

Debt, Fiscal Adjustment and Economic Growth in Jamaica

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Abstract1

The buildup of debt in Jamaica has been concurrent with the country's slow economic growth, and the issues are intertwined. High debt slows economic growth, and slow economic growth makes the process of reducing the debt burden more difficult. Jamaica committed itself to a strict fiscal consolidation program to reduce its debt burden. The fiscal consolidation will be long—spanning more than half a generation—until reaching the debt-to-GDP target of 60 percent by 2026. Besides adhering to the fiscal targets, success will depend on the country's ability to break away from a history of low economic growth.

JEL Codes: E62,H62, H63, H68, O49

Keywords: Economic growth, fiscal consolidation, forecast of budgets, Jamaica,

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¹ The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent. Corresponding author: jpschmid@iadb.org.

Introduction

Jamaica's development experience over the past few decades has been characterized by decline and frustration, representing one of the worst growth performances in the region. Over the past 20 years, the country's economy grew on average less than 1 percent per year, significantly below the average 3.9 percent of the entire Latin American and Caribbean region. The global economic crisis in 2007 further affected its growth path and started a prolonged recession from which the country is just recovering. Jamaica's real GDP is considerably below the level it would be today if the country had continued to grow at precrisis rates, and it is still below 2007 levels (Figure 1).

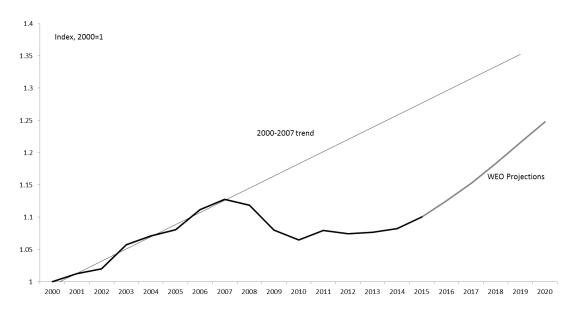


Figure 1. Real GDP: Deviation from 2000 to 2007 Trend

Source: World Economic Outlook, International Monetary Fund.

Accompanying the weak growth performance was a consistently high level of debt (Figure 2a). Starting in the mid-1990s, debt increased rapidly and has remained above 100 percent ever since. Historically, a major part of the debt buildup was caused by assumptions of liabilities contracted outside of the government, including a major increase as a result of the resolution of a financial crisis at the end of the 1990s (King and Kiddoe, 2010). In addition, weak fiscal management played a role as the country failed to earn sufficient revenues to cover increasing rigid expenditures, including interest payments and salaries (Schmid, 2014). The prolonged crisis that was triggered by the global recession further worsened the fiscal situation and left the country with a debt-to-GDP ratio of more than 140 percent as at 2013 (Figure 2a). Jamaica's debt situation is an important challenge given that its debt-to-GDP ratio is among the

highest in the world, considerably higher than other small economies' (Figure 2b). The increase in debt has several adverse effects for the country, including interest payments of more than 60 percent of revenues in FY2008/09. In addition, the situation has created significant investor uncertainty, negatively affecting investment decisions and growth prospects.²

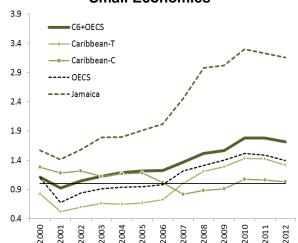
Figure 2a. Debt-to-GDP Ratio and **Economic Growth** % GDP Debt to GDP (lhs)

200.0% 6.0% 180.0% 5.0% Real GDP growth (rhs) 160.0% 4.0% 3.0% 140.0% 120.0% 2.0% Ratio 100.0% 1 0% 80.0% 0.0% -1 0% 60.0% 40.0% -2 0% 20.0% -3.0% 0.0% -4 0% 1990 1995 2000 2005 2010 2015

Note: National debt as defined by the Debt Management Unit.

Source: Ministry of Finance and Planning.

Figure 2b. Debt Ratios Relative to Other **Small Economies**



Source: Ruprah et al. (2014).

Notes: Relative ratios were calculated using different other small economy benchmarks. C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; OECS = Organization of Eastern Caribbean States; Caribbean-C = commoditybased economies; Caribbean-T = tourism-based economies.

At the same time, Jamaica is making substantial efforts to stabilize the economy and achieve macroeconomic sustainability over the medium to long term. Jamaica entered a fouryear Extended Fund Facility with the International Monetary Fund on May 1, 2013, that targets a reduction of the debt-to-GDP ratio from 145.3 percent as of March 2013 to 100 percent or below by March 2020. Although the program is important for confidence in the stabilization efforts, the country will remain in a vulnerable position given the effort that is required to reach the debt targets.

² Confidence has improved as a result of the successful implementation of the Extended Fund Facility with the IMF since May 2013. However, it is still low, since according to the Jamaica Chamber of Commerce business confidence survey for the third quarter of 2015, only 44 percent of firms in Jamaica reported that it was a good time to expand productive activity.

Debt, Fiscal Adjustment, and Economic Growth

There is a strong correlation between economic growth and debt. Growth eases the debt problem because it leads to a growing tax base and lower debt in relative terms. In contrast, although economic growth affects the debt burden, there is also growing evidence that debt above a certain level adversely affects growth. Estimations of the relation for the Caribbean by Greenidge et al. (2012) indicate that when the ratio is less than 30 percent, there is a positive effect of debt on growth. When the debt-to-GDP ratio is above 30 percent, the effect is still positive but at a declining rate. Once the ratio exceeds 60 percent, debt has a negative effect on economic growth (Figure 3).

Different channels for the adverse effect are possible. High or increasing levels of debt make future tax increases more likely. In addition, domestic financing of debt can increase domestic interest rates and crowd out private investment. As the Jamaican case has shown, high debt levels also increase the vulnerability of the country and can lead to economic and financial crisis.³

Debt reduction can be achieved through different means, including growth, fiscal consolidation, inflation, debt restructuring and defaults, and privatization. Amo Yartey et al. (2012) summarize the large debt reductions between 1970 and 2007.⁴ The authors find that out of 206 episodes that fit their definition of such reductions, around 100 were achieved through restructuring or default. A combination of growth, higher inflation, or fiscal consolidation was responsible for the debt reduction in the other cases.

The effects of large fiscal adjustments on economic growth have been mixed. Although fiscal adjustments can have negative effects on economic growth through a reduction of domestic consumption and investment, the degree of the effect also depends on the type of adjustment (International Monetary Fund, 2010). For example, reducing spending rather than increasing taxes is less likely to create recessions and more likely to lead to a successful fiscal adjustment (Alesina and Ardagna, 2010). Among spending categories, successful adjustments focus on government wages and transfers as opposed to investment (Tsibouris et al., 2006; Hernandez de Cos and Moral-Benito, 2013). Although fiscal adjustment can have negative effects on growth, monetary and exchange rate policies can affect the growth and success of the adjustment. Also, structural reforms such as medium-term expenditure frameworks and

³ For further discussion on the correlation between macroeconomic stability and debt, see Sutherland and Hoeller (2012).

⁴ Defined as a decline in the debt-to-GDP ratio of at least 15 percent of GDP over five years. See Tsibouris and colleagues 2006 for a similar study with a different definition of *large fiscal adjustment*.

fiscal rules support the chances for the success of adjustments (International Monetary Fund, 2010).

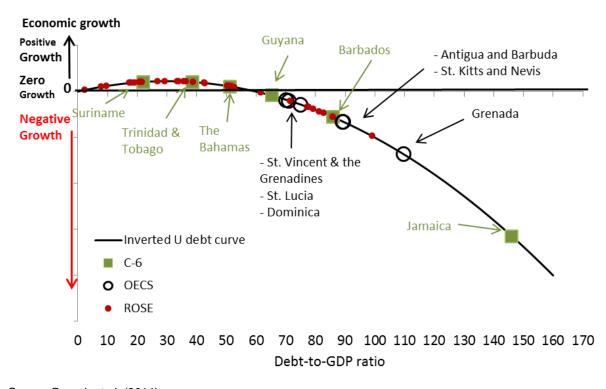


Figure 3. Debt-to-GDP Ratio and Economic Growth, 2012

Source: Ruprah et al. (2014).

In Jamaica, a combination of fiscal measures, debt liability operations, and growth-accelerating policies is being pursued. Jamaica has had two domestic debt exchanges, which reduced interest payments and extended the maturities of the domestic securities.⁵ In addition, the government bought back \$US3 billion in debt owed under the Petrocaribe agreement for US\$1.5 billion. The debt buyback led to an immediate reduction of 10 percent in debt to GDP.⁶

With respect to fiscal adjustment, the government reached a primary surplus of 7.5 percent of GDP for the last two fiscal years and is on track to reach the targeted 7.25 percent in the current fiscal year. Projected primary surpluses to reach the debt target under the fiscal rule

⁵ The exchanges did not alter the amount of debt but had important effects as with the JDX the average domestic interest rates decreased from 19 percent to 12.5 percent for Jamaican dollar denominated debt and from 9 percent to 7 percent for US dollar denominated debt. Furthermore, the average maturity of the debt was extended from 4.7 years to 8.3 years after the JDX. Similarly, in the NDX average interest rates declined from 9.5 percent to 7.8 percent. Maturities for locally issued variable rate bonds were

extended by 3 to 8 years and fixed rate bond maturities were extended by 3 to 10 years under NDX.

⁶ Given the higher interest payments on the securities that replace the Petrocaribe debt, Jamaica will incur lower fiscal balances, slowing down the reduction in debt to GDP going forward. Simulations indicate that debt to GDP will still be 5 percent lower in 2020 than it would have been without the debt buyback.

of 60 percent of GDP by 2026 will remain around 7 percent of GDP. A primary surplus on that level is comparatively high and is usually only achieved in oil producing countries (see Table 1). While the debt exchanges and the fiscal adjustment have had the desired effect, economic growth has become the weakest link in Jamaica's economic framework. Since the start of the EFF, growth assumptions had to be revised downward several times. As a result, policies to support economic growth have become the center of attention.

Table 1: Primary Fiscal Balance and Gross Debt, Selected Economies

Country	Primary fiscal Balance (2000-2015)	Debt /GDP
Kuwait	16.7%	9.5%
Qatar	12.0%	28.9%
Brunei Darussalam	11.1%	3.3%
Norway	10.3%	30.1%
United Arab Emirates	10.0%	14.7%
Republic of Congo	9.9%	51.6%
Saudi Arabia	9.7%	1.8%
Gabon	7.9%	33.7%
Jamaica	7.2%	132.8%
Equatorial Guinea	5.8%	23.6%

Source: World Economic Outlook, International Monetary Fund.

Drivers of Debt Reduction in Jamaica

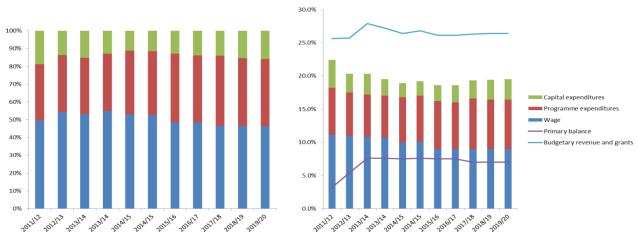
The macroeconomic framework supported by the Extended Fund Facility projects the debt-to-GDP ratio to decline from 145.3 percent at the end of the 2012/13 fiscal year to 100 percent or under by 2020. The focus of the framework is the aforementioned strong fiscal adjustment, with primary surpluses of 7 percent of GDP and above. In addition, the projections assume an acceleration of economic growth from around 1 percent currently to 2.7 percent by the 2018/19 fiscal year.

The fiscal adjustment comprises the expenditure and revenue side. The authorities introduced a comprehensive tax reform that should increase and stabilize tax revenues at around 25 percent of GDP (nontax revenue and grants add between 1 percent to 2.5 percent of GDP to budgetary revenues and grants). Complementing the revenue increase, primary expenditures as a share of GDP should decrease from 20.4 percent in fiscal year 2013/14 to 19.1 percent in fiscal year 2019/20. Capital expenditures also contribute to the fiscal consolidation, as they remain suppressed during most of the program. A reduction in the public

sector wage bill from 11 percent in fiscal year 2012/13 to 9 percent of GDP by fiscal year 2016/17 should lead to a sustainable decrease in expenditures (Figure 4a and 4b).

Figure 4a. Primary Expenditures Composition, Fiscal Years 2011/12 to 2019/20

Figure 4b. Primary Balance Components, Fiscal Years 2011/12 to 2019/20



Source: IDB estimates based on Ninth Extended Fund Facility review by the International Monetary Fund.

Although economic growth is an important contributor, inflation and the primary balance are the main drivers of the overall debt reduction (Figure 5). Exchange rate movements are important as part of the debt is denominated in foreign currencies. Depreciation has been important for the debt trajectory as the currency was adjusting from an overvalued level, however its contribution is projected to decrease as the currency has approached a more competitive level. The contribution from the interest rate is also expected to decrease as interest payments are projected to decrease from the current 8 percent of GDP to 6 percent by 2020, as debt to GDP decreases while interest rates decrease as a result of improved investor sentiment.

Adherence to the fiscal targets will be crucial to keep the debt-to-GDP ratio on a downward trajectory. The Extended Fund Facility expires in March 2017, but the recently introduced Fiscal Rule provides the framework for fiscal consolidation subsequent to the Extended Fund Facility, with a legally binding target of a debt-to-GDP ratio of 60 percent by March 2026.⁷

⁷ The center of the fiscal rule is a formula that determines the fiscal policy framework to limit the annual budgeted overall fiscal balance of the public sector, defined as achieving a reduction in public debt to GDP of no more than 60 percent by the end of fiscal year 2025/26. A periodic

review and recalibration of the overall balance floor will be conducted every three years to ensure the balance floor's ongoing consistency with the ceiling by the target date and to maintain a stable anchor for fiscal policy. (See also the Third Extended Fund Facility review "Supplementary Memorandum of Economic and Fiscal Policies" at www.imf.org/external/pubs/ft/scr/2014/cr1485.pdf.)

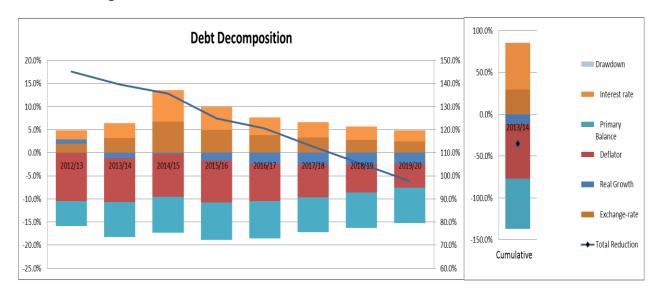


Figure 5. Drivers of Debt Reduction, Fiscal Years 2012/14 to 2019/20

Source: IDB estimates based on Ninth Extended Fund Facility review by the International Monetary Fund.

Economic Growth and Debt Ratios

Under the assumptions of the current macroeconomic framework, growth accelerates from the current 1.1 percent to 2.7 percent by fiscal year 2018/19, resulting in an average growth rate of 2.2 percent per year until 2020. Under this assumption, the debt-to-GDP ratio should decline to under 100 percent by March 2020. Because of the Petrocaribe debt buyback, Jamaica can attain its target of 100 percent of debt to GDP in March 2020, with a primary surplus of 7.0 percent.⁸ Assuming a 3 percent medium-term growth, the debt-to-GDP ratio should reach 60 percent by March 2026, with a primary surplus of 7.1 percent of GDP.

Even though the projected acceleration in growth would bring Jamaica's fiscal position to a sustainable level, the required primary surplus would have to remain in the range of 7 percent until 2026. In addition, failing to reach the projected growth rates, the debt-to-GDP ratio could remain at higher levels. One-percent-lower average growth would leave the debt-to-GDP ratio at 104.1 percent in March 2020, reaching 100 percent 2 years later. Also, 60 percent of the debt-to-GDP ratio would only be reached with 2 years of delay in 2028.

Figures 6a and 6b highlight the beneficial effects if economic growth is stronger than the projections. For example, a 1-percent-higher growth rate would lead to a public debt-to-GDP ratio of 95.7 percent in March 2020 and 51.9 percent in March 2026. If growth were to

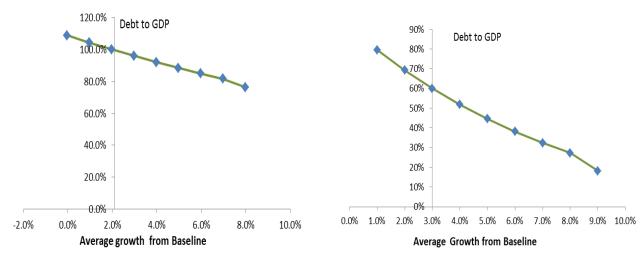
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⁸ Based on similar simulations, the IMF recently reduced the primary surplus target of 7.5 percent of GDP to 7.25 percent for FY2015/16 and 7 percent for FY2016/17.

accelerate by 2 percent more than the Extended Fund Facility's projections, debt would decline to 91.8 percent in 2020 and 44.6 percent in 2026.

Figure 6a. Debt-to-GDP Ratio in 2020 and Economic Growth

Figure 6b. Debt-to-GDP Ratio in 2026 and Economic Growth



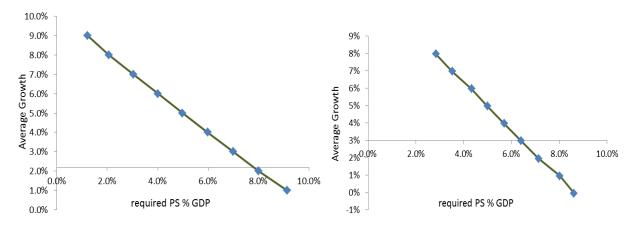
Source: IDB estimates based on Ninth Extended Fund Facility review by the International Monetary Fund.

Reaching the debt targets could be delayed if growth or other determinants of debt deviate from the projections. However, given their commitment to the Extended Fund Facility and fiscal rule targets, the authorities could also adjust the fiscal targets to compensate for changes in the economic environment. Given the strong fiscal effort under the baseline, increasing the primary surplus further could pose challenges. In contrast, higher economic growth would imply a lower primary surplus to reach the same debt target, easing the burden of adjustment and providing buffers. A debt-to-GDP ratio of 100 percent could be reached by 2020, with a primary surplus of 6.0 percent and 5.0 percent of GDP if growth accelerated by 1 percent and 2 percent, respectively. Between 2020 and 2026, a primary surplus of 6.4 percent and 5.7 percent instead of 7.1 percent would be required to reach 60 percent of a debt-to-GDP ratio under the same assumptions (Figures 7a and 7b).

⁹ The rule also comprises an automatic correction mechanism that triggers if cumulative deviations from the overall balance floor exceed either a lower threshold of 1.5 percent of GDP or an upper threshold of 3.5 percent of GDP—with the latter requiring a larger annual correction of 1.5 percent of GDP, compared with 0.75 percent of GDP for exceeding only the lower threshold. The additional fiscal adjustment would be required in subsequent fiscal years to correct for these deviations to bring fiscal performance back in line with the fiscal rule.

Figure 7a. Primary Surplus and Growth to Reach a 100 Percent Debt-to-GDP Ratio by 2020

Figure 7b. Primary Surplus and Growth to Reach a 60 Percent Debt-to-GDP Ratio by 2026



Source: IDB estimates based on ninth Extended Fund Facility review by the International Monetary Fund.

While the simulations provide the primary surplus required to reach certain debt targets under the economic baseline scenario, it would be prudent to remain above these values to have buffers against potential economic shocks given the vulnerability of Jamaica and the world economy stemming from risks such as a faster than expected increase in US interest rates, a marked slowdown of the world and the US economy, and political uncertainties in several parts of the world.

Unemployment

Growth is not only related to fiscal outcomes but also to key socioeconomic outcomes, including poverty and unemployment. According to a recent study, the unemployment rate has historically decreased between 0.18 and 0.35 percentage points, for a 1 percent increase in GDP (Nugent and Schmid, 2013). 10 Using the higher value of reduction in the unemployment rate of 0.35 percent for every 1 percent growth and the growth projections, the unemployment rate would decline to 12.5 percent at the end of 2016. Unemployment would be below the precrisis levels of 10 percent by 2020 given the projected growth rates. However, unemployment would only move slowly, with a decrease in growth of 1 percent, remaining at 13.5 percent in March 2017 and 11.8 percent in March 2020 (Figures 7a and 7b). An increase in the growth rate would have important effects on employment, which would decline to 11.5 percent at the end of 2016 if

¹⁰ Doing the same analysis for poverty is challenging because the decline in poverty between 2003 and 2007 happened in a period of low economic growth. Although growth contributed to the decline in that period, the stable economy and low inflation were major drivers for poverty reduction. As a result, calculating elasticities of poverty with respect to growth would give misleading effects (see Medvedev et al. [2013]).

growth increased by 1 percentage point (10.1 percent for increase in growth of 2 percent). Unemployment would reach 7.8 percent in 2020 with the same growth acceleration (5.4 percent if growth increased by 2 percent). In contrast, unemployment would be at about 14 percent if growth decreased by 2 percent (Figures 8a and 8b).

Figure 8a. Growth and Unemployment Figure 8b. Growth and Unemployment by 2016 by 2020 14% 16% 12% 12% 10% 10% 8% 8% 6% 6% 4% 4% 2% 2% **n**% 0% -2.00% -1.00% 0.00% 1.00% 2.00% 3.00% 4.00% 5.00% -2.00% -1.00% 1.00% 2.00% 3.00% 4.00% 5.00% Average Growth from baseline Average Growth from baseline

Source: IDB estimates based on data from the Statistical Institute of Jamaica.

Conclusion

Jamaica's debt buildup has transpired concurrently with slow economic growth; these issues are intertwined, with high debt slowing economic growth and slow economic growth making the process of reducing the debt burden more difficult. Jamaica has committed itself to a challenging program of fiscal austerity under the Extended Fund Facility agreement and thereafter a reliance on fiscal consolidation to reduce the debt burden.

The program outlined by the Extended Fund Facility and the Fiscal Rule can bring Jamaica's fiscal situation onto a sustainable path. However, the process will be long and strenuous, spanning more than half a generation before the country reaches a debt-to-GDP ratio of 60 percent, which is seen by many as a sustainable debt level.

The projected reduction in debt is driven mostly by the fiscal consolidation (and inflation). In addition, a slowdown in the depreciation of the Jamaican dollar and a decrease of interest payments support the declining debt trajectory. Economic growth is not the main driver of debt reduction, but it still plays a vital role for the success of the fiscal consolidation. Lower-than-

projected growth would make meeting the debt targets more challenging, requiring either later attainment of the targets or a stronger fiscal adjustment. In contrast, acceleration in economic growth would have highly beneficial effects for the country—debt levels would decrease and the fiscal adjustment could be lowered, while the unemployment rate would decrease at a faster pace.

Potential economic or weather related shocks are a further challenge to Jamaica. Given the tight fiscal consolidation, higher growth rates would provide a buffer against external shocks such as faster than expected increases in interest rates, a marked slowdown of the United States economy or weather related damage.

However, prospects for Jamaica achieving growth rates above the 2.7 percent projection, which is already above long-term trend, are uncertain. The world economic downturn adversely affected Jamaica's growth path, and the economy has recovered only slowly since. Although this implies that the country is substantially below potential GDP, it also indicates that Jamaica faces considerable challenges to economic growth. Important reforms have occurred, but the county still needs to improve many aspects of its business climate to reach the growth rates required for sustainable debt reduction.¹¹

¹¹ For example, the World Bank *Doing Business 2016* report names Jamaica as one of the 10 countries with 'most notable improvement' in performance in the Doing Business Indicator in 2014/15. In addition, Jamaica was ranked 64, an improvement of 7 ranks using the new methodology.

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