

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

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ABSTRACT

Over the past two decades the Bahamian economy has been experiencing economic stability, but is plagued by a deterioration in the overall fiscal balance and consequently a rise in the national debt. Therefore, using the calibration technique on static equations, this paper computes both the fiscal and debt sustainable ratios for the economy. Preliminary findings of the study indicate that over the latter four years of the review period, the primary fiscal balance switched to a deficit from a surplus, as the Government pursued expansionary fiscal policy measures. Moreover, although there has been an enlargement in the national debt (excluding Government contingent liabilities) over the past five years, the debt is sustainable at its current debt to GDP ratio of 38.1%. In addition, the results reveal that a primary deficit of 3.2% of GDP will stabilize the debt at the current level (38.1%).

Keywords: Fiscal policy, fiscal sustainability, debt sustainability, Bahamas

JEL Classification numbers: E62, E63

¹ The views expressed in this paper are those of the authors and do not necessarily represent the Central Bank of The Bahamas.

1.0 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 effectiveness in the form of economic growth and development. In its most basic form, fiscal policy can be utilized to influence real Gross Domestic Product (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), inefficient 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. Samuelson (1980) postulated that public debt has the potential to place a burden on future generations if countries consume all of their available stock of capital or if they refuse to continually augment their existing capital.

Given the significant impact on the economy of governments' fiscal stance, it is necessary for them to exercise fiscal prudence, since the lack thereof has implications for economic growth and debt sustainability. As in the case of the Bahamas, fiscal prudence has always been the focus of the Government, with policies geared towards maintaining the debt to GDP ratio within the range of 30% to 35%. However, the debt to GDP ratio has trended upwards over the past decade and as such, has implications for debt sustainability in the long run. Hence the aim of the study is to determine the primary fiscal deficit/surplus GDP ratio that will stabilize the debt in the long run. As such, the paper computes and analyses the sustainable primary balances the Government of the Bahamas would need to steady the debt ratio at its current level and also reduce the ratio in the long run. The calibration technique on static

equations will be used to compute the fiscal and debt sustainability ratios. Thus, following the introduction, section 2 explores the literature on fiscal discipline and debt sustainability. Section 3 highlights the impact of fiscal policy on macroeconomic policy objectives. A review of fiscal performance and debt accumulation in the Bahamas comprises section 4, while section 5 contains an empirical analysis of fiscal and debt sustainability ratios. Recommended fiscal measures are expounded upon in section 6 and section 7 incorporates the general findings and concludes the paper.

2.0 Literature review on fiscal discipline and debt sustainability

In a survey conducted by the Economic Commission For Latin America and the Caribbean (1997), data was cited 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 two 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. The results also 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.

Nonetheless, since the mid to late 1990's, elevated public debt has characterized many of the economies in the region. Sahay (2005) noted that seven of the world's ten most indebted emerging market economies are found in the Caribbean². The author accredited this to high levels of public debt, which were fuelled by weakening fiscal balances. Sahay 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. The writer's evaluation was based on the primary fiscal balance of these countries³. It was uncovered that during 1998-2003, the fiscal account position of Caricom countries worsened with declines being recorded in the fiscal balance of each country. The average public debt to GDP ratio in the Caribbean climbed from 56% in 1997 to in excess of 90%⁴ by 2003, with fixed rate regimes experiencing the worst performance compared to flexible regimes. In an effort to explain the deteriorating overall fiscal position of the Caribbean, Sahay attributed the public debt burden borne by these countries to several

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

³ 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.

⁴ This ratio is significantly above the level of debt sustainability which should be no more than 50% of GDP according to some theories.

factors, namely 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.

Therefore, in every economy, fiscal sustainability is of significance to macroeconomic stability. According to the International Monetary Fund (IMF) manual on Fiscal Transparency (2007), a set of policies is sustainable if a borrower is expected to be able to continue servicing its debt without an unrealistically large future correction to the balance of income and expenditure. Author Krejdl (2006) noted that fiscal policy is sustainable if the present value of future primary surpluses equals the current level of debt. Therefore, in examining the sustainability of fiscal policy, the first step is determining the government's budget constraint. 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:

$$-(T - E) + rB = db/dt + dM/dt \quad (1)$$

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 (1) 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 United States dollar, some countries, such as The Bahamas, have precluded use of the monetary base that is, seigniorage⁵, 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.

$$-(\tau - e) + (r - g) b = db/dt \quad (2)$$

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

⁵ Seigniorage refers to the profits gains from making a coin, that is, the difference between the face value of a coin and the cost of producing, distributing and retiring it from circulation.

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:

$$\tau - e = (r - g) b \quad (3)$$

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 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.

Moreover, Governments fiscal stance, which mirrors the behaviour of the deficit, is key to fiscal sustainability. Godley and Cripps (1983) define the fiscal stance as Government expenditure divided by the tax ratio, that is, revenue over GDP. Therefore,

$$FS = G/(T/GDP) \quad (4)$$

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

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. Hence, fiscal sustainability focuses on the evolution of government debt ($b =$ debt to GDP), whether it remains small or it increases rapidly. Thus, the following budget identity can be applied in testing the fiscal sustainability:

$$f = \Delta s + \Delta b \quad (5)$$

where f is the fiscal sustainability ratio, s is seignorage⁶ and b is the debt to GDP ratio. From this we derive the fiscal sustainability as follows:

$$b = (f-s)/(h+y) \quad (6)$$

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

In general, 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.

Moreover, as it relates to debt sustainability, a Commonwealth Secretariat, (1996) report on domestic debt management, noted that the 'avoidance of fiscal deterioration without interrupting macroeconomic goals' is the primary sustainability objective, as per public debt management. Fraser's (1999) paper, noted the modification done to the Blanchard & Fischer model by the Commonwealth Secretariat (1996) (see Equation 9). The Commonwealth Secretariat modified the model to apply exclusively to the sustainability of domestic debt. Hence, variables were expressed in terms of GDP, as in contrast to Gross National Product (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:

$$Z + iB = \Delta S + \Delta B \quad (7)$$

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:

$$b = (z-s)/(y-r) \quad (8)$$

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

⁶ For the purpose of this study the change in central bank financing is used as a proxy for seigniorage revenue.

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 fiscal policy (deficits and debt). As a ratio of 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:

$$\delta = \delta_0 + rb \quad (9)$$

Moreover, Blanchard & Fischer 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 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. Fraser (1999) 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.

3.0 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 Organization for Economic Co-operation Development (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, Baldacci and Mulas-Grandos (2002) on the causal relationship between expenditure composition, fiscal adjustment and growth for low income countries, 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 $\frac{1}{4}$ to $\frac{1}{2}$ 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 slow down 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.

4.0 Fiscal performance & Debt accumulation in The Bahamas

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 a deterioration in Government's finances due to increased current expenditure, particularly with respect to wages and transfer payments. For instance, 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, Government's fiscal stance over the review period, 1985 to 2005 has been expansionary (see Appendix Tables 1 & 7).

Note that, the tax ratio for The Bahamas grew at a slower rate than expenditure growth. At the end of 2005 the tax ratio amounted to 16.8% of GDP from 15.7% in 1985, while expenditure to GDP recorded a ratio of 21.8% from 20.1%. The expansion in the tax ratio in 2005 was a result of the Government's enhanced revenue collection measures during that year. 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 and introduction of compliance officers to undertake review and analytical work in connection with revenue administration.

The deterioration in the fiscal performance was also registered in the primary fiscal balance. 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 7). Nevertheless, interest payments declined slightly to 2.0% of GDP in 2005 from 2.7% of GDP in 1985.

Moreover, the total national debt⁷ averaged an annual 38.3% of GDP during the period 1985-2005. The national debt stock as a percentage of GDP rose to 46.6% at the end of 2005 from 29.5% at end-1985 (see Appendix Figure 1). 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%. Further, over the review period, 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 (See Appendix Table 4).

Important to note is that in determining a country's debt sustainability level, the focus is on a non-increasing foreign debt to GDP ratio and not on the internal debt. The reason emphasis is on the external debt is that the government can utilize the option of rolling over the internal debt by issuing new bonds—this is assuming that the domestic demand will exist for the bond—but cannot default on its commitment to service the external debt. For The Bahamas, the stock of external debt, although it has risen over the review period, remained relatively low. Therefore, in keeping with the condition of a non-increasing external debt to GDP ratio, the results indicated that the Bahamas' debt at its current level is sustainable since this ratio remained small and even declined over the review period.

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 Central Bank of The Bahamas Act (2000), the options available to the Government include the following:

⁷ Figure includes Government and Government guarantee debt.

- With respect to advances from the Central Bank, as laid out in Volume VIII Chapter 351: Section 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 revenue⁸ of the 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 (20%) 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.

5.0 Empirical analysis of Fiscal & Debt Sustainability in The Bahamas

5.1 (a) *Fiscal Sustainability Ratios*

Using the calibration technique on equation (6), fiscal sustainability ratios were computed. Data for the period 1985 to 2005 were utilized in the exercise. The assumed values included s , which is the 20 year average change in central bank financing; y , which refers to the International Monetary Fund (2006) forecasted nominal growth rate (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:

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

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

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

⁸ "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 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.

Given these assumed values, a primary fiscal deficit of 3.23% was derived using the budget identity equation (6). The results implied that a primary deficit of 3.23% is necessary to stabilize the current debt to GDP ratio of 38.1%, as depicted above mathematically.

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 estimated nominal 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%, a primary fiscal deficit not in excess of 2.57% of GDP would be required to stabilize the debt over the medium term, as illustrated mathematically below. 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.

5.2 (b) Debt Sustainability Ratios

Using data for The Bahamas for the period 1984-2005, the modified version of the Blanchard & Fischer (1993) model would be applied (see equation 7) 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 is being used (see equation 8). In the estimation, z refers to the primary deficit, which excludes interest paid on domestic debt. The variable b is the debt to GDP ratio, while s is the change in Central Bank financing of Government's deficit. The real interest rate, r , 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. Nominal GDP (y) refers to the growth rate. See Appendix Table 5 for variables values.

Employing the calibration technique, the debt sustainability ratios were computed. Using equation (8) and applying the current debt to GDP ratio of 38.1%, with an assumed growth rate of 5.8% and the 20

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.

$$\begin{aligned}b &= (z-s)/(y-r) \\0.381 &= (z - 0.0014)/(0.058 - (-0.0021)) \\ \therefore z &= 0.0243 \rightarrow 2.43\%\end{aligned}$$

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 (8) 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 20 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 term, as depicted mathematically below.

$$\begin{aligned}b &= (z-s)/(y-r) \\0.30 &= (z - 0.0014)/(0.058 - (-0.0021)) \\ \therefore z &= 0.0194 \rightarrow 1.94\%\end{aligned}$$

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 20 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 out of the 20 years, despite registering overall fiscal deficits during those periods (see Appendix Tables 6 & 7).

6.0 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. Sahay (2005) outlined five key steps which can be undertaken by governments to achieve debt sustainability and growth. The steps comprised 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, the author noted that cross country studies have proven fiscal consolidation's ability to augment growth rates via economic reform programmes, 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 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-swap schemes that greatly reduced its public debt (see Rozenwurcel, 1994). Nonetheless, privatization is seen as a temporary solution, which should not replace the need for other stable revenue generating measures and prudent government spending.

Moreover, most Caribbean countries, The Bahamas included, are vulnerable to the threat of natural disasters, such as hurricanes and floods, 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, 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. In recent years, The Bahamas has incurred expenses from hurricanes Jeanne and Francis, which have been classified among the worst on record for the country. With these two recent hurricanes having cost the country about 8% of GDP, 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) and the drafting of a Disaster Preparedness and Response Bill.

Furthermore, for The Bahamas and all other 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.

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 (see Branch, 2007). Thus, until the government is able to fund its operations in the money market, the coordination of fiscal and monetary policies should be based 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 coordination would avert unstable fluctuations in aggregate demand.

7.0 Conclusion

Prudent fiscal policy remains a central tenet of macroeconomics and is very important to stimulating economic growth. This study 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 and debt sustainability.

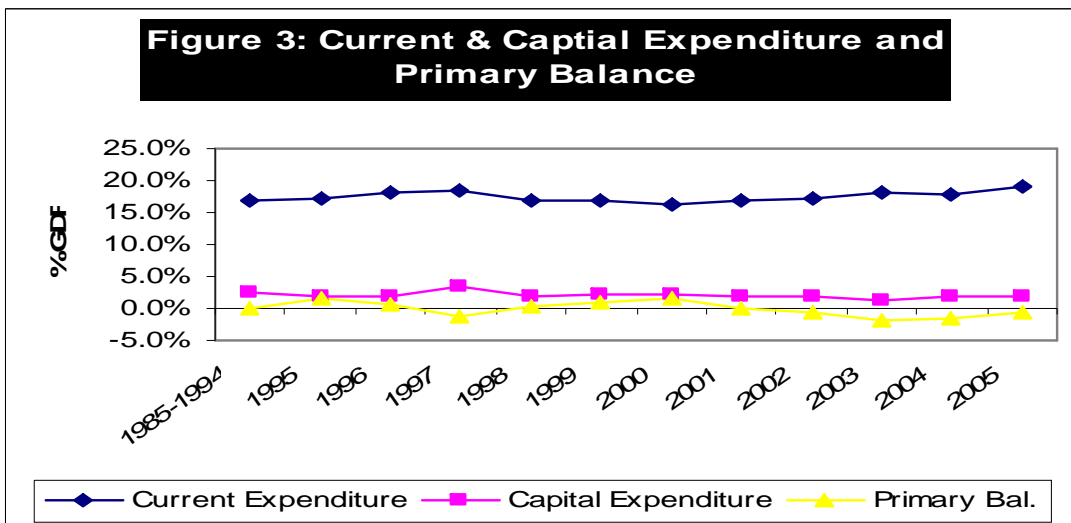
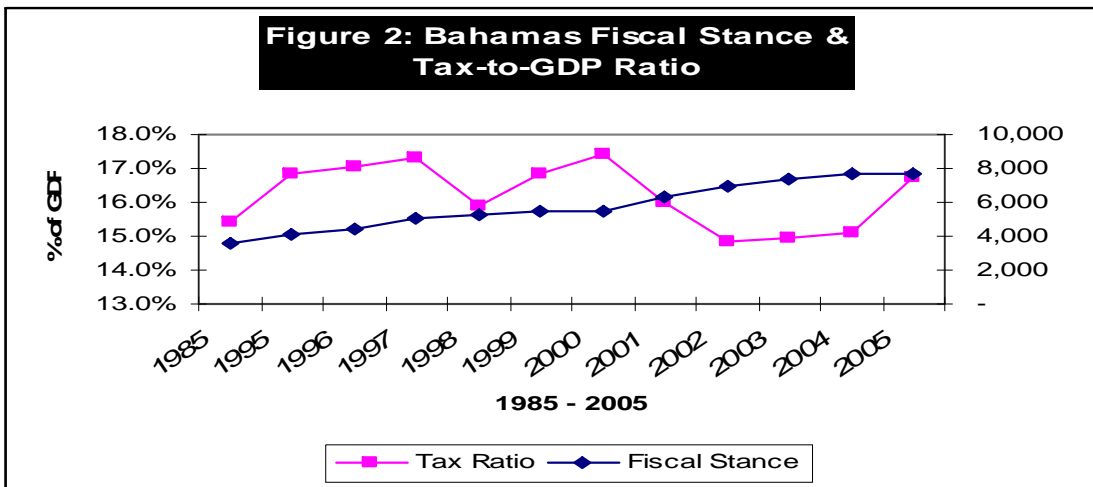
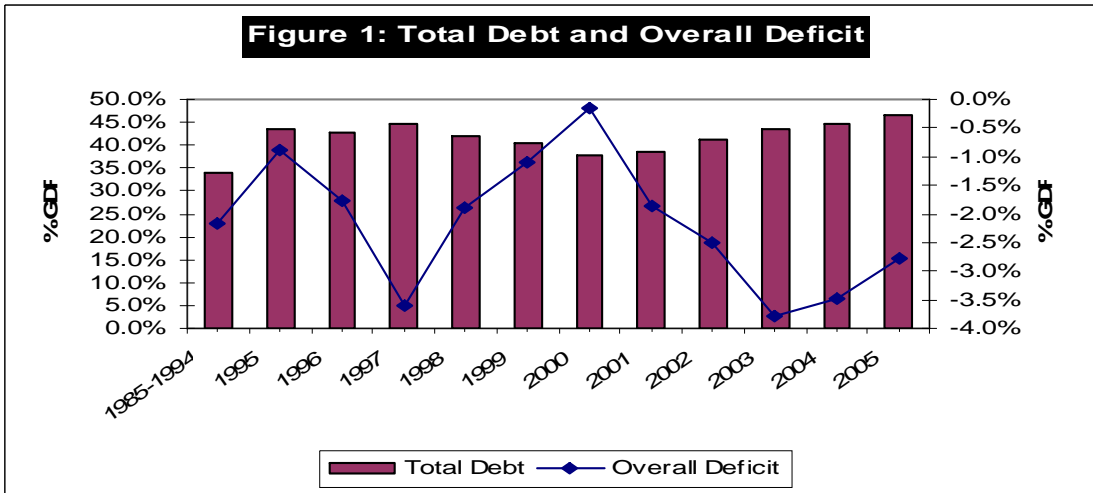
During the past two decades, an analysis of fiscal policy in The Bahamas revealed that the Government has been adopting an expansionary fiscal stance over the period 1985-2005. Nevertheless, the fiscal stance has been sustainable, with the primary deficit to GDP ratio never exceeding the 2.1% benchmark. Further, findings disclosed 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 since the primary deficit relative to the size of the economy is within the 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, 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.

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, Government's fiscal policy should at all times complement the Central Bank's monetary policy, since fiscal and monetary prudence co-ordination are necessary to achieve economic growth.

Appendix - Figures & Tables



**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 Quarterly Statistical Digest & Authors' Estimates

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: National Debt in The Bahamas

Years	Total Debt*	Total Debt**	Internal Debt	External Debt	Internal Debt	External Debt
	% GDP	% GDP	% GDP	% GDP	% Total Debt	% of Total Debt
1985	29.5	25.8	19.7	6.1	66.8	20.6
1986	29.4	25.4	19.3	6.1	65.6	20.7
1987	26.4	22.8	18.1	4.7	68.8	17.8
1988	25.9	22.3	18.4	3.9	71.1	15.1
1989	25.9	21.9	18.4	3.5	71.0	13.4
1990	29.2	24.4	20.4	3.8	69.9	13.0
1991	37.7	28.0	23.8	4.2	63.1	11.1
1992	41.6	30.6	26.6	4.0	63.9	9.7
1993	45.8	51.9	30.9	3.6	67.4	7.8
1994	45.4	34.8	31.8	3.1	69.9	6.8
1995	43.7	34.1	31.3	2.7	71.7	6.1
1996	42.9	34.2	32.1	2.1	74.9	5.0
1997	44.6	35.9	33.4	2.5	74.9	5.6
1998	42.1	33.5	31.4	2.2	74.5	5.2
1999	40.5	32.1	29.9	2.2	73.9	5.5
2000	37.9	30.2	28.1	2.2	74.0	5.8
2001	38.6	31.1	29.0	2.2	75.0	5.7
2002	41.3	33.4	31.7	1.7	76.9	4.1
2003	43.7	35.2	29.9	5.2	68.5	12.0
2004	44.8	37.1	32.0	5.0	71.5	11.2
2005	46.6	38.1	33.2	4.9	71.3	10.5
	* Includes Government guarantees					
	** Excludes Government guarantees					
	Source: Central Bank of The Bahamas Quarterly Statistical Digest					

Table 5: 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
20 Years Average	0.3156	-0.0109	0.0014	-0.0021	0.0652

Source: Authors' Estimates

**Table 6: Direct Charge, Primary Deficit & Central Bank Financing
(B\$ Million)**

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 Quarterly Statistical Digest

Table 7: 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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