to 46.6% of GDP at the end of 2005 (see Appendix Figure 1 & Table 7).

The deterioration in the fiscal performance was also registered in the primary fiscal balance, which excludes interest payments. The primary fiscal balance went from a surplus of 1.1% of GDP in 1985 to a deficit of 0.7% of GDP at the end of 2005 (see Appendix Figure 3 & Table 10). Nevertheless, interest payments declined slightly to 2.0% of GDP in 2005 from 2.7% of GDP in 1985.

Note that, with regards to Government's deficit financing in The Bahamas there are stipulated guidelines that the Government is required to adhere to. As outlined in the Statute Laws of The Bahamas, the options available to the Government include the following:

- With respect to advances from the Central Bank, as laid out in Volume VIII Chapter 351:28(3), the amount of any advance outstanding at any given time should not exceed ten percent (10%) of average ordinary revenue of the Government for the last three years or estimated ordinary revenue[5] of the

[5] "Ordinary revenue" is defined by the act as all income or contributions to Government revenue not being loans, capital grants or other receipts of capital nature. "Average ordinary revenue refers to the yearly average of the ordinary revenue for a three year period (in which accounts have been brought before

Government's most recently approved budget estimates, whichever is the least amount.

- As stated in Volume VIII Chapter 359:16(1), the Government may receive advances from any bank, insurance company or money lending institution, funds necessary to meet its current Consolidated Fund requirements. Nonetheless, such amounts ought not to exceed fifteen percent (15%) of the average ordinary revenue or ten percent (10%) of the estimated ordinary revenue whichever is the least.
- In Volume VIII Chapter 361:3(1), the Minister of Finance is authorized to borrow either all at once or in parts thereof, via the issue of treasury bills (t-bills), sums not exceeding twenty percent (25%) of the average ordinary revenue of the Government. Moreover, the Minister may also borrow, via the issuance of t-bills, any sum required to settle t-bill maturities.

4.2 *Analysis of Fiscal Sustainability Level*

In every economy fiscal sustainability is of significance to macroeconomic stability. Fiscal sustainability focuses on the evolution of Government debt and whether it remains finite or explodes. Therefore, fiscal policy is sustainable provided that the real stock of Government debt does not grow rapidly over time. Moreover, by achieving fiscal sustainability the Government will be ensuring that it has the capacity in the short and longer term to finance its desired expenditure programs, as well as the ability to service its debt.

In examining the sustainability of fiscal policy, the first step is determining the Government's budget constraint (see Equation 3). By taking into consideration the Government's budget constraint, the

parliament) before the next year any question is raised regarding any subsection. " Estimated ordinary revenue refers to estimations of ordinary revenue as laid before parliament for that year.

sustainability of fiscal policy will be unveiled. However, since fiscal sustainability concerns the evolution of *b,* whether it remains small or it increases rapidly, the following budget identity can be applied in testing the fiscal sustainability:

$$F = \Delta s + \Delta b \qquad (7)$$

where *s* is seignorage measured as *(ΔS/GDP)*h*, and *b* is the debt to GDP ratio.

From which we derive the fiscal sustainability as follows:

$$b = (f-s)/(h+y) \qquad (8)$$

where *h* is inflation rate and *y* is the rate of growth

The assumed values included *s*, which is the 21 year average change in central bank financing; *y*, which refers to the IMF's forecasted growth (5.8%) for the calendar year 2006; *b,* the 2005 debt to GDP ratio valued at 38.1%; and h, the inflation rate of 2.3% which reflects an average for the 2001-2005. Using these values the sustainable fiscal deficit was computed as:

$$0.381 = (f - 0.0014)/(0.023 + 0.058)$$

$$\therefore f = 0.0323 \rightarrow 3.23\%$$

Given these assumed values, a fiscal deficit of 3.23% was derived using the budget identity equation (8). The results implied that a primary deficit of 3.23% is necessary to stabilize the current debt to GDP ratio of 38.1%.

Moreover, in the recent Budget Communication for fiscal year 2007/2008 the Government indicated that its medium term objective is to bring the debt to GDP ratio down to between 30%-35% of GDP by 2012/2013. Hence, using the IMF's estimated growth rate of 5.8% for the 2006 calendar year and an assumed inflation rate of 2.3%, calculations showed that in order for the Government to achieve its

medium term target ratio of 30% then a primary fiscal deficit not in excess of 2.57% of GDP would be required to stabilize the debt over the medium term. Therefore, the Government's objective of a fiscal deficit to GDP ratio of 1.9% in 2007/2008 is within the range of the fiscal sustainability ratio.

$$0.30 = (f - 0.0014)/(0.023 + 0.058)$$
$$\therefore f = 0.0257 \rightarrow 2.57\%$$

Appendix Table 2 shows the calculated fiscal sustainability value (f) when different growth rates (y) and debt to GDP ratios (b) are applied.

4.3 Analysis of Debt Sustainability Level

According to a Commonwealth Secretariat, 1996 report on Domestic Debt Management, the 'avoidance of fiscal deterioration without interrupting macroeconomic goals' is the primary sustainability objective, as per public debt management. Unlike developed countries, Caricom economies lack breadth in their tax base and have high social and infrastructure development needs. Hence, the fiscal gap for these economies has significant implications for macroeconomic stability. The general macroeconomic implications of growing deficits and thus debt can be traced via the impact on the financial system, Government payment of higher debt servicing, external account and the private sector, where 'crowding out' of private investment occurs.

In Fraser's (1999) paper, "*The Monetary and Fiscal Implications of Achieving Debt Sustainability*", the author noted the modification done to the Blanchard & Fischer model by the Commonwealth Secretariat (1996) (see Equation 6). The Commonwealth Secretariat (1996) modified the model to apply exclusively to the sustainability of

domestic debt. Hence, variables were expressed in terms of Gross Domestic Product (GDP) as in contrast to GNP, and the model was simplified to generate benchmark standards upon which policy options can be estimated. Given the revised version, Government's budget identity is as follows:

$$Z + iB = \Delta S + \Delta B \qquad (9)$$

Where Z is the primary deficit; iB is the interest paid on total debt outstanding; ΔS is the change in base money; and ΔB is the increase in total debt outstanding. From this identity, the following relationship is derived:

$$b = (z-s)/(y-r) \qquad (10)$$

where z is the primary deficit to GDP ratio and r is real rate of interest.

Blanchard & Fischer (1993) noted that among low inflation industrialized countries, seignorage has accounted for approximately 0.5% of GNP in Government revenue and in high inflation economies far more. Notwithstanding, values of $s>0$ imply that the Governments have elected to boost the revenue base via the creation of money. Of keen significance to this model, is the link between growth and real interest rates. The IMF (1996) pointed out that if the rate of increase in the real interest rate exceeds the rate of growth of the economy, then the national debt is growing faster than Government's ability to make repayments. Moreover, Grant (1998) posited that in the case where money supply becomes endogenous because the monetary authorities can no longer influence the real deficit then the "fiscal dominance hypothesis" is in operation. Therefore, the expectation is

for 'y' to be greater than 'r'. Overall, the key variable in this model is the debt to GDP ratio, 'b', where a period in which the ratio was deemed most favourable is identified, and then under a specific set of assumptions evaluate the fiscal path most appropriate in order to achieve such a target in future periods.

More specific to The Bahamas, over the period 1985 to 2005, the internal debt stock increased as a percentage of GDP, moving from 19.7% of GDP in 1985 to 33.2% of GDP in 2005. Conversely, the stock of external debt declined to 4.9% of GDP in 2005 from 6.1% of GDP in 1985. Nevertheless, the total debt stock as a percentage of GDP rose to 46.6% at the end of 2005 from 29.5% at end-1985 (see Appendix Table 7). However, excluding Government contingent liabilities from the total debt stock, the debt to GDP ratio in 1985 amounted to 25.8% and at the end of 2005 stood at 38.1%.

Using data for The Bahamas for the period 1984-2005, the modified version of the Blanchard & Fischer (1993) model would be applied (see equation 9) to compute debt sustainability for The Bahamas. However, Fraser (1999) did a few additional modifications to tailor the model to suit the Bahamian economy. Hence, in computing the debt sustainability for The Bahamas, the model applied by Fraser (1999) is being used (see equation 10). In the estimation, Z refers to the primary deficit, which excludes interest paid on domestic debt. The variable iB is the actual amount of interest paid on Bahamian dollar debt. Central Bank financing of Government's deficit (advances to Government and net purchases of Government securities) represents the change in base money, ΔS. B refers to Government's direct charge, which is the total debt outstanding to central Government, excluding Government contingent liabilities. The real interest rate is calculated as nominal interest rate less the rate of inflation. The nominal interest

rate used is the average interest paid on domestic direct charge (r) for the period and changes in the retail price index are used as for inflation rate (h). Nominal GDP (y) refers to growth rate. See Appendix Table 8 for variables values.

Note that the debt sustainability indicators project the path of fiscal policy that will be consistent with the current debt stock, taking into consideration a given level of growth and interest rate. The acceptable size of the primary deficit relative to the size of the economy is dependent on the debt to GDP ratio target for the specific economy. Deviations from the estimated primary deficit necessary to stabilize the debt ratio suggest that there is need for fiscal adjustment. Comparative lower ratios suggest room for fiscal expansion, meaning that the Government can increase current and capital expenditures. Conversely, higher ratios are an indication that there is need for fiscal tightening, signalling the need for Government to reduce spending.

Therefore, using equation (10) and applying the current debt to GDP ratio of 38.1%, with an assumed growth rate of 5.8% and the twenty (21) year average values for ‘s’ and ‘r’, a primary fiscal deficit of 2.43% to GDP is necessary to stabilize Bahamas’ current debt level, as shown mathematically below.

$$b = (z-s)/(y-r)$$
$$0.381 = (z - 0.0014)/(0.058 - (-0.0021))$$
$$\therefore z = 0.0243 \rightarrow 2.43\%$$

Moreover, several institutions, such as the IMF, have indicated that as a rule of thumb, debt ratios in excess of 50% of GDP imply that the debt is unsustainable. Therefore, for The Bahamas the current (2005)

debt level is sustainable at 38.1% of GDP since it is below the international benchmark level; however, if the Government pursues expansionary fiscal policies, without augmenting revenue, through adequate revenue reform measures, then the debt ratio is likely to become unsustainable, since currently it is approaching the threshold level. The Government appears to be cognisant of this development and has announced in the 2007/2008 Budget Communications (May 2007) that its target over the medium term will be to bring the debt to GDP ratio down to between the 30%-35% level.

Using equation (10) and applying Government's medium term objective of a debt to GDP ratio of 30.0%, with an assumed growth rate of 5.8% over the medium term and the twenty (21) year average values for 's' and 'r', then a primary fiscal deficit of 1.94% to GDP is necessary to stabilize the Bahamas' debt over the medium, as shown mathematically below.

$$b = (z-s)/(y-r)$$
$$0.30 = (z - 0.0014)/(0.058 - (-0.0021))$$
$$\therefore z = 0.0194 \rightarrow 1.94\%$$

However, if the average growth rate for nominal GDP over the last ten years (1996-2005) is substituted for y (5.7%) then in order for the debt to be sustainable over the medium term and achieve Government's debt to GDP 30.0% target ratio, the size of the primary deficit relative to the size of economy would need to be 1.87%, which is slightly lower than what is required at an assumed 5.8% growth rate (See Appendix Table 3).

Notwithstanding, for the twenty-one (21) years under review, the primary deficit to GDP ratio never exceeded 2.1%, despite the overall fiscal deficit to GDP ratio peaking at 3.8% in 2003. Primary surpluses were recorded in ten (10) out of the twenty-one (21) years, despite registering overall fiscal deficits during those periods (see Appendix Tables 9 & 10).

4.4 Empirical Analysis of Fiscal Policy and Debt on Economic Growth

Empirical studies conducted on the casual relationship between expenditure composition, fiscal adjustment and growth, alluded to the theory that fiscal adjustment does not dampen growth; however, expenditure composition is critical. It has been postulated that, an increase in spending on Government wages and salaries can negatively impact economic growth, while expenditures on goods and services and capital projects tend to raise the growth rate significantly. Therefore, quality fiscal adjustments, based on the reallocation of public expenditure to more productive uses and the reduction of budget deficits, are said to be conducive to higher economic growth in countries with unfavourable macroeconomic conditions.

Using annual data for The Bahamas, for a sample period 1985 to 2005, an Ordinary Least Square (OLS) model, depicting the relationship between growth and the impact of several fiscal variables was examined. The results endorsed the theory that there is a positive relationship between Government expenditure and growth. For The Bahamas, the regression results indicated that 98% of economic growth is explained by Government expenditure and is a very significant contributor to growth, but with a one year lag effect. However, Government revenue, when tested was not a significant

variable to growth and was thus omitted from the regression. Based on the regression results ceteris paribus, every $1 increase in Government expenditure is matched by a $5.02 increase in GDP (see Equation 11 – below p-values are shown in brackets). Therefore, the results imply that Government expenditure boosts economic growth, while a cut in Government spending can result in a slowdown in growth.

$$NGDP = 1968422 + 5.0236\,Govexp(-1) \quad (11)$$

(0.151) *(0.000)*

$R^2 = 0.97983$ Adjusted $R^2 = 0.97871$

DW = 1.4811

where,

NGDP = nominal Gross Domestic Product

Govexp(-1) = total Government expenditure lagged one period

Moreover, due to the importance of expenditure to growth, an analysis was done of the various expenditure components. When examining overall current and capital expenditures, it was revealed that both were significant contributors to economic growth, explaining 98% of the change in GDP. A $1 rise in current expenditure will result in a $4.87 increase in GDP ceteris paribus. However, with respect to capital spending and growth, the positive effects are noticeable only after a two year lag. Even though increased capital spending will cause the fiscal deficit to expand in the initial years, following a two year span, growth will be boosted. According to the regression results, at a 5% level of significance, for every $1 spent on capital projects, after two years, GDP will be boosted by $5.69 (see Equation 12).

$$NGDP = 207.8075 + 4.8662\,Currexp + 5.6905\,Capexp(-2) \quad (12)$$

(0.184) *(0.000)* *(0.011)*

$R^2 = 0.98215$ Adjusted $R^2 = 0.97992$

DW = 1.7824

where,

Currexp = current expenditure

Capexp(-2) = capital expenditure lagged two periods

The Granger causality test was also done to determine if there was evidence of a feedback relationship between GDP, current expenditure and capital expenditure. The test results indicated that at a 10% level of significance, current expenditure is the main contributor to growth. Moreover, according to the Granger causality test, capital spending alone will not lead to economic growth. However, the Wald test suggested that capital expenditure is significant to GDP growth when combined in the expenditure equation (see Appendix Tables 4 & 5).

A further breakdown of current expenditure by economic classification revealed that personal emoluments which account for over 60% of Government consumption, is an important contributor to economic growth. According to regression results from an OLS model using personal emoluments, transfer payments and capital expenditure as exogenous variables and nominal GDP as the endogenous variable, a positive relationship exists between these regressors and growth, with 98.4% of GDP growth explained by these independent variables (see Appendix Table 6). The results revealed that for every $1 increase in personal emoluments, a $4.09 rise is expected in GDP (see Equation 13).

The positive and significant relationship was also noted for transfer payments, which comprised of interest payments and subsidies & other transfers, where for every $1 hike in transfer payments the expected result is a $7.63 advance in nominal GDP. Subsidies and other transfers are generally to quasi-autonomous agencies, public corporations, households and non-profit institutions. However, for Government purchases of goods and services the results suggest that even though there is a positive link to growth it is not significant and as such it was omitted from the regression.

Similarly, for capital expenditure with a two year lag, for every $1 increase there is a $4.67 rise in nominal GDP (see Equation 13). Higher capital expenditure supposedly affects GDP with a lag, due to implementation of infrastructure which would encourage business growth and the development of communities, boosting consumption and GDP. Therefore, the results from the model implied that an increase in spending on Government wages and salaries, transfer payments and capital expenditure all have a positive and significant impact on growth. Thus, the theory that expenditure composition is critical to growth holds true for the Bahamian economy. Nevertheless, all this hinges upon the favourable macroeconomic conditions that prevail in the economy.

$$NGDP = 744.8281 + 4.0863\,Peremol - 7.6318\,Tranpay + 4.6718\,Cap_{exp(-2)} \quad (13)$$

(0.075) (0.019) (0.000) (0.031)

$R^2 = 0.98385$ Adjusted $R^2 = 0.98062$

DW = 1.8589

Where,

Peremol = personal emoluments

Tranpay = transfer payments

It is interesting to note that for some countries, increased spending on Government wages and salaries appear to impact negatively on growth, while expenditure on other goods and services and capital projects raised the growth rate significantly. However, for The Bahamas there is a positive relationship between Government outlays on personal emoluments and growth. The positive relationship posited to occur is as a result of the structure of the Bahamian economy where there is a high import propensity, due to the fact that, almost all the items consumed are imported (approximately 90% of all that is consumed is imported). Therefore, the increase in wages and salaries is likely to lead to a rise in consumption, and as a result of the multiplier effect of consumption, real economic growth will occur.

Further, a quantitative analysis of the national debt in The Bahamas and its impact on growth showed that there is an inverse relationship between these two variables. Meaning that, as the national debt increases it will give rise to a decline in GDP, and vice versa. For the Bahamian economy, in a model using current expenditure, capital expenditure, internal debt stock and external debt stock as independent variables, it was observed that 99% of economic growth was explained by these variables (See Equation 4). For external debt, at a 5% level of significance, a $1 increase in the debt stock will result in GDP declining by $2.03.

$$NGDP = 422019 - 2.0313Extdebt + 0.6130Intdebt + 4.8147Capexp(-2) + 6.6249Currexp \quad (14)$$

(0.813) (0.030) (0.159) (0.018)
(0.000)

R^2 = 0.98741 Adjusted R^2 = 0.98381

DW = 2.1889

where,

Extdebt = external debt

Intdebt = internal debt

However, for internal debt, it was noted that even though this variable displayed the expected sign, it was insignificant. Nevertheless, when omitted from the equation the explanatory power of the model decreases (lower R^2 and adjusted-R^2). Thus, internal debt appears to be important to economic growth, even though it is not as significant as external debt. One reason cited for the difference in the level of significance between internal and external debt is the fact that the Government usually rolls over the existing internal debt by issuing new Treasury bills and other Government securities. On the other hand, external debt payments are obligations that the Government has to honour, meaning that the Government cannot default on their external debt payments. Thus, the high level of significance is due to the negative impact rising external debt payments can have on growth.

Several institutions, such as the IMF, have indicated that as a rule of thumb, debt ratios in excess of 50% of GDP imply that the debt is unsustainable. Therefore, The Bahamas' current debt levels appear to be sustainable at 38.1% of GDP. However, since currently it is approaching the threshold level, if the Government pursues expansionary fiscal policies the debt ratio is likely to become unsustainable. The Government appears to be cognisant of this development and have announced in the 2006/2007 Budget

Communications (May 2006) that its target over the medium term will be to bring the Debt to GDP ratio down to the 30% level.

Moreover, the empirical results highlighted the importance of Government fiscal behaviour on economic growth, with fiscal prudence remaining the hallmark for economic growth.

SECTION 5: RECOMMENDED FISCAL REFORM MEASURES

The correction of fiscal imbalances and a country's debt problems are essential to economic growth. Governments need to undertake a number of steps to correct fiscal imbalances and achieve debt sustainability. However, the manner in which each country's fiscal situation is corrected will depend on the structure of the underlying economy. In his paper, Sahay (2005) specifically outlines five key steps which can be undertaken by Governments to achieve debt sustainability and growth. The steps comprised of: fiscal consolidation, prudent debt management, asset sales/privatization, exogenous shock vulnerability reduction and growth enhancing reforms. The findings revealed that fiscal consolidation appeared to be the primary tool used to correct fiscal imbalances, which led to the extremely high deficits in observed countries. Moreover, he noted that cross country studies have proven fiscal consolidation's ability to augment growth rates via economic reform programs, which give rise to foreign and private sector investment.

With regards to debt management, Governments can opt to rewrite existing debt to take advantage of the reduced costs associated with extended maturities. Meanwhile, prudent debt management may allow Government's to achieve fiscal sustainability. As mentioned by Kufa, Pellechio and Rizavi (2003), a country's future primary balance ability to cover any existing and future debt obligations is the

determining factor in deciding whether or not a country's debt ratio is sustainable. Additionally, while the proceeds from asset sales and privatization may be applied to existing debt, Sahay acknowledged that revenue percentages may vary across countries and tend to be rather low. Moreover, privatization must be undertaken carefully and be highly transparent. An example of this fact is evident in the case of Argentina where revenues derived from privatization played a critical role in correcting its fiscal imbalances, during the early stabilizing years following its financial crisis in 1989 and 1990. Privatization efforts in Argentina also facilitated the introduction of debt-equity-swaps schemes that greatly reduced its public debt. Nonetheless, privatization is seen as a temporary solution, which should not replace the need for other stable revenue generating measures and prudent Government spending.[6]

Moreover, most Caribbean countries are vulnerable to the threat of natural disasters, which results in widespread recovery costs for these economies. The occurrence of natural disasters generally demands the use of resources and thus, impacts the Government's fiscal policy. Hence, given the threat of natural disasters such as hurricanes and floods, Governments need to enact proper disaster preparedness and response to alleviate the setbacks associated with these occurrences. Governments must assess demographic, economic, geopolitical, climatic, natural resources and security risk factors in a bid to project the effects of these components on fiscal policy. Caribbean Governments are urged therefore, to consider this fact when undertaking fiscal policy reform.

In recent years, The Bahamas has incurred expenses from hurricanes Jeanne and Francis, which have been classified among the worst on

[6] See Rozenwurcel (1994), "Fiscal reform and Macroeconomic Stabilization in Argentina", Documento Cedes/103, Buenos Aires Argentina

record for the country. It has been suggested that about $200 million in direct losses and $300 million in insured losses were incurred. In sum these two recent hurricanes cost the country about 8% of GDP. Realizing that the country has never experienced a disaster of this magnitude, the Government took steps to alleviate the economic and social impact of such exogenous shocks through the creation of a National Emergency Management Agency (NEMA). NEMA has a responsibility for the promotion and propulsion of the national disaster management agenda. Moreover, the Government is currently drafting a Disaster Preparedness and Response Bill to further administer disaster preparedness. In this regard, the Government appears to have taken a crucial fiscal reform measure.

Furthermore, for most Caribbean countries, the Government is the primary employer. As a result, public sector emoluments can take up a large portion of the Government's budget. Therefore, it is necessary for the Government to streamline its workforce and refrain from "political hiring" which tends to result in over employment. While this option may not be welcomed by most, it can result in reduced Government expenditure.

Notwithstanding, regardless of a country's choice of fiscal reform measures, these efforts should be phased in gradually so that possible crowding out does not occur and the private sector has sufficient time to adjust to fiscal policy modification. Thus, it is important that reforms be sequenced, with the stages clearly identified. Moreover, it is essential to have coordination between fiscal and monetary policies. Fiscal and monetary stability cannot be disassociated since the credibility of monetary policy can potentially be frustrated by inappropriate fiscal policy[7]. Thus, until the Government is able to fund

[7] See Branch (2005), 'Monetary and Financial Stability: Issues for Caricom Economies in the Domestic Sector', The Caribbean Center for Monetary Studies

its operations in the money market, the coordination of fiscal and monetary policies should rely on a joint exercise between the central bank and the Ministry of Finance aimed at setting a binding limit on the ability of the Government to obtain funds from the Central Bank. Effective monetary and fiscal policy co-ordination would avert unstable fluctuations in aggregate demand.

SECTION 6: CONCLUSION

Prudent fiscal policy remains a central tenet of macroeconomics and is very important to stimulating economic growth. The study conducted endorsed the need for adherence to fiscal sustainability measures, since the level of sustainability serves as an indication of whether the current policy stance is sustainable in the long run. Moreover, one of the prerequisites for debt sustainability is a sound fiscal environment. Hence, there is an established relationship between fiscal discipline, debt sustainability and economic growth.

During the past two decades, an analysis of fiscal policy in The Bahamas revealed that the Government has been adopting an expansionary fiscal stance over the period 1985-2005. Nevertheless, the fiscal stance has been sustainable, with the primary deficit to GDP ratio never exceeding the 2.1% benchmark. Further, findings revealed that the Government has reduced its external indebtedness over recent years and increasingly relied on domestic financing. The trend is partly owing to the inverse relationship that exists between debt and economic growth and the belief that external debt is riskier.

According to the IMF, which cited a 50% debt to GDP ratio as sustainable, the national debt for The Bahamas at its current level (38.1%) is high but the application of the model indicated that since

the primary deficit relative to the size of the economy is within its acceptable size, the debt at its current level is sustainable. Therefore, the Government's medium term objective of reducing the debt level to the 30%-35% of GDP range, which was announced in the 2007/2008 Budget Communication, is achievable and should be pursued.

Moreover, empirical results revealed that Government spending is critical to economic growth. Consequently, it is recommended that the Government tailor its spending to finance more productive sectors, since there is a very significant and positive relationship between Government expenditure composition and economic growth. Some findings for other countries suggested that outlays on capital goods boost growth more than spending on current goods, mainly consumption. However, in keeping with the Bahamian economy's importer status, spending on both current and capital goods appear to enhance economic growth.

Overall it is worthy to note that, fiscal policy must also be attuned to external conditions, since an expansionary fiscal stance is likely to translate into higher import demand and a growing current account deficit, unless export performance (as measured by the export performance ratio) improves. When a fiscal stance is in excess of the export performance ratio it will produce a twin deficit situation (fiscal and external deficits) and an accumulation of debt. Moreover, Governments' fiscal policy should at all times complement the Central Bank's monetary policy, since fiscal and monetary prudence and co-ordination is necessary to achieve economic growth.

Appendix Figures &Tables

Figures 1, 2 & 3

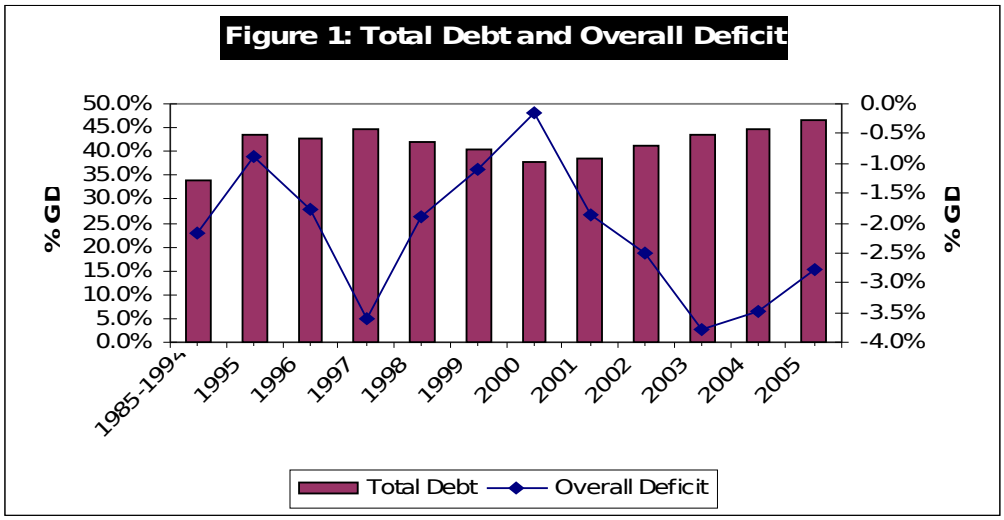
Figure 1: Total Debt and Overall Deficit
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
% GD
0.0%
-0.5%
-1.0%
-1.5%
-2.0%
-2.5%
-3.0%
-3.5%
-4.0%
% GD
1985-1994
1995
1996
1997
1998
1999
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2003
2004
2005
Total Debt
Overall Deficit

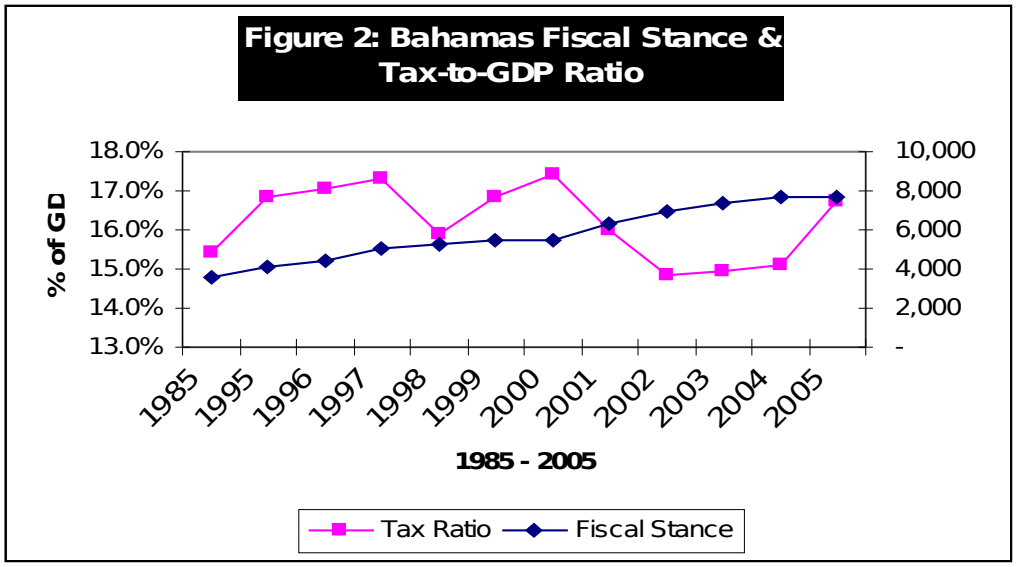
Figure 2: Bahamas Fiscal Stance & Tax-to-GDP Ratio
18.0%
17.0%
16.0%
15.0%
14.0%
13.0%
% of GD
10,000
8,000
6,000
4,000
2,000
-
1985
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
1985 - 2005
Tax Ratio
Fiscal Stance

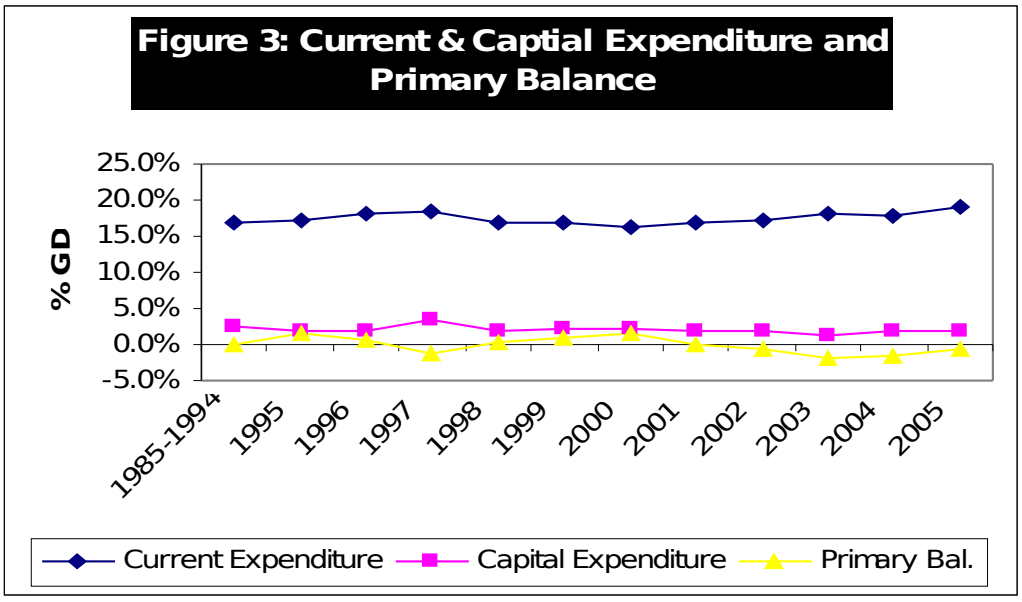
Figure 3: Current & Captial Expenditure and Primary Balance
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
-5.0%
% GD
1985-1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
Current Expenditure
Capital Expenditure
Primary Bal.

Table 1: The Bahamas Fiscal Stance (1985 -2005)

Years	Government Expenditure (B$ Million)	Tax Ratio (%)	Fiscal Stance (FS)	Nominal GDP (B$ Million)	Difference (FS-GDP)
1985	405.2	17.1	2,363	1,855.4	507.6
1986	411.1	16.3	2,524	2,081.7	441.9
1987	450.8	16.4	2,741	2,311.7	429.1
1988	524.4	15.4	3,408	2,578.9	829.0
1989	577.8	13.1	4,404	3,062.5	1,341.4
1990	569.7	13.8	4,116	3,165.7	950.4
1991	604.1	13.6	4,433	3,111.2	1,321.6
1992	622.7	15.4	4,034	3,109.2	925.0
1993	622.3	15.6	3,991	3,091.9	898.9
1994	654.9	17.5	3,751	3,258.7	492.4
1995	686.8	16.8	4,079	3,429.4	649.2
1996	750.3	17.0	4,401	3,609.4	792.0
1997	875.6	17.3	5,051	3,841.5	1,210.0
1998	841.8	15.9	5,291	4,282.7	1,008.0
1999	920.5	16.9	5,459	4,704.2	754.3
2000	958.6	17.4	5,502	5,003.7	498.0
2001	1,015.5	16.0	6,354	5,131.5	1,222.7
2002	1,023.2	14.8	6,900	5,389.4	1,510.8
2003	1,109.5	15.0	7,410	5,502.6	1,907.4
2004	1,157.2	15.1	7,673	5,661.0	2,012.1
2005	1,282.0	16.8	7,649	5,869.5	1,779.3
Average	***765.0***	***15.9***	***4,835***	***3,812.0***	***1,022.9***

Source: Central Bank of The Bahamas

Table 2: Fiscal Sustainability Ratios				
Target B	**Assumed S**	**Assumed y**	**Assumed h**	**Calculated F**
38.1%	0.14%	5.8%	2.3%	3.23%
38.1%	0.14%	5.0%	2.3%	2.92%
38.1%	0.14%	4.5%	2.3%	2.73%
38.1%	0.14%	3.7%	2.3%	2.43%
36.1%	0.14%	4.2%	2.3%	2.49%
35.0%	0.14%	5.0%	2.3%	2.70%
30.0%	0.14%	5.8%	2.3%	2.57%
30.0%	0.14	4.5%	2.3%	2.18%
Source: Authors Estimates				

Table 3: Debt Sustainability Ratios				
Target b	**Assumed s**	**Assumed y**	**Assumed r**	**Calculated Z**
38.1%	0.14%	5.8%	0.21%	2.43%
38.1%	0.14%	4.5%	0.21%	1.93%
38.1%	0.14%	3.7%	0.21%	1.63%
36.1%	0.14%	4.2%	0.21%	1.73%
35.0%	0.14%	5.0%	0.21%	1.96%
30.0%	0.14%	5.8%	0.21%	1.94%
30.0%	0.14%	5.7%	0.21%	1.87%
30.0%	0.14	4.5%	0.21%	1.55%
Source: Authors Estimates				

Table 4: Granger Causality Tests

Sample: 1985 2005
Lags: 1

Null Hypothesis:	Obs	F-Statistic	Probability
CURREXP does not Granger Cause NGDP	20	3.82955	0.06699
NGDP does not Granger Cause CURREXP		0.01140	0.91622
CAPEXP does not Granger Cause NGDP	20	1.19755	0.28908
NGDP does not Granger Cause CAPEXP		1.31705	0.26702

Table 5: Wald Test

Null Hypothesis:	C(2) = 0		
F-statistic	8.347991	Probability	0.010676
Chi-square	8.347991	Probability	0.003861

Table 6: Regression Results

Nominal GDP (Dependent)				
Regressors	Model 1	Model 2	Model 3	Model 4
Constant	196.8422 (1.4982)***	207.8075 (1.3888)	744.8281 (1.9161)	42.2019 (0.24165)
Government Expenditure*	5.0236 (29.5713)	-	-	-
Current Expenditure	-	4.8662 (23.7829)	-	6.6249 (6.5584)
Capital Expenditure**	-	5.6905 (2.8893)	4.6718 (2.3876)	4.8147 (2.6647)
Personal Emoluments	-	-	4.0863 (2.6181)	-
Transfer Payments	-	-	7.6318 (8.1636)	-
External Debt	-	-	-	-2.0313 (-2.4168)
Internal Debt	-	-	-	-0.6130 (-1.4891)
R^2	0.97983	0.98215	0.98385	0.98741
Adjusted R^2	0.97871	0.97992	0.98062	0.98381
F-Statistics	874.4640	440.1885	304.6238	274.415
Durbin Watson	1.4811	1.7824	1.8589	2.1889
Observations	20	19	19	19

- **lagged 1 period*
- *** lagged 2 periods*
- ****All values bracketed are t-ratios*

Table 7: National Debt in The Bahamas

Years	Total Debt* % GDP	Internal Debt % GDP	External Debt % GDP	Internal Debt % Total Debt	External Debt % of Total Debt
1985	29.5	19.7	6.1	66.8	20.6
1986	29.4	19.3	6.1	65.6	20.7
1987	26.4	18.1	4.7	68.8	17.8
1988	25.9	18.4	3.9	71.1	15.1
1989	25.9	18.4	3.5	71.0	13.4
1990	29.2	20.4	3.8	69.9	13.0
1991	37.7	23.8	4.2	63.1	11.1
1992	41.6	26.6	4.0	63.9	9.7
1993	45.8	30.9	3.6	67.4	7.8
1994	45.4	31.8	3.1	69.9	6.8
1995	43.7	31.3	2.7	71.7	6.1
1996	42.9	32.1	2.1	74.9	5.0
1997	44.6	33.4	2.5	74.9	5.6
1998	42.1	31.4	2.2	74.5	5.2
1999	40.5	29.9	2.2	73.9	5.5
2000	37.9	28.1	2.2	74.0	5.8
2001	38.6	29.0	2.2	75.0	5.7
2002	41.3	31.7	1.7	76.9	4.1
2003	43.7	29.9	5.2	68.5	12.0
2004	44.8	32.0	5.0	71.5	11.2
2005	46.6	33.2	4.9	71.3	10.5

** Includes Government guarantees*

Source: Central Bank of The Bahamas Statistical Digest

Table 8: Modeling Debt Sustainability For The Bahamas

Years	B	z	s	r	y
1985	0.2577	0.0114	-0.0073	0.0059	0.1615
1986	0.2541	0.0166	0.0006	-0.0151	0.1220
1987	0.2284	0.0115	0.0094	-0.0108	0.1105
1988	0.2234	-0.0122	-0.0020	0.0021	0.1156
1989	0.2193	-0.0219	0.0140	0.0006	0.1875
1990	0.2442	-0.0032	0.0067	-0.0006	0.0337
1991	0.2796	-0.0131	0.0039	0.0040	-0.0172
1992	0.3061	-0.0054	0.0042	-0.0091	-0.0006
1993	0.5187	-0.0027	-0.0073	-0.0024	-0.0056
1994	0.3484	0.0201	0.0089	-0.0030	0.0539
1995	0.3411	0.0149	0.0027	-0.0002	0.0524
1996	0.3417	0.0066	0.0030	0.0020	0.0525
1997	0.3589	-0.0115	-0.0059	-0.0027	0.0643
1998	0.3353	0.0042	-0.0187	-0.0001	0.1149
1999	0.3210	0.0096	0.0024	-0.0046	0.0984
2000	0.3016	0.0168	0.0112	-0.0027	0.0637
2001	0.3115	0.0011	0.0120	0.0019	0.0255
2002	0.3343	-0.0067	-0.0014	-0.0084	0.0503
2003	0.3519	-0.0183	-0.0124	0.0007	0.0210
2004	0.3706	-0.0147	0.0061	-0.0009	0.0288
2005	0.3808	-0.0071	0.0000	-0.0001	0.0368
21 Years Average	0.3156	-0.0109	0.0014	-0.0021	0.0652

Source: Central Bank of The Bahamas Statistical Digest

Table 9: Direct Charge, Primary Deficit & Central Bank Financing			
Years	**Direct Charge**	**Primary Deficit**	**Central Bank Financing**
1985	478.2	21.2	-13.598
1986	528.9	34.6	1.176
1987	527.9	26.6	21.755
1988	576.1	31.5	-5.141
1989	671.8	67.0	42.790
1990	773.2	10.1	21.197
1991	869.8	40.7	12.257
1992	951.6	16.9	13.121
1993	1,603.9	8.4	-22.454
1994	1,135.4	65.6	29.000
1995	1,169.8	51.1	9.425
1996	1,233.3	24.0	10.959
1997	1,378.6	44.0	-22.566
1998	1,436.2	17.8	-79.896
1999	1,510.1	45.0	11.175
2000	1,509.2	84.3	55.794
2001	1,598.3	5.4	61.659
2002	1,801.5	36.0	-7.731
2003	1,936.2	100.7	-68.023
2004	2,097.9	83.1	34.735
2005	2,235.2	41.8	0.147

Source: Central Bank of The Bahamas Statistical Digest

Table 10: The Bahamas Selected Central Government Fiscal Indicators
(In Percent of GDP)

	1985-1989	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
REVENUE & GRANTS	18.1%	15.7%	15.8%	17.2%	17.4%	19.7%	19.2%	19.0%	19.2%	17.8%	18.5%	19.0%	17.9%	16.5%	16.4%	17.0%	19.1%
Tax Revenue	15.7%	13.8%	13.6%	15.4%	15.6%	17.5%	16.8%	17.0%	17.3%	15.9%	16.9%	17.4%	16.0%	14.8%	15.0%	15.1%	16.8%
Non-Tax Revenue	2.4%	1.9%	2.1%	1.7%	1.8%	2.0%	1.9%	2.0%	1.8%	1.9%	1.6%	1.6%	2.0%	1.7%	1.4%	1.6%	2.1%

Capital Revenue	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.2%
Grants	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
EXPENDITURE	20.1%	18.0 %	19.4 %	20.0 %	20.1 %	20.1 %	20.0 %	20.8 %	22.8 %	19.7 %	19.6 %	19.2 %	19.8 %	19.0 %	20.2 %	20.4 %	21.8 %
Current Expenditure	17.2%	15.3 %	16.2 %	17.1 %	17.3 %	16.9 %	17.2 %	18.0 %	18.4 %	16.9 %	16.8 %	16.4 %	16.8 %	17.0 %	18.1 %	18.0 %	19.0 %
Capital Expenditure	3.0%	2.0%	2.0%	2.2%	1.6%	2.1%	2.0%	1.9%	3.4%	1.9%	2.1%	2.1%	1.8%	1.8%	1.3%	1.8%	1.9%
Net Lending [()=repayment]	-0.2%	1.0%	2.1%	1.3%	2.1%	1.8%	1.4%	1.6%	1.9%	1.9%	1.9%	1.8%	3.2%	0.3%	2.3%	2.0%	2.9%
Primary Balance**	**0.1%**	**-0.3 %**	**-1.3 %**	**-0.5 %**	**-0.3 %**	**2 .0%**	**1 .5%**	**0 .7%**	**-1.1 %**	**0 .4%**	**1 .0%**	**1 .7%**	**0 .1%**	**-0.7 %**	**-1.8 %**	**-1.5 %**	**-0.7 %**
Overall Fiscal Balance**	**-1.9%**	**-2.3 %**	**-3.7 %**	**-2.8 %**	**-2.8 %**	**-0.4 %**	**-0.9 %**	**-1.8 %**	**-3.6 %**	**-1.9 %**	**-1.1 %**	**-0.2 %**	**-1.9 %**	**-2.5 %**	**-3.8 %**	**-3.5 %**	**-2.8 %**

***Surplus/Deficit = (+/-)*
Source: Central Bank of The Bahamas Quarterly Statistical Digest

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