December 2010
IMF Country Report No. 10/363

**Barbados: 2010 Article IV Consultation—Staff Report; Staff Supplement; Public Information Notice on the Executive Board Discussion**

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2010 Article IV consultation with Barbados, the following documents have been released and are included in this package:

- The staff report for the 2010 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on September 24, 2010, with the officials of Barbados on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on November 10, 2010. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.

- A staff supplement of November 30, 2010 updating information on recent developments.

- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its December 3, 2010 discussion of the staff report that concluded the Article IV consultation.

The document listed below has been or will be separately released.

Selected Issues Paper

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

BARBADOS

# Staff Report for the 2010 Article IV Consultation

Prepared by the Staff Representatives for the 2010 Consultation with Barbados
(In consultation with other departments)

Approved by David J. Robinson and James Roaf

November 10, 2010


**Executive Summary**

- ***Background***. The global economic crisis has hit Barbados severely by choking tourism inflows and limiting offshore activity. GDP declined 5 percent in 2009 and an estimated 1 percent in the first half of 2010. External borrowing and the SDR allocation enabled an increase in international reserves. The public debt reached 110 percent of GDP in FY 2009/10, nonperforming loans have risen significantly, and the collapse of CLICO and BAICO has hurt the insurance sector.
- ***Focus of consultation*.** Within the context of a projected gradual recovery, the discussions focused on (i) the critical need to bring the public debt-to-GDP ratio down over the medium term; (ii) the health of the banking sector; (iii) measures to resolve CLICO Barbados; and (iv) reforms to strengthen supervision and regulation of the nonbank financial sector. The staff made the following recommendations:
  - ***Fiscal policy***: Go beyond the planned expenditure controls and raise VAT and corporate tax rates while widening their base to first stabilize and then put the public debt on a firm downward path as a ratio to GDP.
  - ***Monetary policy***: A decisive fiscal adjustment would help to contain pressures on the exchange rate peg, while monetary policy rates should be set to manage capital flows.
  - ***Financial sector policy***: Intensify monitoring and reporting requirements; conduct regular stress tests and strengthen prudential regulation for banks; reform the regulatory and supervisory framework of nonbank financial institutions; and resolve CLICO and BAICO.
- ***Authorities' views***. The authorities agreed with the thrust of these recommendations. In particular, they agreed with the staff's view that a deeper fiscal adjustment would bring less disruption to economic activity than an unsustainable public debt. They are planning to have the new Financial Services Commission up and running by the spring of 2011.
- ***Exchange system***. The Barbados dollar has been pegged to the U.S. dollar at the rate of BDS\$2.00 = US\$1.00 since 1975. Barbados has accepted the obligations of Article VIII, Sections 2, 3, and 4, and maintains an exchange system free of restrictions on current account transactions. While the real exchange rate is not far from its estimated equilibrium, it is somewhat overvalued and efforts should be intensified to address risks to external stability from large fiscal imbalances.
- ***Mission***. The team that visited Bridgetown during September 12–24 comprised Marcello Estevão (head), Gamal El-Masry and Carla Macario (all WHD) and John Ralyea (FIN). John Rolle (OED) participated in several meetings.


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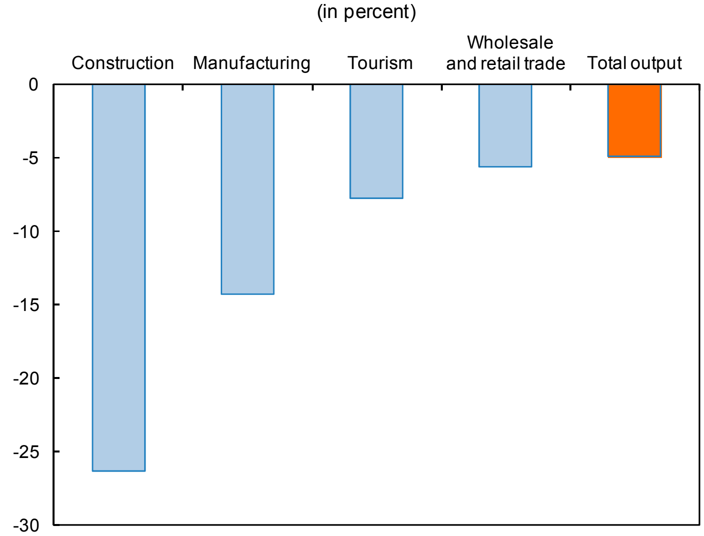
## I. Background

1. **The global crisis hit Barbados front and center.** Output is expected to have contracted by a cumulative 6 percent from late 2007 through end-2010, with widespread weakness across all major economic activities, especially tourism, financial services, and real estate. Indeed, the fact that the global recession originated in the U.S. and U.K. financial centers—main sources for high-end tourism and real estate investment to the country—explains such negative results. Moreover, as global financial institutions initially sustained large losses, fewer funds flowed to Barbados for treasury management in the offshore sector, and returns on financial investments worldwide diminished. With the outlook for tourism depressed and FDI in high-end properties coming to a sudden stop, construction contracted sharply, falling by a cumulative 26 percent between 2007 and 2009 (Box 1).

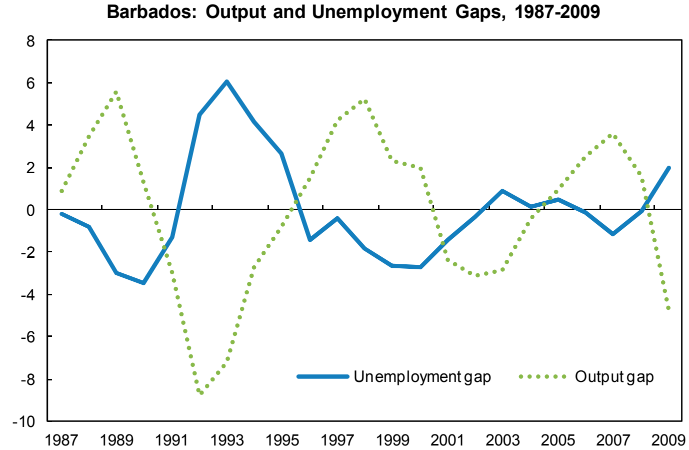
Cumulative Change in Output, by Key Sectors 2007-2009
(in percent)




Source: Barbados authorities; and Fund staff calculations.

2. **The broad economic weakness has hurt the labor market, while inflation remains stubbornly elevated.** The unemployment rate has steadily increased from 7.4 percent in 2007 to 10.7 percent in the second quarter of 2010, despite a number of initiatives by the government to encourage firms to maintain employment, particularly in the tourism sector (Box 2). Average inflation declined in 2009, but a mix of increases in fuel and food prices following gyrations in international commodity prices should push up inflation in 2010, including through small second-round effects on core prices. Moreover, Barbados's inflation has generally been higher than in key competitor markets in the last few years.

**Barbados: Output and Unemployment Gaps, 1987-2009**




Source: IMF staff calculations.

## Box 1. Tourism Developments

**Since the onset of the global slowdown in late 2007, Barbados's large tourism sector has contracted considerably.** About 40 percent of value added is either directly or indirectly related to tourism. In addition to hotels and restaurants, the core tourism activity drives to a large extent the activity in transportation, wholesale and retail, telecommunications, financial services, and construction. A comparison to similar tourist destinations in the region (in terms of size and clientele) shows that, while Barbados did not suffer the steepest decline in tourism, it was, nonetheless, severely affected.

Long-Stay Tourist Arrivals: Regional Comparison

| | 2007 | 2008 | 2009 | Growth Rate (in %) | |
|---|---|---|---|---|---|
| | | | | 2007-09 | Jan-Aug 10 1/ |
| Barbados | 572,937 | 567,667 | 518,564 | -9.5 | 4.1 |
| British Virgin Islands | 358,056 | 345,934 | 308,793 | -13.8 | 10.3 |
| Martinique | 503,107 | 479,933 | 443,202 | -11.9 | 6.6 |
| St. Lucia | 287,435 | 295,761 | 278,491 | -3.1 | 14.3 |
| St. Maarten | 469,407 | 475,410 | 440,185 | -6.2 | 3.4 |

Source: Caribbean Tourism Organization.
1/ BVI and St. Lucia (Jan-July) and St. Maarten (Jan-June).

**Overall tourist arrivals in Barbados dropped in 2008 and 2009, but certain source markets remained remarkably resilient.** The Canadian market, for example, showed great resilience throughout the recession, and continues to grow at a healthy pace. The U.S. market has also contracted less sharply during 2007–09 than the European and "other" markets, and it has bounced back in the first half of 2010.

Tourist Arrivals in Barbados: Major Source Markets

| | 2007 | 2008 | 2009 | Growth Rate (in %) | |
|---|---|---|---|---|---|
| | | | | 2007-09 | Jan-Aug 10 |
| Canada | 52,981 | 57,335 | 63,751 | 20.3 | 20.9 |
| Europe | 250,773 | 251,778 | 220,704 | -12.0 | -7.7 |
| United States | 133,519 | 131,795 | 122,306 | -8.4 | 20.4 |
| Other | 135,664 | 126,759 | 111,803 | -17.6 | 0.9 |
| Total | 572,937 | 567,667 | 518,564 | -9.5 | 4.1 |

Source: Caribbean Tourism Organization.

**Looking ahead, airlift expansion and greater diversification will be critical in developing tourist markets.** The recent experience with the Canadian and U.S. markets shows that expanding airlift capacity is key to attracting new customers. Indeed, the recent increase in arrivals from both countries can be traced to new air carriers linking Western Canada and New York to Barbados with nonstop flights. In addition, a recent direct flight from Brazil and forthcoming direct flights from Dallas (Texas) and Germany will open up new markets for Barbados.

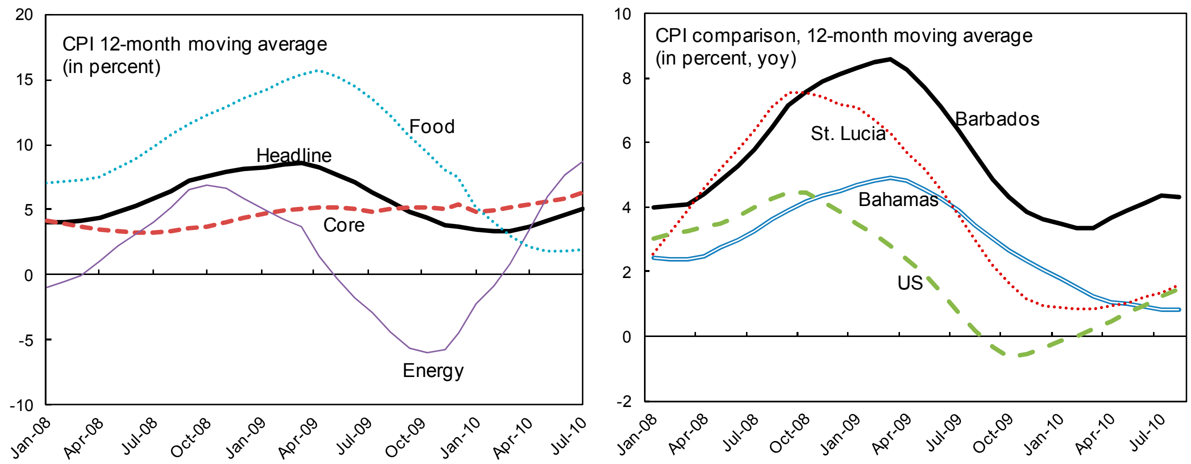
**Fiscal consolidation in key tourist markets will hurt tourism activity in Barbados.** As Europe and North America tighten fiscal policies, consumers' disposable income, and thus tourism demand, will grow slowly. Moreover, the recently introduced Airline Passenger Duty in the United Kingdom—officially presented as an environmental tax—has raised the tax per ticket to the Caribbean in two steps from £40.00 to £75.00 effective November 1, with twice as much charged for travel in premium class.

**Box 2. The Authorities' Response to the Recession**

**Soon after the first signs of the economic downturn became visible in 2008, the authorities implemented a number of countercyclical measures to protect employment and minimize the impact of the recession on the most vulnerable groups**:

- The Tourism Investment Relief Fund was set up in 2009 to encourage the renovation of tourism-related facilities through the provision of public loans, loan guarantees, and grants;
- An employment stabilization scheme was introduced in 2009 to allow employers to defer for one year their contribution to the National Insurance Scheme (NIS) provided that they maintain their employment levels;
- On the social front, old-age benefits were increased, free transportation was introduced on public buses for all school children, a training fund was established by the NIS to retrain workers who lost their jobs, and more recently, unemployment benefits paid out by the NIS were extended from 26 weeks to 40 weeks to cover the longer-term unemployed; and

Large capital projects were encouraged or undertaken directly by government agencies. These included the construction of two large office buildings by the NIS for later lease to the government, infrastructure projects by the Barbados Water Authority to install and replace main water and sewage pipes, and a loan guarantee provided by the central government to private financiers and developers to restart the prominent Four-Seasons Hotel and Villas project on the West Coast.




Source: Central Bank of Barbados; INS; and Fund staff calculations.

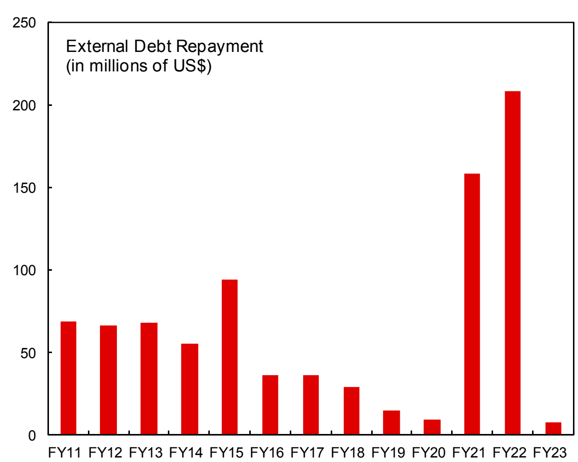
3. **The fiscal accounts have deteriorated significantly, adding to trend increases in the debt-to-GDP ratio.** Tax revenue, particularly corporate income taxes and VAT, declined considerably in FY09/10, reflecting sharply lower economic activity, while current spending eased only marginally. Moreover, despite adjustment in some public service tariffs last year, public enterprises as a whole continue to accumulate large losses and remain a burden on the government budget, drawing direct transfers and loan guarantees. As a result, the central government deficit widened from 5 percent of GDP in FY2008/09 to more than 9 percent in FY2009/10, adding to the deterioration of the public accounts due to the steady increase in central government current spending over the past five years. By the end of FY 2009/10, the public debt-to-GDP ratio reached 110.7 percent. The trend increase in debt-to-GDP has been exacerbated by low productivity growth in the country, with total factor productivity actually declining in the past 10 years (*Selected Issues Paper*, Chapter I).

Barbados: Central Government Expenditure 1/
(In percent of GDP)

| | 2005/06 | 2008/09 | 2009/10 Est. | 2010/11 Proj. |
|---|---|---|---|---|
| Total expenditure | 29.7 | 38.1 | 38.5 | 37.8 |
| Current expenditure | 26.4 | 35.1 | 36.0 | 35.3 |
| Primary current expenditure | 22.5 | 30.1 | 30.4 | 29.4 |
| Wages and salaries | 8.9 | 10.5 | 11.1 | 10.5 |
| Goods and services | 3.1 | 5.3 | 5.3 | 5.2 |
| Transfers | 10.5 | 14.3 | 14.0 | 13.7 |
| Interest payments | 4.0 | 5.0 | 5.6 | 5.9 |
| Capital expenditure | 3.3 | 2.9 | 2.5 | 2.5 |

1/ Fiscal year from April to March.

4. **However, debt-rollover risks are limited.** More than two-thirds of Barbados's debt is domestic and denominated in local currency, and about one-third of the central government debt is in the hands of the National Insurance System, which will continue to buy government securities and hold them to maturity. Moreover, external debt amortizations are strongly back-loaded.




Source: Barbados authorities; and Fund staff estimations and projections.

5. **In an effort to stem the rising debt, authorities issued a "Medium-Term Fiscal Strategy" (MTFS) in March**. The strategy aims at reducing the overall fiscal deficit and generating a balanced budget by 2014/15 and a surplus by 2015/16, while keeping economic growth to acceptable levels by focusing on foreign exchange earning sectors. The authorities proposed improving tax administration, and containing the growth of the wage bill and of transfers (including to public health, education, and transportation providers). In addition, they intend to substitute expensive foreign private loans with cheaper multilateral financing to improve debt dynamics. They expect that the fiscal adjustment would bring down the public debt-to-GDP ratio by about 14 percentage points in five years, with further steady improvements thereafter.[1]

6. **The weakness in the external sector has put pressure on foreign reserves.** Depressed tourism proceeds and high commodity prices more than doubled the current account deficit to 9.6 percent of GDP in 2008. However, a recession-induced contraction in imports outpaced a further fall in tourism and export revenues, narrowing the deficit to 5.5 percent of GDP in 2009. The relatively high deficits, along with a collapse in long-term private sector inflows, put pressure on foreign reserves under the long-standing pegged exchange rate regime. In 2009, the authorities issued US$120 million in external bonds and got US$85 million in SDR allocations. By the end of 2010, under current plans, the authorities would have borrowed an additional net amount of US$145 million.[2] In the absence of foreign borrowing and the SDR allocations, foreign reserves would have halved in two years.

7. **The real exchange rate, while somewhat overvalued, is broadly in line with fundamentals** (*Selected Issues Paper*, Chapter II)**.** Staff analysis suggests that Barbados' real effective exchange rate, which has appreciated 13 percent over the last 24 months relative to its main competitors, exceeds its equilibrium rate by 5 to 10 percent. The current level of foreign reserves could be considered adequate under several criteria but others point to the need for further accumulation of reserves. In addition, Barbados' share of the Caribbean tourism market slipped in 2009. However, concerns about overvaluation and possible losses in competitiveness of the Barbadian economy may be mitigated somewhat by Barbados' focus on high-end tourism, which could be less price sensitive than other tourism segments.

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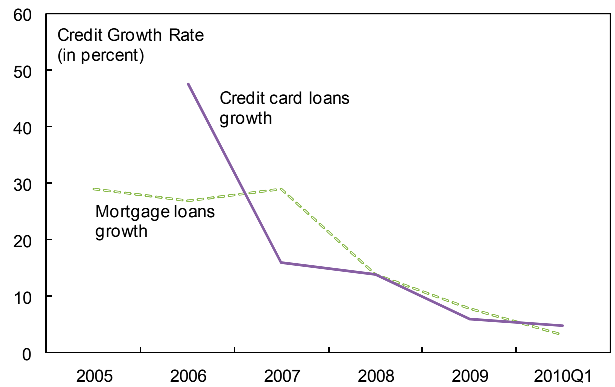
[1] In October 2010, S&P downgraded Barbados' debt to BBB- from BBB (although it remains investment grade) because of its negative dynamics. The ratings agency kept the country on a stable outlook, given low debt-rollover risks and the authorities' commitment to fiscal adjustment.

[2] In June 2010, the authorities borrowed US$100 million (to be repaid in December 2010) using the proceeds to repay a maturing bond of US$100 million. Later in the summer, they successfully placed a US$200 million bond in New York with a 12-year maturity and 7.2 percent interest rate. In October, a US$45-million loan was approved by the Inter-American Development Bank (IADB).

8. **The banking system is showing strains from the recession.** The Barbadian banking sector, which consists of six foreign institutions, remains well capitalized, although several indicators have deteriorated in recent months. Non-performing loans increased on average to almost 10 percent of total loans in June 2010, with one bank posting a large increase owing to its exposure to tourism projects. In addition, loss provisions remain low, largely because domestic requirements are lower than international standards (*Selected Issues Paper*, Chapter III). Despite this deterioration, preliminary stress tests suggest that the banking system would remain sound even in the event of further substantial shocks.[3] Credit growth has trended down, while liquidity remains stable.



Source: Barbados authorities; and Fund staff calculations.

Barbados: Financial Soundness Indicators, 2006-10 1/
(In percent)

| | 2006 | 2007 | 2008 | 2009 | Jun-10 |
|---|---|---|---|---|---|
| Capital adequacy ratio 2/ | 14.4 | 16.4 | 16.1 | 17.5 | 18.0 |
| NPLs to total loans | 4.4 | 2.8 | 3.5 | 7.2 | 9.9 |
| Provision for loan loss to total loans | 1.5 | 1.5 | 2.2 | 3.3 | 1.5 |
| Return on equity | 14.3 | 13.5 | 11.5 | 9.9 | 7.9 |
| Credit to the private sector, growth yoy | 13.2 | 6.4 | 11.1 | 1.4 | 1.7 |
| Liquid assets to total assets 3/ | 7.9 | 9.5 | 9.0 | 10.8 | 10.4 |

Sources: Central Bank of Barbados; and Fund staff estimates.
1/ Onshore banking system; data for December unless otherwise indicated.
2/ Does not include local branches of foreign banks;
3/ Includes all six banks.

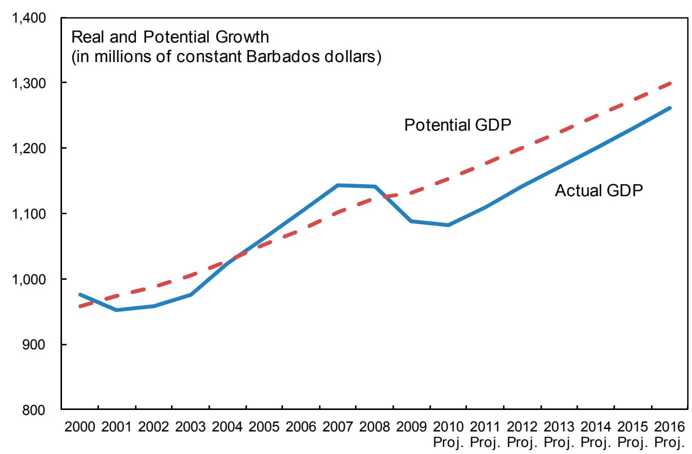
9. **Offshore financial institutions have contracted and stock market activity has stalled, but credit unions appear resilient to the crisis.** Assets of offshore institutions fell from 11 times GDP in 2007 to 9 times GDP in 2009, and the sector's contribution to fiscal revenues has declined. At the same time, stock trading dropped from 7 percent of GDP in 2007 to less than ½ percent of GDP in 2009, and has declined further so far in 2010. The available information suggests that credit unions have faced the economic downturn without severe difficulties, although membership has contracted and non-performing loans remain high.

[3] IMF staff is currently collaborating with Barbados' central bank staff to perform a full-fledged stress test of the entire banking system. The preliminary stress test done so far was based on migrating up to 100 percent of loans in a given classification category to the next lower one. Under this shock scenario, the capital adequacy ratio of individual banks fell by as much as 4 percentage points, but remained well above the regulatory 8-percent threshold.

10. **The insurance sector faced a major crisis**. In 2008, Trinidad and Tobago's CL Financial saw the value of its assets plummet, due in part to losses in real estate investments in Florida and in methanol production. In February 2009, the government of Barbados acknowledged difficulties in CL Financial's domestic subsidiary, CLICO-Barbados. Of CLICO-Barbados' three business lines, the mortgage business has been sold and negotiations to sell the general insurance business are in train. In contrast, CLICO's life-insurance arm has sizeable net liabilities, currently estimated at about 3¼ percent of GDP. To provide liquidity, the central bank deposited US$5 million into CLICO's mortgage subsidiary in early 2009 and granted access to a special credit window, while an oversight committee was set up to conduct the resolution process. Another affiliate of CL Financial, British American Insurance Corporation (BAICO), was recently put under judicial management. The government will soon request the appointment of a judicial manager for CLICO.

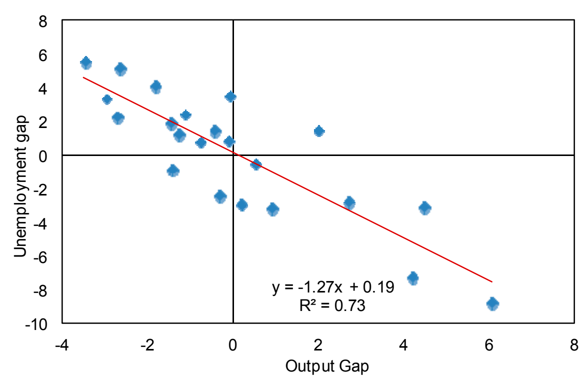
## II. Outlook and Risks

11. **The outlook is for a gradual recovery with some downside risks around it.** Staff expects a marginal output contraction in 2010 and a moderate recovery in 2011 and onwards with growth rates of 2½–3 percent. The projected recovery, which is weak when taking into account the deep contraction of the past two years, is consistent with forecasts of anemic recoveries and persistently high unemployment rates in the United States and the United Kingdom—key sources of tourism to Barbados. Against this background, the crisis-driven output gap should narrow only gradually in the medium term. Ongoing uncertainty about the speed of the recovery in the United States—particularly due to weak household balance sheets, persistently high unemployment rates, and slow resolution of nonperforming mortgages—is the main risk to the outlook for Barbados.




Source: IMF staff estimations and projections.

12. **Inflation is projected to moderate toward historic rates, while unemployment rates should rise further before receding.** After the blip in 2010, more stable fuel prices and subdued domestic and external demand should curb inflationary pressures. In addition, private employers have indicated that it is becoming increasingly difficult to maintain current levels of employment in the




Source: IMF staff calculations.

face of continued weak foreign and domestic demand for goods and services. Thus, as countercyclical programs wane—and absent a more vigorous economic recovery to close the output gap—unemployment is expected to rise above 11 percent in 2011, a level not seen since the late 1990s, before receding slowly toward historical averages.

13. **External headwinds will continue to weigh on the balance of payments in the medium term under the current policy stance.** The current account is projected to widen in 2010 to 7.9 percent of GDP, despite a projected two-percent increase in tourism revenues. The large external borrowing volumes in 2010 are unlikely to be sufficient to offset the deterioration in the trade balance, and reserves are projected to fall to 4.2 months of imports by the end of the year from 4.6 months of imports at end-2009. In the absence of policy changes or significant new borrowing, foreign reserves are projected to fall to just over two months of imports in 2015. In addition, current and projected future reserves fall short of covering 100 percent of short-term debt on a remaining-maturity basis.

Barbados: International Reserve Coverage 1/

| | 2004-07 Average | 2008 | 2009 | 2010 |
|---|---|---|---|---|
| GIR in percent of | | | | |
| Broad money (conventional threshold > 20 percent) | 24 | 21 | 23 | 20 |
| Short-term external debt by remaining maturity (> 100 percent) | 80 | 49 | 70 | 69 |
| Minimum composite reserve thresholds (US$ million) | | | | |
| Wijnholds and Kapteyn (2001) 2/ | … | 1,337 | 1,127 | 1,127 |
| Lipschitz, Messmacher, and Mourmouras (2006) 3/ | … | 2,204 | 1,914 | 1,922 |
| Memorandum item | | | | |
| GIR (US$ million) | … | 678 | 745 | 707 |

Sources: Central Bank of Barbados; Fund staff calculations.

1/ Does not include external non-bank private-sector short-term debt due to lack of data. Also, 2010 projections are estimated based on commercial bank data as of April 2010.

2/ Full coverage of external short-term debt on a remaining maturity basis (net of non-resident deposits) plus 20 percent of broad money.

3/ Full coverage of foreign debt service, plus 10 percent of broad money, plus 20 percent of annual imports.

14. **The medium-term outlook hinges crucially on the authorities' ability to deliver fiscal consolidation and on improved structural conditions to growth.** Staff projects that the public debt could rise by about 10 to 15 percent of GDP over the next five years without measures to bring the public deficit down in a sustainable manner. That could increase uncertainty about debt sustainability and reinforce existing pressures on foreign reserves. Contingent liabilities from CLICO (and possibly BAICO) and from government guarantees to construction projects would add to this negative scenario. The MTFS aims at reversing this situation, which could be helped by reforms to raise trend growth in the country.

## III. Policy Discussions

### A. Fiscal Policy

15. **The mission supported a decisive fiscal adjustment strategy that would first stabilize and then put the debt-to-GDP ratio on a downward path.** As a small, open economy, the level of economic activity in Barbados is ultimately determined by global conditions. Thus, the mission took the view that a strong fiscal consolidation effort would have a small effect on economic growth when compared to the larger impact from negative

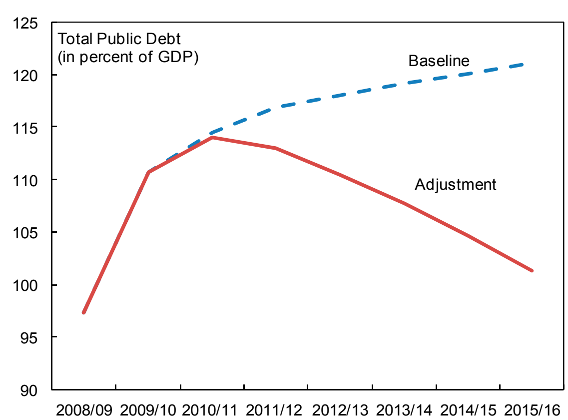
debt dynamics and risks around it. Indeed, reduced market confidence in Barbados' ability to consolidate the fiscal accounts could potentially result in loss of access to external debt markets and much lower medium-term growth. The staff stressed, however, that the fiscal adjustment needs to be done in a way that—to the extent possible—protects the poor and limits its adverse impact on growth. To that end, the staff considered Barbados' tradition of cooperation between labor unions, employers, and government as a great asset.

16. **The mission broadly agreed with the targets set forth by the authorities' fiscal adjustment strategy, but argued for stronger revenue measures to reach them.** Consistent with the MTFS, the FY 2010/11 budget relies mainly on controlling public sector wages, transfers, and capital spending to produce a small, ½ percent of GDP improvement in the primary fiscal balance. However, preliminary data suggest that tax revenues for the beginning of the budget year have been much weaker than expected, putting at risk the planned modest adjustment for the year. Looking ahead, under the team's economic assumptions, the expenditure controls, improved debt management, and consolidation of tax revenue agencies listed in the MTFS would not suffice to achieve the authorities' medium-term targets. For that, a possible set of measures, including concrete actions to improve revenue collection, could include:

- **On the revenue side,** an increase in the VAT rate by 3 percentage points to 18 percent, combined with base broadening by eliminating many exemptions and zero ratings, and improvements in tax administration. The staff also recommended raising the corporate tax rate (from 2 to 3 percent) and reducing exemptions over the medium term, particularly for offshore operations.

- **On the expenditure side**, bringing down public sector wages and spending on goods and services to their mid-2000s ratio to GDP. Staff also recommended adjusting tariffs for public utilities and services to improve the financial situation of loss-making public enterprises, thus allowing the government to cut transfers to them.

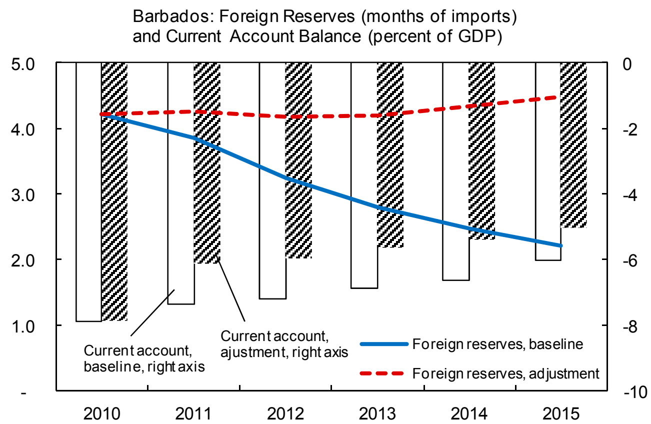
- All these measures should be combined with well-targeted transfers to vulnerable social groups to alleviate the impact of the fiscal adjustment. The adjustment could be calibrated to leave space for moderate increases in capital spending to support medium-term growth.



Source: Barbados authorities; and Fund staff estimates and projections.

17. **The illustrative adjustment scenario would put public debt on a stable, downward trajectory, thus bolstering domestic and external stability.** The cumulative impact of the suggested measures would be to strengthen the consolidated government budget from a deficit of 7.3 percent of GDP in FY2009/10 to a 2 percent surplus in FY2015/16. Thus, total public debt, after peaking in FY2010/11 at 114 percent of

GDP, would gradually fall to just over 100 percent of GDP by the end of the projection period, steadily improving thereafter, as broadly intended in the MTFS (Appendix I). Compared with the baseline scenario, public debt would be about 20 percentage points of GDP lower. Weaker pressure from government deficits and overall slower wage growth (including by the possible signaling effect from low wage growth in the public sector to private sector wages) would reduce the growth of imports. Thus, the external current account balance would improve toward its medium-term equilibrium level (as estimated in Chapter II of the *Selected Issues Paper*). Better debt dynamics and lower wage costs vis-à-vis the baseline scenario would boost FDI inflows, which, together with improved current account balances, would stabilize foreign reserves at around 4¾ months of imports. Bound and stress tests confirm that the downward trajectory of the public debt would be sustained under most standardized shocks —such as an interest rate hike or exchange rate devaluation (Appendix I)—but debt sustainability will remain vulnerable until debt ratios decline much further in the longer run.

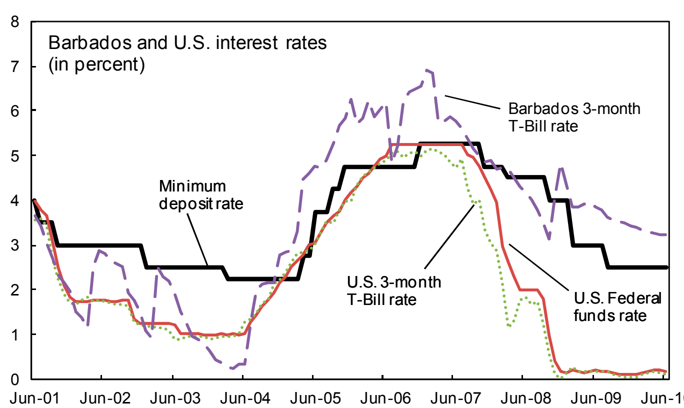


Source: Barbados authorities; and Fund staff projections.

18. **Authorities agreed that the fiscal adjustment needs to be deepened.** In particular, they agreed with a combination of stronger revenue measures and further spending cuts starting this budget year. However, they showed some reluctance to perform major changes in the tax code without further studies, including with the help of CARTAC. The authorities reiterated their commitment to maintain only moderate growth in public wages and salaries and reduce transfers to quasi-public enterprises, while highlighting their efforts to reform the public sector and raise its efficiency, including in state-owned enterprises.

## B. Monetary and Exchange Rate Policies

19. **The mission argued against further declines in policy interest rates, as the effect on economic activity is uncertain, while pressures on reserves could increase.** The staff noted that capital controls are being applied liberally in Barbados and are not too restrictive, serving primarily to smooth currency movements. That makes them an effective tool against disruptive and volatile capital flows, but also implies that changes in domestic policy rates have limited impact on economic activity. However, reductions in the minimum deposit rate, which is currently at 2½ percent and remains negative in real terms, could create misalignments with policy rates in



Source: Barbados authorities; and IFS.

core economies, given usual country spreads, thus exacerbating pressures on foreign reserves and the exchange rate peg.

20. **The authorities agreed that the impact of changes in the deposit rate on real activity is fairly modest.** They are currently setting the minimum deposit rate to maintain a reasonable spread vis-à-vis the U.S. federal fund rates, thus managing pressures on foreign reserves. However, the authorities stated that the low deposit rates have translated into somewhat lower lending rates (albeit not one-to-one) and contributed to alleviate balance-sheet pressures on households.

21. **Staff argued that fiscal adjustment was the best policy to stem pressures on the real exchange rate.** The authorities reiterated their strong commitment to the 2-to-1 peg to the U.S. dollar, which has been in place since 1975 and has served as an effective nominal anchor to the Barbadian economy. In this context, the authorities agreed with the staff that a decisive fiscal adjustment path is essential to protect the peg.

### C. Financial Sector Policies

22. **Staff pointed out that the deterioration in some of the financial soundness indicators begs closer supervision.** The significant increase in nonperforming loans in recent months (and the likely further increase going forward, even in a baseline scenario of a steady recovery, due to usual lagged effects) could pose risks to the financial sector and the economy. This said, staff noted the banking system's high capital ratio, which, according to work from an MCM technical assistance mission in early September, would remain well above the regulatory threshold under plausible additional stress.

23. **The authorities stressed that the structure of Barbados' banking system and the currently intensified bank supervision are sources of resilience.** Large and stable Canadian banks account for more than 70 percent of banking assets with the remaining market share accounted for by large regional banks. Moreover, officials pointed out that these institutions have a long-term commitment to the country, which was confirmed by bank representatives who view the deterioration of financial conditions mainly as a cyclical phenomenon. Central bank staff has intensified monitoring and reporting requirements, and has stepped-up onsite inspections, focusing on credit risk. They are encouraging banks to carry out stress tests, including by posting guidelines on the central bank's website. The central bank has also set up a financial stability unit that will carry out quarterly stress tests and analytical studies.

24. **The authorities are reinforcing the regulatory framework for the banking system, but staff suggested further improvements in provisioning requirements.** Officials are drafting regulations for prompt corrective action and have signed MOUs with Canadian supervisors to facilitate cross-border coordination among regulators. They are participating in a regional college of regulators to coordinate the consolidated supervision of commercial banks based in Barbados. The authorities are also moving forward with changes in regulation and legislation to introduce some of the recommendations of the 2008 FSAP Update

(Appendix II). The staff noted that provisioning levels were low, and reiterated the FSAP suggestion that requirements be upgraded to international practices.

25. **The authorities are discussing different strategies for resolving CLICO-Barbados, but are waiting for more information about BAICO.** Discussions revolved around a resolution plan that addresses the statutory gap in CLICO Life, while protecting small individual investors. The authorities are aware of CLICO-Barbados' net liabilities in other countries in the region. The fiscal costs of such a plan would be bound by CLICO-Life's net liabilities of 3¼ percent of GDP and would ultimately depend on the extent that liabilities to larger investors are guaranteed.[4] More concrete information and actions will be available as the work of the judicial managers of CLICO-Barbados and BAICO progresses.

26. **Staff voiced concerns about the quality of insurance sector supervision**. The authorities stated that they are strengthening regulation and supervision of nonbank financial institutions. They are moving forward with the consolidation of the supervision of onshore and offshore nonbank financial institutions into the planned Financial Services Commission (FSC). This commission—which would bring under one umbrella the supervision of insurance, credit unions, securities and international business—is scheduled to be in place by next spring. Staff noted that better and more timely information on nonbank financial institutions would improve transparency and provide better market discipline to the sector.

## D. Structural Issues

27. **Staff argued for measures to raise Barbados' low productivity growth.** Barbados seems to have a relatively good business environment, as attested by the Competitiveness Index from the World Economic Forum, which ranks Barbados at the top of CARICOM and fifth in the Western Hemisphere. However, staff estimates that total factor productivity has been declining in the country, which has welfare consequences and makes it more difficult to consolidate the fiscal accounts in a sustainable manner. While the causes for this poor performance are not clear, improving the efficiency of government services, including by consolidating agencies with complementary mandates and alleviating the bureaucratic burden on the private sector, would be steps in the right direction.

28. **Officials view facilitating private sector investment and diversifying tourism sources as key to raising economic efficiency and growth.** As examples, they highlighted (i) the government project for an underwater pipeline to pump natural gas from Trinidad to

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[4] Other countries in the region have a range of strategies to resolve CLICO. In Trinidad and Tobago, the budget proposed a restructuring plan that would pay investors up to a threshold of US$ 12,000, and would apply a haircut in NPV terms to the remaining liabilities. The plan is being reviewed after it met with considerable opposition from investors, including credit unions. In the Bahamas, the judicial manager is still trying to liquidate assets and is exploring selling the life insurance portfolio. Guyana is financing the payout of CLICO liabilities mainly with a Caribbean Petroleum Fund of US$15 million, but that would not cover the National Insurance System, which had gross investments in CLICO equivalent to about 2¼ percent of GDP.

Barbados, to be financed entirely by private capital, which would lower energy costs and carbon emissions; and (ii) recent efforts to access tourism source markets in Brazil and Asia. Officials remarked on the difficulties that they sometimes face from exogenous forces, citing as an example the new tax on airline travel imposed in the United Kingdom.

### E. Statistical Issues

29. **Remaining data issues hinder optimal surveillance of the Barbados' economy.** The authorities published revised national accounts (done with the support of CARTAC), producing a better picture of nominal GDP growth and levels. However, this welcome revision needs to be supplemented by official estimates of price deflators, and a consistent real GDP series, which currently is calculated by the central bank still using the old national accounts framework. Moreover, timely data on the financial situation of state-owned enterprises would allow a better assessment of the state of public finances. More granular information on banks' assets, liabilities, and capital composition would improve the CBB's ability to monitor the health of the banking system.

## IV. Staff Appraisal

30. **While the global crisis hit Barbados front and center, the outlook is for a gradual recovery.** Output will still contract in 2010, but at a much slower rate than in 2009. Looking ahead, the recovery should be gradual with some downside risks due to uncertainties about the strength of economic activity in core economies, including protractedly high unemployment rates. Foreign reserves would remain under pressure, although government borrowing provides a protective cushion.

31. **The major challenge ahead is to put the public debt on a steady declining path to support both domestic and external stability.** Economic activity in Barbados is ultimately determined by global conditions, thus, fiscal policy should focus squarely on bringing the debt-to-GDP ratio down in the medium term. The MTFS sets out a welcome commitment to adjustment that, nonetheless, should be strengthened by concrete actions to improve revenue collection. An increase in VAT and corporate tax rates, while broadening the tax base, would be important steps in the right direction. On the expenditure side—very much in the spirit of the MTFS—public sector wages and spending on goods and services could be brought down to their mid-2000s ratios to GDP. Increases in tariffs for public utilities and services would allow further cuts in government transfers to quasi-public enterprises. These measures should be combined with well-targeted transfers to vulnerable social groups to alleviate the impact of the fiscal adjustment and with moderate increases in capital spending to support medium-term growth.

32. **A decisive fiscal adjustment is the best way to protect the exchange rate peg, while the current monetary stance is broadly appropriate.** The peg to the U.S. dollar has worked as an effective nominal anchor for the past 35 years, but staff estimates suggest that the real exchange rate is somewhat overvalued. Ongoing fiscal pressures are at the heart of the problem and fiscal adjustment is the best policy for improving medium-term reserve dynamics

and protecting the peg, including by reinforcing Barbados' status as a desirable destination for foreign capital. The minimum deposit rate should continue to be set with an eye to prevent misalignments vis-à-vis policy rates in core economies, given usual country spreads, thus avoiding disruptive capital movements.

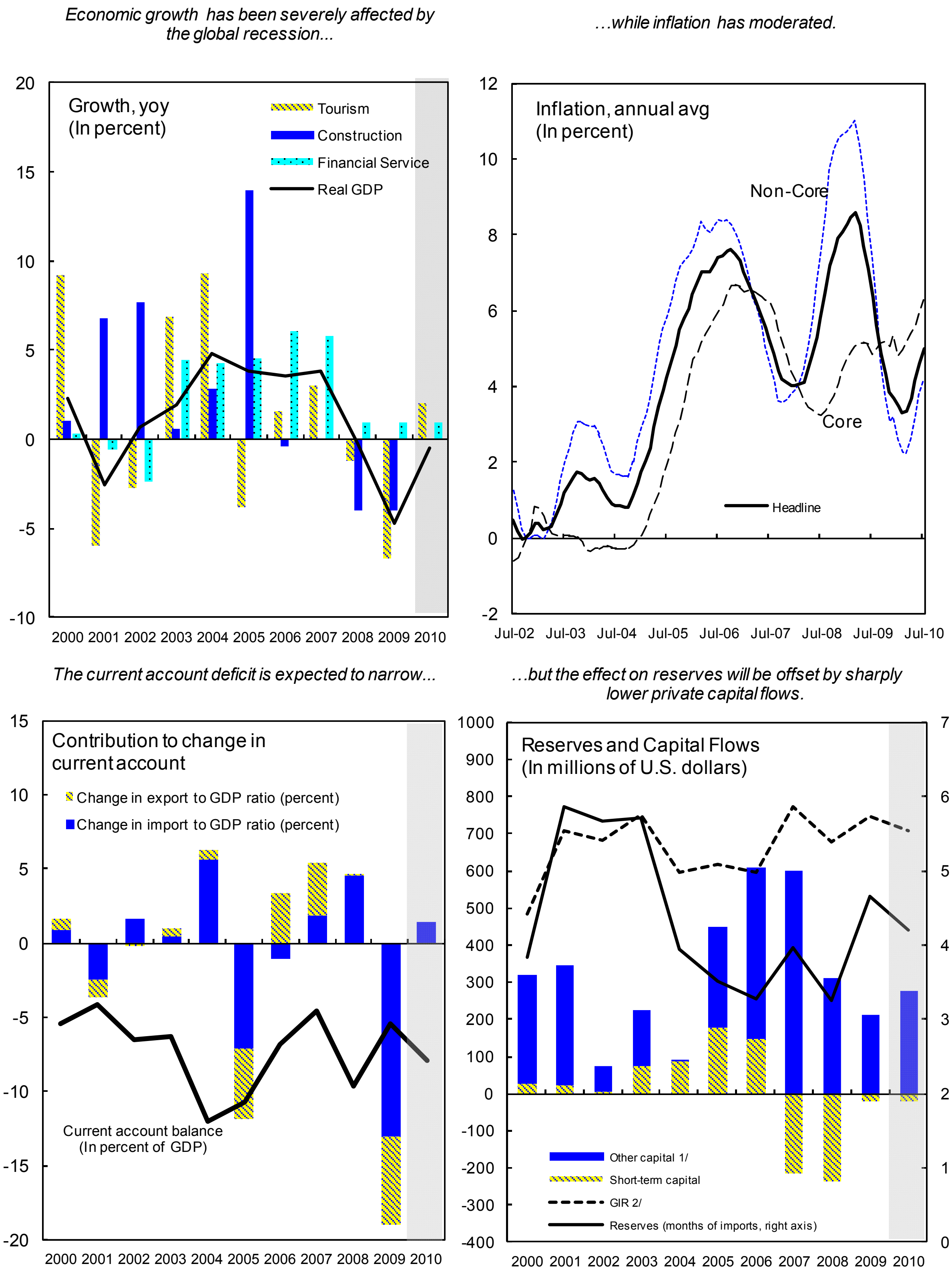
33. **Banks remain healthy, but tighter regulations are needed.** The significant increase in nonperforming loans in recent months (and the likely further increase going forward) poses risks to the financial sector, although banks' high capital ratios serve as effective cushions. In addition, Barbados' banking system is comprised of large and stable international institutions, which is a source of great resilience. Despite these factors, the central bank should continue its intensified monitoring of the banking system—now facilitated by its new financial stability unit—including by performing periodic stress tests. Provisioning requirements should be upgraded to international practices and banks should be asked to provide more granular information about their loan portfolio.

34. **Supervision of nonbank financial institutions needs to be revamped.** The bankruptcy of two important insurance companies illustrates the weaknesses in the supervisory framework. Consolidating the supervision of onshore and offshore nonbank financial institutions into the planned Financial Services Commission (FSC), as well as improving human capital in this area would be steps in the right direction. Better and timelier information on nonbank financial institutions would improve transparency and provide more effective market discipline to the sector. Smooth and swift resolutions of CLICO and BAICO would lift the uncertainty in the sector and on the size of contingent fiscal liabilities.

35. **Low productivity growth is an obstacle to better life quality in Barbados.** Despite relatively good business conditions, staff estimates that total factor productivity growth is quite low in the country, which has welfare consequences and makes it more difficult to consolidate the fiscal accounts in a sustainable manner. Improving the efficiency of government services, including by consolidating agencies with complementary mandates and alleviating the bureaucratic burden on the private sector, would help to boost productivity growth. Channeling private capital to investments that would lower the cost of living and producing in the country would also increase economic efficiency. Going beyond raising productivity growth, a more diversified tourism industry would boost the country's resilience to regional shocks and open up new sources of medium-term growth.

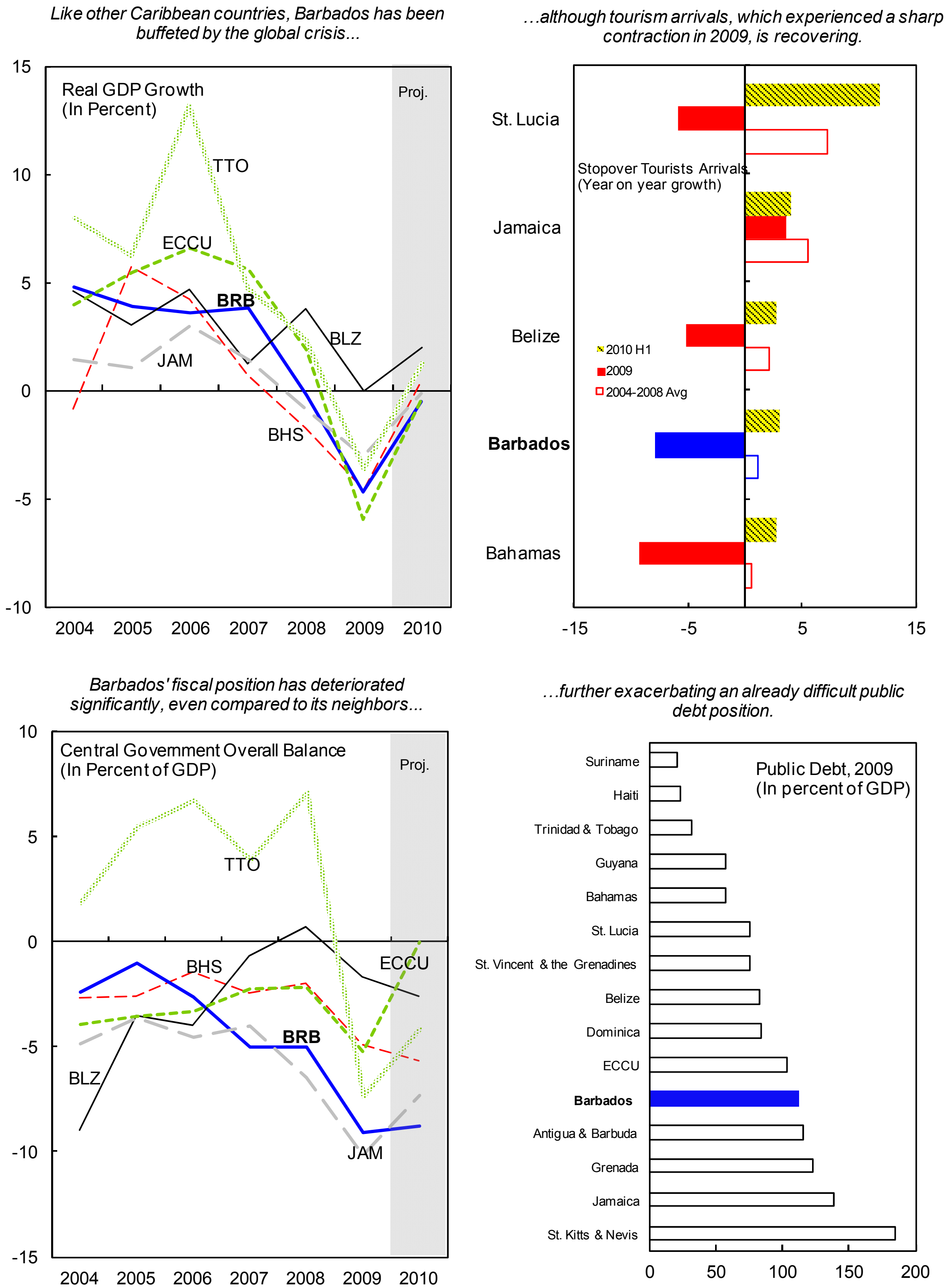
36. **It is recommended to hold the next consultation on the standard 12-month cycle.**

## Figure 1. Barbados: Macroeconomic Developments, 2000-10



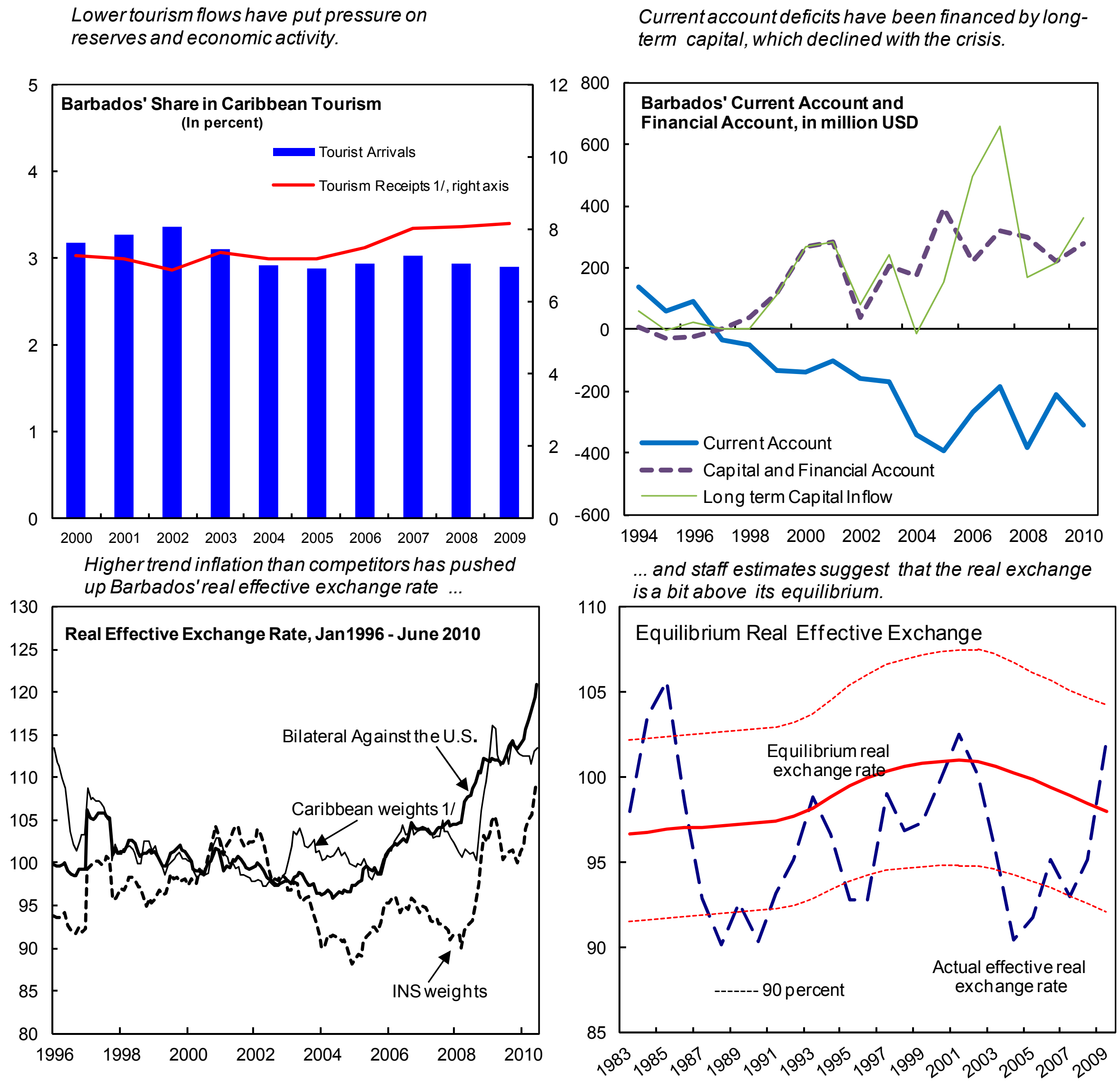

Sources: Central Bank of Barbados; and Fund staff projections.
1/ Includes errors and omissions.
2/ Includes the additional special and general SDR allocations in 2009.

## Figure 2. Barbados: Economic Performance in a Regional Context




Sources: Central Bank of Barbados; Caribbean Tourism Organization; and Fund staff estimates.

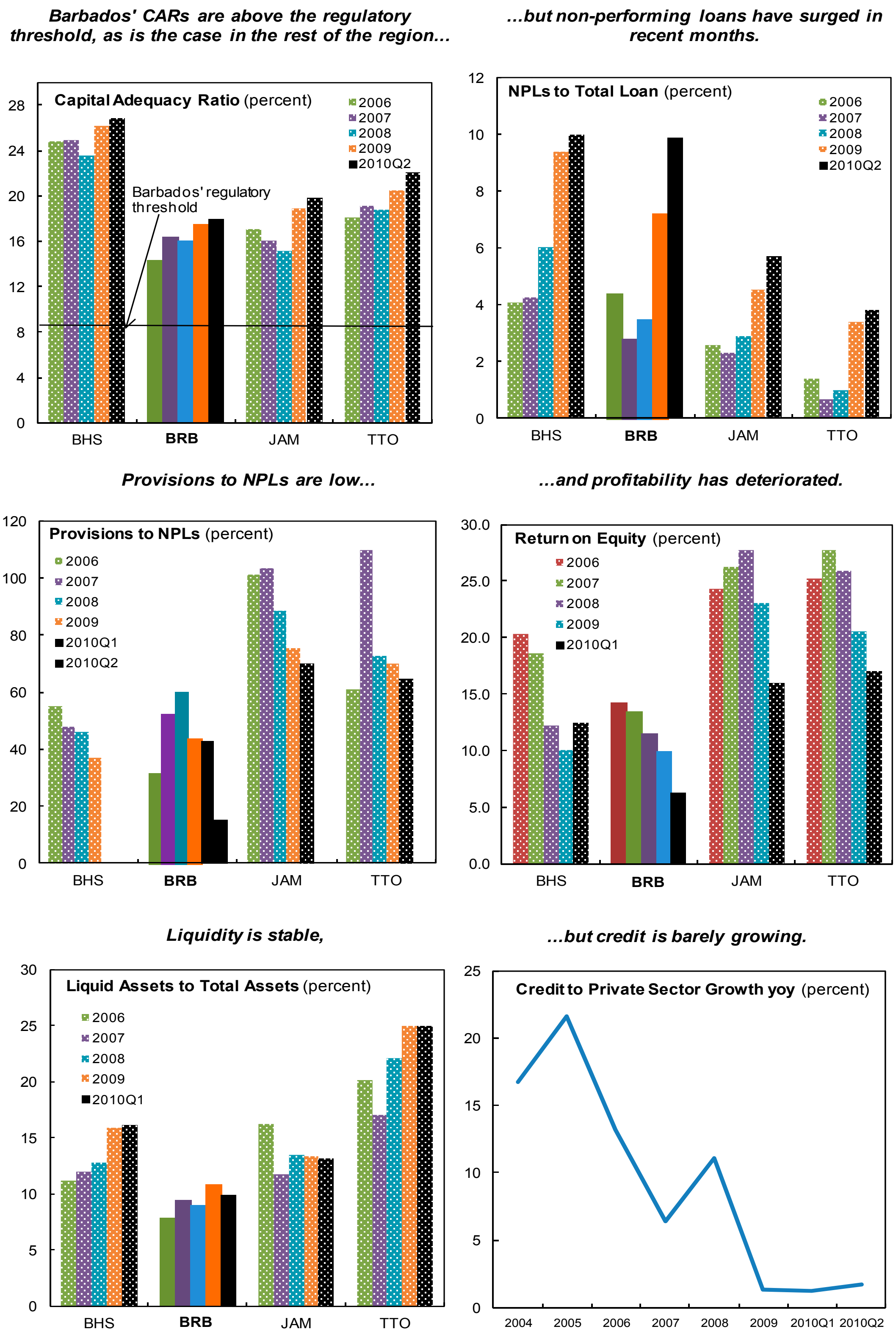
Figure 3. Barbados: External Stability




Sources: Caribean Tourism Organization; country authorities; and IMF staff estimates.

1/ Estimation of ERER based on panel data of 21 tourism-dependent countries defined as those where tourism exports exceed 20 percent of total exports: Antigua and Barbuda, The Bahamas, Barbados, Belize, Cyprus, Dominica, Dominican Republic, Egypt, Fiji, Greece, Grenada, Jamaica, Jordan, St. Kitts and Nevis, Malta, St. Lucia, St. Vincent and the Grenadines, Mauritius, Samoa, Seychelles, and Vanuatu.

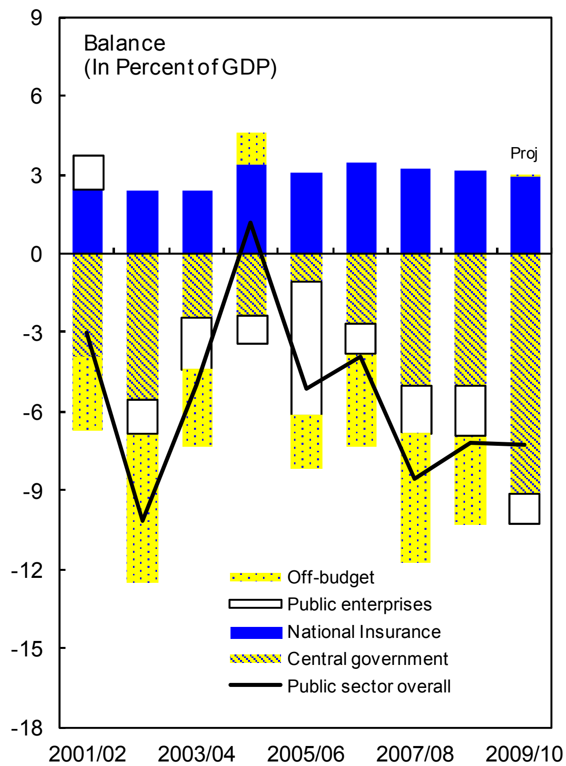
Figure 4. Barbados: Financial Sector Indicators compared to Peers in the Region 1/



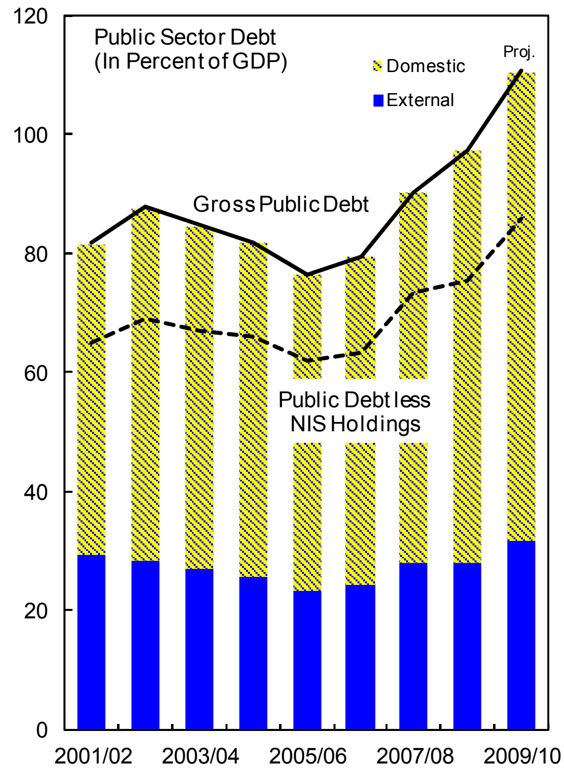

Source: International Financial Statistics; National authorities; and Fund staff estimates.
1/ Regional comparators include The Bahamas, Jamaica, and Trinidad and Tobago.

# Figure 5. Barbados: Fiscal Sector Developments and Financing

*The fiscal stance has weakened substantially in recent years...*




*...leading to a rapid rise in the debt/GDP ratio.*




Barbados: Financing of the Nonfinancial Public Sector Operations, 2005/06-2010/11
(In percent of GDP)

| | 2005/06 | 2006/07 | 2007/08 | 2008/09 | Rev. 2009/10 | Proj. 2010/11 |
|---|---|---|---|---|---|---|
| **Overall public sector borrowing requirement** | **5.1** | **3.9** | **8.6** | **7.2** | **7.3** | **7.0** |
| **Central government 1/** | **3.1** | **6.2** | **10.0** | **8.4** | **9.0** | **8.8** |
| **Central government** | **3.1** | **6.6** | **10.2** | **8.4** | **9.1** | **8.8** |
| External (net) | 2.9 | 2.3 | 4.3 | -0.1 | 2.8 | 3.2 |
| Disbursements | 4.4 | 4.1 | 4.7 | 1.0 | 4.1 | 6.7 |
| Amortization | -1.5 | -1.8 | -1.4 | -1.5 | -1.3 | -3.5 |
| Other, including privatization (net) 2/ | 0.0 | 0.0 | 0.9 | 0.4 | 0.0 | 0.0 |
| Domestic (net) | 0.2 | 4.3 | 5.9 | 8.5 | 6.3 | 5.5 |
| **Government funds** | **0.0** | **-0.4** | **-0.2** | **-0.1** | **-0.1** | **0.0** |
| **Public enterprises** | **5.1** | **1.2** | **1.8** | **2.0** | **1.2** | **1.2** |
| External (net) | -0.3 | -0.3 | 0.8 | -0.3 | 0.0 | 0.0 |
| Domestic (net) | 5.4 | 1.4 | 1.0 | 2.2 | 1.2 | 1.2 |
| **National Insurance Scheme** | **-3.0** | **-3.4** | **-3.2** | **-3.1** | **-2.9** | **-2.9** |
| Banking system | 0.9 | 0.4 | 0.4 | 0.3 | 0.7 | 0.7 |
| Investments in government securities | -1.4 | -3.0 | -1.1 | -5.3 | -2.1 | -2.7 |
| Others | -2.6 | -0.8 | -2.5 | 1.8 | -1.6 | -0.9 |

Sources: Barbados authorities; and Fund staff estimates and projections.
1/ Includes off-budget activities and general funds.
2/ Includes public-private partnerships.

# Table 1. Barbados: Selected Economic, Financial, and Social Indicators

I. Social and Demographic Indicators (most recent year)

| | | | |
|---|---|---|---|
| Population (2009 in millions) | 0.276 | Adult literacy rate | 99.4 |
| Per capita GDP (2009 in US$) | 13,003 | Population below poverty line | 13.0 |
| Life expectancy at birth in years | 75.4 | Gini coefficient | 42.0 |
| Rank in UNDP Development Index | 37 | Unemployment rate | 10.2 |

Main products, services and exports: tourism, financial services, rum, sugar, and chemicals.

II. Economic Indicators

| | | | | | Prel. | Proj. | |
|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| | (Annual percentage change) | | | | | | |
| **National accounts and prices** | | | | | | | |
| Real GDP | 3.9 | 3.6 | 3.8 | -0.2 | -4.7 | -0.5 | 2.5 |
| Nominal GDP | 15.0 | 5.4 | 3.9 | -1.2 | -2.3 | 1.7 | 5.3 |
| CPI inflation (average) | 6.1 | 7.3 | 4.0 | 8.1 | 3.7 | 5.0 | 3.5 |
| CPI inflation (end of period) | 7.3 | 5.7 | 4.8 | 7.2 | 4.3 | 4.9 | 2.2 |
| Domestic demand (contribution to growth) | 11.5 | -5.4 | -4.1 | -5.7 | -7.7 | -0.3 | 3.2 |
| Foreign demand (contribution to growth) | 3.6 | 7.7 | 3.0 | -1.1 | -2.7 | 0.1 | -0.6 |
| **External sector** | | | | | | | |
| Exports of goods and services | 18.4 | 13.1 | 11.5 | -1.1 | -13.5 | 1.5 | 6.4 |
| Imports of goods and services | 16.4 | 3.4 | 7.4 | 6.4 | -22.7 | 4.6 | 6.2 |
| Real effective exchange rate (average) | 1.6 | 3.4 | -2.4 | 3.9 | 2.5 | … | … |
| Terms of trade | -6.1 | -3.8 | -0.9 | -3.8 | 6.3 | -3.8 | -0.6 |
| **Money and credit (end of period)** | | | | | | | |
| Net domestic assets | 14.1 | 14.2 | 9.4 | 11.3 | 3.1 | 4.0 | 8.2 |
| *Of which:* private sector credit | 21.7 | 13.2 | 6.4 | 11.1 | 1.4 | -0.2 | 4.1 |
| Broad money | 6.9 | 11.3 | 13.2 | 2.8 | 2.8 | 4.6 | 6.3 |
| Velocity (GDP relative to broad money) | 1.5 | 1.4 | 1.3 | 1.2 | 1.2 | 1.1 | 1.1 |
| | (In percent of GDP, unless otherwise indicated) | | | | | | |
| **Public finances (fiscal year)** | | | | | | | |
| Nonfinancial public sector overall balance | -5.1 | -3.9 | -8.6 | -7.2 | -7.3 | -7.0 | -5.0 |
| Central government | | | | | | | |
| Revenue and grants | 28.7 | 28.3 | 31.5 | 33.0 | 28.9 | 28.7 | 31.0 |
| Expenditure | 26.4 | 26.7 | 31.9 | 35.1 | 36.0 | 35.3 | 35.6 |
| Interests | 4.0 | 4.2 | 4.9 | 5.0 | 5.6 | 5.9 | 6.3 |
| Balance | -1.1 | -2.7 | -5.0 | -5.0 | -9.1 | -8.8 | -6.9 |
| NIS | 3.0 | 3.4 | 3.2 | 3.1 | 2.9 | 2.9 | 3.1 |
| Public enterprises | -5.1 | -1.2 | -1.8 | -2.0 | -1.2 | -1.2 | -1.2 |
| Off-budget activities | -2.0 | -3.5 | -5.0 | -3.3 | 0.1 | 0.0 | 0.0 |
| Primary balance | -2.1 | -0.8 | -4.7 | -3.3 | -2.9 | -2.5 | -0.2 |
| **Debt** | | | | | | | |
| Public sector (fiscal year) | 76.6 | 79.6 | 90.4 | 97.3 | 110.7 | 114.4 | 116.9 |
| External | 23.6 | 24.5 | 28.3 | 28.1 | 31.9 | 33.7 | 32.1 |
| Domestic | 53.0 | 55.1 | 62.1 | 69.2 | 78.8 | 80.8 | 84.8 |
| **Savings and investment** | | | | | | | |
| Gross domestic investment | 19.4 | 20.7 | 19.5 | 18.9 | 15.0 | 18.5 | 14.3 |
| Public | 7.0 | 7.5 | 7.0 | 6.8 | 5.5 | 3.3 | 3.3 |
| Private | 12.3 | 13.1 | 12.3 | 11.9 | 9.6 | 15.1 | 11.0 |
| National savings | 8.7 | 13.8 | 14.9 | 9.2 | 9.4 | 13.2 | 9.2 |
| Public | 0.2 | 2.1 | -0.8 | -1.8 | -4.6 | -3.7 | -1.7 |
| Private | 8.6 | 11.6 | 15.7 | 11.1 | 14.0 | 16.9 | 10.9 |
| External savings | 13.1 | 8.4 | 4.5 | 9.6 | 5.6 | 5.2 | 5.1 |
| **Balance of payments** | | | | | | | |
| Current account | -10.7 | -6.9 | -4.5 | -9.6 | -5.5 | -7.9 | -7.4 |
| Capital and financial account | 10.7 | 5.6 | 7.9 | 7.5 | 5.6 | 7.0 | 7.0 |
| Official capital | 3.4 | 1.2 | -1.8 | -0.5 | 4.3 | 4.6 | 2.9 |
| Private capital 1/ | 5.5 | 6.7 | 13.2 | 3.9 | -0.1 | 4.3 | 4.1 |
| *Of which:* long-term flows | 0.8 | 11.5 | 18.1 | 4.7 | 1.2 | 4.5 | 4.0 |
| Overall balance | 0.6 | -0.5 | 4.4 | -2.4 | -0.5 | -1.0 | -0.4 |
| **Memorandum items:** | | | | | | | |
| Exchange rate (in Barbados dollars per U.S. dollar) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Gross international reserves (in millions of US dollars)2/ | 618.2 | 597.0 | 774.0 | 678.1 | 745.4 | 706.7 | 692.1 |
| In months of imports | 3.5 | 3.3 | 4.0 | 3.3 | 4.6 | 4.2 | 3.9 |
| Nominal GDP (in millions of Barbados dollars)3/ | 7,370 | 7,769 | 8,075 | 7,976 | 7,790 | 7,925 | 8,347 |

Sources: Barbados authorities; and Fund staff estimates and projections.

1/ Includes short-term and long-term flows, and errors and omissions.

2/ Includes the additional special and general SDR allocations.

3/ The nominal GDP data series has been revised in 2010.

Table 2. Barbados: Nonfinancial Public Sector Operations (Baseline) 1/
(In percent of GDP, unless otherwise indicated)

| | 2005/06 | 2006/07 | 2007/08 | 2008/09 | Rev. 2009/10 | Proj. 2010/11 |
|---|---|---|---|---|---|---|
| **Public sector** | | | | | | |
| Current revenue | 32.4 | 34.0 | 36.8 | 38.0 | 35.0 | 34.5 |
| Current expenditure | 30.8 | 31.1 | 36.9 | 40.4 | 41.6 | 40.9 |
| Interest to the private sector | 3.9 | 4.2 | 4.9 | 4.8 | 5.2 | 5.5 |
| External | 1.5 | 1.6 | 2.0 | 2.1 | 2.0 | 2.4 |
| Domestic | 2.4 | 2.6 | 2.9 | 2.7 | 3.2 | 3.1 |
| Capital revenue | 2.2 | 2.4 | 2.4 | 2.6 | 3.1 | 3.1 |
| *Of which* : interest from the private sector | 0.9 | 1.0 | 1.0 | 1.0 | 0.8 | 0.9 |
| Capital expenditure | 6.9 | 5.7 | 6.0 | 4.0 | 3.8 | 3.7 |
| **Balance** | **-3.1** | **-0.4** | **-3.6** | **-3.8** | **-7.4** | **-7.0** |
| **Off-budget activity balance** | **-2.0** | **-3.5** | **-5.0** | **-3.3** | **0.1** | **0.0** |
| Off-budget investment | -2.0 | -3.9 | -4.2 | -2.7 | 0.0 | 0.0 |
| PPPs | 0.0 | 0.0 | -0.9 | -0.8 | 0.0 | 0.0 |
| Funds | 0.0 | 0.4 | 0.2 | 0.1 | 0.1 | 0.0 |
| **Overall balance** | **-5.1** | **-3.9** | **-8.6** | **-7.2** | **-7.3** | **-7.0** |
| *Of which* : **primary balance** | **-2.1** | **-0.8** | **-4.7** | **-3.3** | **-2.9** | **-2.5** |
| **National Insurance Scheme (NIS)** | | | | | | |
| Current revenue | 5.6 | 5.9 | 6.3 | 6.6 | 6.7 | 6.4 |
| Current expenditure | 4.3 | 4.4 | 5.0 | 5.3 | 5.6 | 5.6 |
| Capital revenue | 1.8 | 1.9 | 2.1 | 2.0 | 2.1 | 2.2 |
| *Of which:* interest from central government | 0.9 | 0.9 | 1.1 | 1.0 | 1.2 | 1.3 |
| Capital expenditure | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 |
| **NIS Balance** | **3.0** | **3.4** | **3.2** | **3.1** | **2.9** | **2.9** |
| **Public sector balance, excluding NIS** | **-8.2** | **-7.4** | **-11.8** | **-10.3** | **-10.2** | **-9.9** |
| **Central Government** | | | | | | |
| Current revenue | 28.7 | 28.3 | 31.5 | 33.0 | 28.9 | 28.7 |
| Current expenditure | 26.4 | 26.7 | 31.9 | 35.1 | 36.0 | 35.3 |
| *Of which* : interest payments | 4.0 | 4.2 | 4.9 | 5.0 | 5.6 | 5.9 |
| External | 1.3 | 1.4 | 1.7 | 1.9 | 1.8 | 2.1 |
| Domestic | 2.7 | 2.8 | 3.1 | 3.1 | 3.8 | 3.8 |
| Capital revenue and grants | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.3 |
| Capital expenditure and net lending | 3.3 | 4.3 | 4.7 | 2.9 | 2.5 | 2.5 |
| **Balance** | **-1.1** | **-2.7** | **-5.0** | **-5.0** | **-9.1** | **-8.8** |
| **Public enterprises balance** | **-5.1** | **-1.2** | **-1.8** | **-2.0** | **-1.2** | **-1.2** |
| **Total financing** | **5.1** | **3.9** | **8.6** | **7.2** | **7.3** | **7.0** |
| **Foreign financing** | **2.6** | **2.1** | **5.1** | **-0.3** | **2.8** | **3.2** |
| Central Government | 2.9 | 2.3 | 4.3 | -0.1 | 2.8 | 3.2 |
| Disbursements | 4.4 | 4.1 | 4.7 | 1.0 | 4.1 | 6.7 |
| Amortization | -1.5 | -1.8 | -1.4 | -1.5 | -1.3 | -3.5 |
| Other, including privatization (net) | 0.0 | 0.0 | 0.9 | 0.4 | 0.0 | 0.0 |
| Public enterprises | -0.3 | -0.3 | 0.8 | -0.3 | 0.0 | 0.0 |
| **Domestic financing** | **2.5** | **1.9** | **3.5** | **7.5** | **4.5** | **3.8** |
| Central government | 0.2 | 4.3 | 5.9 | 8.5 | 6.3 | 5.5 |
| Public enterprises | 5.4 | 1.4 | 1.0 | 2.2 | 1.2 | 1.2 |
| National Insurance Scheme | -3.0 | -3.4 | -3.2 | -3.1 | -2.9 | -2.9 |
| Funds | 0.0 | -0.4 | -0.2 | -0.1 | -0.1 | 0.0 |
| **Memorandum item:** | | | | | | |
| Nominal fiscal year GDP (in millions of Barbados dollars) | 7,470 | 7,846 | 8,050 | 7,929 | 7,824 | 8,031 |

Sources: Ministry of Finance; and Fund staff estimates.

1/ Fiscal year (April–March). Ratios expressed relative to fiscal-year GDP.

Table 3. Barbados: Public Sector Debt (Baseline) 1/

| | 2005/06 | 2006/07 | 2007/08 | 2008/09 | Rev. 2009/10 | Proj. 2010/11 |
|---|---|---|---|---|---|---|
| | (In millions of Barbados dollars) | | | | | |
| **Public sector** | **5,721** | **6,247** | **7,278** | **7,715** | **8,657** | **9,189** |
| External | 1,762 | 1,924 | 2,278 | 2,224 | 2,496 | 2,703 |
| Domestic | 3,959 | 4,323 | 5,000 | 5,491 | 6,162 | 6,486 |
| **Central government** | **4,765** | **5,200** | **6,084** | **6,631** | **7,573** | **8,009** |
| **External 2/** | **1,535** | **1,717** | **2,005** | **1,971** | **2,242** | **2,450** |
| **Domestic** | **3,230** | **3,484** | **4,080** | **4,661** | **5,331** | **5,560** |
| Short Term | 606 | 635 | 830 | 944 | 1,182 | 779 |
| Long term | 2,624 | 2,849 | 3,249 | 3,717 | 4,149 | 4,781 |
| **Government guaranteed** | **956** | **1,047** | **1,193** | **1,084** | **1,084** | **1,180** |
| External 2/ | 227 | 207 | 273 | 253 | 253 | 253 |
| Domestic | 729 | 840 | 920 | 831 | 831 | 926 |
| | (In percent of GDP) | | | | | |
| **Public sector** | **76.6** | **79.6** | **90.4** | **97.3** | **110.7** | **114.4** |
| External | 23.6 | 24.5 | 28.3 | 28.1 | 31.9 | 33.7 |
| Domestic | 53.0 | 55.1 | 62.1 | 69.2 | 78.8 | 80.8 |
| **Central government** | **63.8** | **66.3** | **75.6** | **83.6** | **96.8** | **99.7** |
| **External 2/** | **20.5** | **21.9** | **24.9** | **24.9** | **28.7** | **30.5** |
| **Domestic** | **43.2** | **44.4** | **50.7** | **58.8** | **68.1** | **69.2** |
| Short Term | 8.1 | 8.1 | 9.7 | 9.7 | 9.7 | 9.7 |
| Long term | 35.1 | 36.3 | 41.0 | 49.1 | 58.4 | 59.5 |
| **Government guaranteed** | **12.8** | **13.3** | **14.8** | **13.7** | **13.9** | **14.7** |
| External 2/ | 3.0 | 2.6 | 3.4 | 3.2 | 3.2 | 3.2 |
| Domestic | 9.8 | 10.7 | 11.4 | 10.5 | 10.6 | 11.5 |
| **Memorandum items:** | | | | | | |
| NIS financial assets | 29.1 | 31.1 | 34.0 | 37.7 | 39.6 | 40.5 |
| NIS holdings of central government debt | 14.5 | 16.3 | 16.8 | 21.9 | 24.9 | 26.8 |
| Public sector debt less NIS assets | 47.5 | 48.5 | 56.4 | 59.6 | 71.1 | 73.9 |
| Public sector debt less NIS holdings | 62.1 | 63.3 | 73.6 | 75.4 | 85.7 | 87.6 |
| Assets held in earmarked sinking funds | 5.9 | 6.3 | 6.8 | 8.1 | 9.2 | 9.5 |
| Public debt, excl. sinking funds | 70.7 | 73.3 | 83.6 | 89.2 | 101.5 | 104.9 |

Sources: Ministry of Finance; Central Bank of Barbados; and Fund staff estimates and projections.

1/ Fiscal year (April–March). Ratios expressed relative to fiscal-year GDP.
2/ External debt is all medium- and long-term debt.

## Table 4. Barbados: Balance of Payments (Baseline)
(In millions of U.S. dollars)

| | 2007 | Prel. 2008 | Proj. 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|---|
| **Current account** | **-183** | **-384** | **-212** | **-312** | **-307** | **-314** | **-315** | **-317** | **-301** |
| Exports | 2,114 | 2,092 | 1,810 | 1,837 | 1,956 | 2,042 | 2,138 | 2,239 | 2,345 |
| Imports | 2,342 | 2,491 | 1,925 | 2,013 | 2,138 | 2,234 | 2,330 | 2,435 | 2,538 |
| Exports of goods | 479 | 458 | 379 | 386 | 427 | 451 | 471 | 493 | 515 |
| *Of which:* re-exports | 116 | 132 | 138 | 154 | 163 | 173 | 182 | 193 | 202 |
| Imports of goods | 1,526 | 1,684 | 1,290 | 1,371 | 1,467 | 1,535 | 1,600 | 1,673 | 1,739 |
| *Of which* : oil | 265 | 366 | 252 | 284 | 293 | 303 | 309 | 319 | 319 |
| Services (net) | 819 | 826 | 797 | 809 | 857 | 892 | 937 | 983 | 1,030 |
| Credit | 1,635 | 1,634 | 1,432 | 1,451 | 1,528 | 1,591 | 1,666 | 1,746 | 1,829 |
| *Of which:* travel (credit) | 1,194 | 1,192 | 1,069 | 1,091 | 1,156 | 1,202 | 1,250 | 1,300 | 1,353 |
| Debit | 816 | 808 | 635 | 643 | 671 | 700 | 730 | 763 | 799 |
| Investment income (net) | -101 | -85 | -140 | -168 | -167 | -166 | -169 | -168 | -158 |
| Credit | 199 | 199 | 140 | 143 | 150 | 157 | 165 | 172 | 180 |
| Debit | 300 | 284 | 280 | 311 | 317 | 323 | 333 | 340 | 338 |
| *Of which:* interest on public debt | 76 | 83 | 79 | 91 | 100 | 102 | 108 | 110 | 103 |
| Current transfers (net) | 145 | 101 | 42 | 32 | 42 | 44 | 46 | 48 | 50 |
| Credit | 256 | 219 | 131 | 123 | 167 | 175 | 183 | 191 | 200 |
| Debit | 111 | 118 | 89 | 91 | 125 | 131 | 137 | 143 | 150 |
| **Capital and financial account** | **319** | **300** | **220** | **279** | **292** | **232** | **252** | **275** | **270** |
| Long-term | 658 | 167 | 215 | 360 | 287 | 228 | 236 | 263 | 270 |
| Public sector | -72 | -22 | 169 | 182 | 120 | 75 | 76 | 96 | 95 |
| Private sector | 730 | 189 | 45 | 178 | 167 | 153 | 160 | 167 | 175 |
| *Of which:* FDI flows | 233 | 189 | 45 | 119 | 125 | 131 | 137 | 143 | 150 |
| Short-term | -238 | -21 | -20 | -1 | 6 | 4 | 16 | 12 | 0 |
| Public sector | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Private sector | -238 | -21 | -20 | -1 | 6 | 4 | 16 | 12 | 0 |
| Change in commercial banks assets | -101 | 154 | 25 | -80 | 0 | 0 | 0 | 0 | 0 |
| **Errors and omissions** | **41** | **-12** | **-28** | **-6** | **0** | **0** | **0** | **0** | **0** |
| **Overall balance (deficit -)** | **177** | **-96** | **-20** | **-39** | **-15** | **-82** | **-63** | **-42** | **-31** |
| **Reserve movements ( - increase)** | **-177** | **96** | **-67** | **39** | **15** | **82** | **63** | **42** | **31** |
| **Memorandum items:** | | | | | | | | | |
| Current account (percent of GDP) | -4.5 | -9.6 | -5.5 | -7.9 | -7.4 | -7.2 | -6.9 | -6.6 | -6.0 |
| Current account after FDI (percent of GDP) | 1.2 | -4.9 | -4.3 | -4.9 | -4.4 | -4.2 | -3.9 | -3.6 | -3.0 |
| Exports of G&S (annual growth rate) | 11.5 | -1.1 | -13.5 | 1.5 | 6.4 | 4.4 | 4.7 | 4.7 | 4.7 |
| Imports of G&S (annual growth rate) | 7.4 | 6.4 | -22.7 | 4.6 | 6.2 | 4.5 | 4.3 | 4.5 | 4.2 |
| Gross international reserves (in US $ million) | 774 | 678 | 745 | 707 | 692 | 609 | 547 | 505 | 474 |
| In months of imports | 4.0 | 3.3 | 4.6 | 4.2 | 3.9 | 3.3 | 2.8 | 2.5 | 2.2 |

Sources: Central Bank of Barbados; and Fund staff estimates and projections.

## Table 5. Barbados: Selected Vulnerability Indicators (Baseline)

(In percent of GDP, unless otherwise indicated)

| | 2005 | 2006 | 2007 | 2008 | Prel. 2009 | Proj. 2010 |
|---|---|---|---|---|---|---|
| **Real sector indicators** | | | | | | |
| Travel receipts | 24.3 | 27.2 | 29.6 | 29.9 | 27.5 | 27.5 |
| **Fiscal indicators** 1/ | | | | | | |
| Public sector debt | 76.6 | 79.6 | 90.4 | 97.3 | 110.7 | 114.4 |
| External | 23.6 | 24.5 | 28.3 | 28.1 | 31.9 | 33.7 |
| Domestic | 53.0 | 55.1 | 62.1 | 69.2 | 78.8 | 80.8 |
| Public sector external debt service | 2.9 | 3.3 | 3.3 | 3.5 | 3.4 | 5.3 |
| Public sector external debt service, in percent of revenues | 8.5 | 9.0 | 8.5 | 8.7 | 8.8 | 14.0 |
| Interest | 4.3 | 4.2 | 4.8 | 5.1 | 5.4 | 6.1 |
| Amortization | 4.2 | 4.7 | 3.7 | 3.6 | 3.5 | 7.9 |
| **External indicators** | | | | | | |
| Gross international reserves (in millions of US dollars) | 618.2 | 597.0 | 774.0 | 678.1 | 745.4 | 706.7 |
| In months of imports | 3.5 | 3.3 | 4.0 | 3.3 | 4.6 | 4.2 |
| In percent of short-term liabilities 2/ | 84.5 | 73.6 | 55.1 | 48.8 | 70.2 | 68.9 |
| In percent of short-term liabilities, excl. banks | 508.9 | 192.9 | 146.5 | 98.2 | 159.5 | 162.2 |
| In percent of narrow money | 61.5 | 52.8 | 62.0 | 55.2 | 62.7 | 58.4 |
| External debt 3/ | 32.9 | 36.5 | 40.1 | 43.3 | 46.7 | 48.8 |
| External interest payments, in percent of exports 4/ | 7.3 | 6.7 | 8.5 | 9.3 | 13.1 | 13.5 |
| External amortization payments on public debt, in percent of exports | 3.2 | 3.5 | 2.8 | 2.8 | 2.8 | 6.4 |

Sources: Central Bank of Barbados; and Fund staff estimates and projections.
1/ On a fiscal-year basis, including central government, public enterprises, and National Insurance Scheme.
2/ Short-term liabilities include commercial banks' short-term foreign liabilities and public sector debt amortizations falling due the following year.
3/ Includes public sector and private debt.
4/ Includes interest payments on public and private external debt.

## Appendix I. Illustrative Scenarios and Debt Sustainability Analyses (DSAs)

**The staff conducted debt sustainability analyses based on two medium-term scenarios**. The *baseline* scenario assumes current policies would be broadly maintained for the foreseeable future; while the *adjustment* scenario assumes that a number of corrective measures would be implemented, beginning in FY 2011/12 (April to March) and continuing over the 5-year projection period.

### A. Key Assumptions and Scenarios

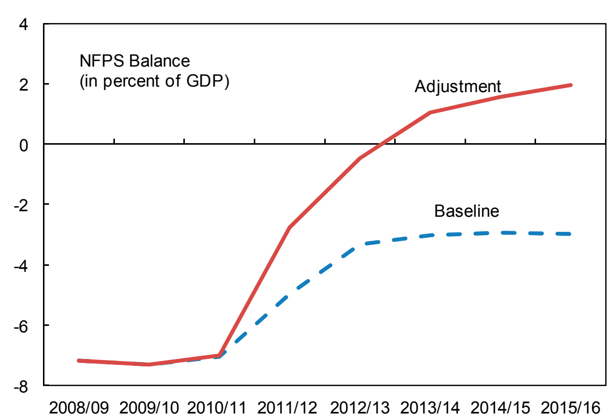
**Both the baseline and adjustment scenarios rely on a number of common assumptions**. These include a stable exchange-rate peg, and a recovery, albeit sluggish, in the global demand for Barbados's goods and services from 2011 onwards. Both scenarios also assume that there will be no additional costs to the budget arising from the resolution of the problems surrounding CLICO-Barbados. On the external side, it is assumed that some private capital inflows will resume in 2011 to finance a number of stalled tourism projects, although the adjustment scenario presumes significantly larger inflow.

#### Baseline scenario

**The baseline scenario reflects a continuation of current fiscal policies**. The nonfinancial public sector (NFPS) deficit would decline marginally from 7⅓ percent of GDP in FY 2009/10 to 7 percent of GDP in FY 2010/11. The NFPS deficit would improve as the country emerges from the recession, but it would remain at around 3 percent over the medium term, despite continued sizeable surpluses of the National Insurance Scheme of about 3 percent of GDP. Accordingly, gross public sector debt would continue to rise from about 110 percent of GDP at end-FY 2009/10 to about 121 percent of GDP by the end of FY 2015/16. On the external side, the current account deficit would widen to about 7–8 percent of GDP during 2011–12, and only gradually fall thereafter. Capital will continue to flow into the country at a weaker pace than in the past, and it will be insufficient to cover the current account deficit. As a result, gross international reserves would drop from about 4.2 months of imports at end-2010 to 2.2 months of imports at end-2015.

#### Adjustment scenario

**The adjustment scenario is predicated on an early and decisive effort by the authorities to strengthen fiscal policies, broadly in line with their Medium-Term Fiscal Strategy (MTFS) objective.** A strong front-loaded fiscal effort would be

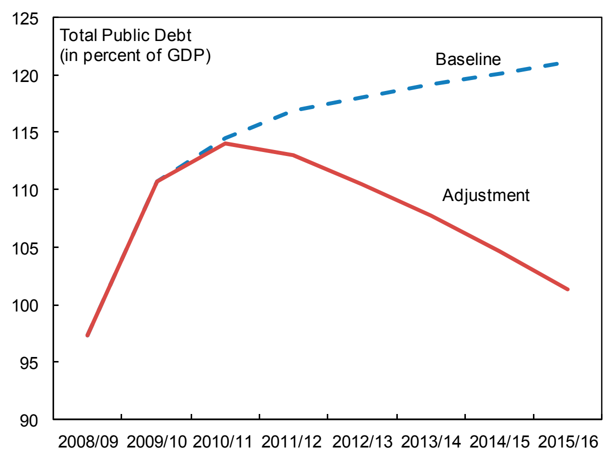


Source: Barbados authorities; and Fund staff estimates and projections.

undertaken starting in FY 2011/12, and would comprise revenue and expenditure actions, as well as measures to increase efficiency in, and ensure financial viability of, public enterprises.

**While some of these actions will take some time to show their full results, others would take effect immediately and deliver early fiscal savings.** Accordingly, the NFPS deficit would narrow by an additional 2¼ percent of GDP in FY 2011/12 to 2¾ percent of GDP. Over the medium term, the NFPS balance would swing from a deficit of 7⅓ percent of GDP in FY 2009/10 to a surplus of 2 percent of GDP in FY 2015/16. Compared with the baseline scenario, this would constitute a cumulative improvement of nearly 19 percent of GDP over five years. The medium-term adjustment scenario includes a moderate increase in capital spending, as well as better targeting of social safety payments, as these are considered critical to raising and sustaining growth.

**The scale of corrective fiscal measures and their early implementation would help to break the unfavorable debt dynamics.** Accordingly, gross public sector debt, after peaking in FY 2010/11 at 114 percent of GDP, would gradually decline along a downward path to 101 percent of GDP by the end of the projection period. Real GDP growth would weaken moderately in 2011 compared with the baseline scenario, reflecting the demand withdrawal from higher taxes and expenditure savings in FY 2011/12. However, stronger investor confidence in the government's adjustment policies—with private capital inflows resuming at a healthier pace, including investment activity in the tourism and offshore financial sectors—would boost the subsequent economic rebound. In turn, the higher growth in the outer years combined with lower interest rate spreads on government borrowing would contribute to improved debt dynamics.



Source: Barbados authorities; and Fund staff estimates and projections.

**The fiscal consolidation effort will also improve the balance of payments outlook.** As domestic demand is tightened vis-à-vis the baseline scenario, the rate of import growth will moderate, thus improving the current account balance. In addition, as investor confidence strengthens, current and capital inflows in general, and FDI in particular, would rebound more strongly. International reserves, while easing somewhat through 2013, would recover to about 4¾ months of imports by the end of the projection period.

| Illustrative Scenarios 1/ (In percent of GDP) | Rev. | Est. | Proj. | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
| **Baseline Scenario** | | | | | | | | |
| **Fiscal** | | | | | | | | |
| Public sector balance | -7.2 | -7.3 | -7.0 | -5.0 | -3.3 | -3.0 | -3.0 | -3.0 |
| Primary balance | -3.3 | -2.9 | -2.5 | -0.2 | 1.6 | 2.4 | 2.5 | 2.5 |
| Revenues | 40.6 | 38.0 | 37.6 | 40.0 | 41.8 | 42.9 | 43.0 | 43.0 |
| Total expenditure | 47.8 | 45.3 | 44.6 | 45.0 | 45.1 | 45.9 | 45.9 | 46.0 |
| Public Debt | 97.3 | 110.7 | 114.4 | 116.9 | 118.0 | 119.1 | 120.1 | 121.1 |
| **External** | | | | | | | | |
| Current account balance | -9.6 | -5.5 | -7.9 | -7.4 | -7.2 | -6.9 | -6.6 | -6.0 |
| FDI Inflows | 4.7 | 1.2 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| GIR (in U.S. dollar millions) | 678.1 | 745.4 | 706.6 | 691.7 | 609.4 | 546.6 | 505.1 | 473.9 |
| GIR (in months of imports) | 3.3 | 4.6 | 4.2 | 3.9 | 3.3 | 2.8 | 2.5 | 2.2 |
| Real GDP (annual percent change) | -0.2 | -4.7 | -0.5 | 2.5 | 3.0 | 2.5 | 2.5 | 2.5 |
| **Adjustment Scenario** | | | | | | | | |
| **Fiscal** | | | | | | | | |
| Public sector balance | -7.2 | -7.3 | -7.0 | -2.8 | -0.5 | 1.1 | 1.5 | 2.0 |
| Primary balance | -3.3 | -2.9 | -2.5 | 1.9 | 4.2 | 6.0 | 6.3 | 6.4 |
| Revenues | 40.6 | 38.0 | 37.5 | 41.4 | 43.5 | 44.9 | 45.0 | 45.0 |
| Total expenditure | 47.8 | 45.3 | 44.5 | 44.2 | 43.9 | 43.9 | 43.5 | 43.1 |
| Public Debt | 97.3 | 110.6 | 114.1 | 113.0 | 110.4 | 107.7 | 104.6 | 101.3 |
| **External** | | | | | | | | |
| Current account balance | -9.6 | -5.5 | -7.9 | -6.1 | -5.7 | -5.4 | -5.2 | -4.9 |
| FDI Inflows | 4.7 | 1.2 | 3.0 | 3.0 | 5.0 | 5.0 | 5.0 | 5.2 |
| GIR (in U.S. dollar millions) | 678.1 | 745.4 | 706.6 | 745.8 | 771.3 | 822.5 | 895.5 | 975.2 |
| GIR (in months of imports) | 3.3 | 4.6 | 4.2 | 4.3 | 4.3 | 4.3 | 4.5 | 4.7 |
| Real GDP (annual percent change) | -0.2 | -4.7 | -0.5 | 2.0 | 2.5 | 3.0 | 3.0 | 3.5 |

Sources: Ministry of Finance; Central Bank of Barbados; and IMF staff estimates and projections.
1/ GDP and external data are in calendar year.

## B. Assessment of DSAs

### Baseline scenario

**Bound tests show that standard shocks can adversely and significantly affect the path of public debt**. As discussed above, under the baseline scenario, public debt is expected to rise over the projection period to 121 percent of GDP. Debt ratios are particularly sensitive to growth and fiscal shocks. Should economic growth decline on a permanent basis by ½ standard deviation from its historic trend, public debt at the end of the projection period would rise to 140 percent of GDP. Similarly, if the primary balance were to follow historic trends, public debt would reach 144 percent of GDP at the end of the projection period.

**External debt is less sensitive to standard shocks**. This is mainly because of the comparatively low share of external debt relative to total debt (less than one-third). Total private and public external debt is estimated at about 42 percent of GDP at end-2009, and after peaking in 2010, is likely to fall under the baseline scenario to about 36 percent of GDP by the end of the projection period. However, as can be expected, external debt is most sensitive to a real depreciation shock. Accordingly, an illustrative depreciation of 30 percent would raise the external debt to 53 percent of GDP by the end of the projection period. Another sensitivity test would be to estimate the potential shock arising from an increase in the price of oil by 30 percent above current WEO projections during in 2011–15. This would widen the current account deficit by about 2 percent of GDP, and could lead, everything else left unchanged, to an effective depletion of reserves by 2015.

**Adjustment scenario**

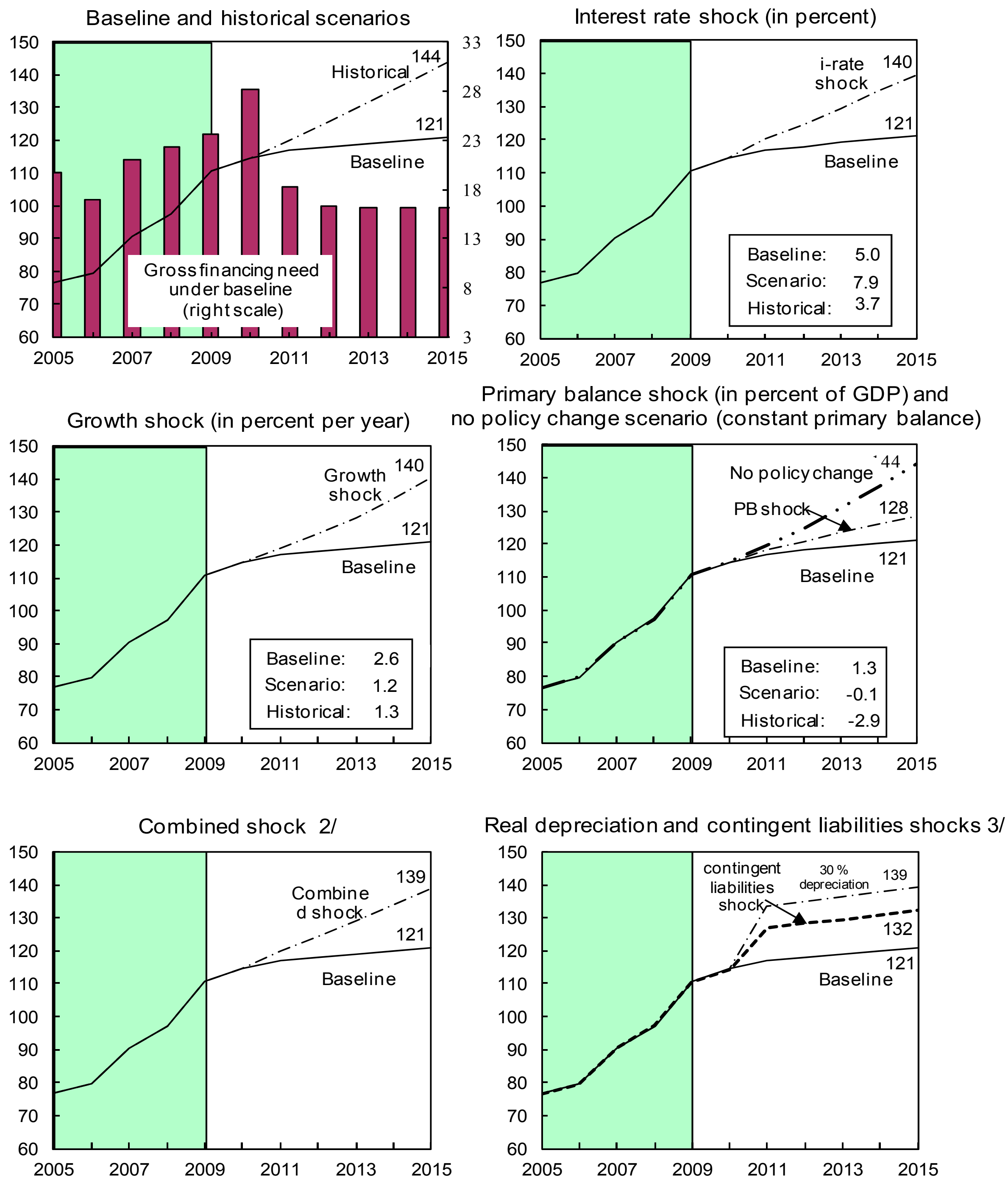
**Under the active scenario, the public debt outlook would not only improve considerably but would also be more resilient to shocks.** Rather than rising ceaselessly, public debt would peak in FY 2011/12 and then turn downward, thanks to positive and sustained fiscal balances, higher overall growth, and lower interest rates and payments. While the fiscal accounts remain vulnerable to shocks, bound tests reveal that public debt-to-GDP ratios would generally continue to decline even if some of these shocks impact the economy. A similar improvement, albeit less pronounced, is also evident in stress tests to the external debt outlook.

Appendix Table 1. Barbados: Public Sector Debt Sustainability Framework, 2005-2015
(Baseline Scenario)
(In percent of GDP, unless otherwise indicated)

| | Actual | | | | | Projections | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | **Debt-stabilizing primary balance 9/** |
| 1 **Baseline: Public sector debt 1/** | 76.6 | 79.6 | 90.4 | 97.3 | 110.7 | **114.4** | **116.9** | **118.0** | **119.1** | **120.1** | **121.1** | **3.1** |
| o/w foreign-currency denominated | 23.6 | 24.5 | 28.3 | 28.1 | 31.9 | 33.7 | 32.1 | 30.8 | 29.7 | 28.5 | 27.3 | |
| 2 Change in public sector debt | -5.3 | 3.0 | 10.8 | 6.9 | 13.4 | 3.8 | 2.5 | 1.1 | 1.1 | 1.0 | 1.0 | |
| 3 Identified debt-creating flows (4+7+12) | -5.8 | 3.7 | 9.8 | 11.7 | 11.6 | 7.1 | 2.5 | 1.1 | 1.1 | 1.0 | 1.0 | |
| 4 Primary deficit | 4.5 | 2.3 | 5.8 | 4.4 | 3.8 | 3.1 | 0.8 | -1.1 | -2.0 | -2.1 | -2.1 | |
| 5 Revenue and grants | 42.1 | 41.8 | 45.2 | 48.9 | 45.1 | 44.8 | 46.9 | 48.8 | 49.6 | 49.7 | 49.7 | |
| 6 Primary (noninterest) expenditure | 46.6 | 44.1 | 51.0 | 53.3 | 48.9 | 47.9 | 47.7 | 47.7 | 47.6 | 47.6 | 47.6 | |
| 7 Automatic debt dynamics 2/ | -10.3 | 1.4 | 3.9 | 7.2 | 7.7 | 3.9 | 1.7 | 2.2 | 3.0 | 3.1 | 3.1 | |
| 8 Contribution from interest rate/growth differential 3/ | -10.3 | 1.4 | 3.9 | 7.2 | 7.7 | 3.9 | 1.7 | 2.2 | 3.0 | 3.1 | 3.1 | |
| 9 Of which contribution from real interest rate | -8.2 | 4.1 | 6.1 | 6.0 | 4.1 | 4.2 | 4.5 | 5.4 | 5.9 | 5.9 | 5.9 | |
| 10 Of which contribution from real GDP growth | -2.2 | -2.6 | -2.2 | 1.2 | 3.6 | -0.3 | -2.9 | -3.2 | -2.8 | -2.8 | -2.9 | |
| 11 Contribution from exchange rate depreciation 4/ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | ... | ... | ... | ... | ... | ... | |
| 12 Other identified debt-creating flows | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 13 Privatization receipts (negative) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 14 Recognition of implicit or contingent liabilities | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 15 Other (specify, e.g. bank recapitalization) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 16 Residual, including asset changes (2-3) 5/ | 0.5 | -0.6 | 1.0 | -4.8 | 1.8 | -3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Public sector debt-to-revenue ratio 1/ | 181.8 | 190.5 | 200.1 | 199.0 | 245.4 | 255.6 | 249.1 | 241.9 | 240.3 | 241.8 | 243.8 | |
| **Gross financing need 6/** | 19.7 | 16.9 | 21.0 | 22.3 | 23.6 | 28.2 | 18.2 | 16.3 | 16.2 | 16.2 | 16.2 | |
| in billions of U.S. dollars | 0.7 | 0.7 | 0.8 | 0.9 | 0.9 | 1.1 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | |
| **Scenario with key variables at their historical averages 7/** | | | | | | **114.4** | **120.0** | **125.7** | **131.5** | **137.5** | **143.6** | **3.3** |
| **Scenario with no policy change (constant primary balance) in 2010-2015** | | | | | | **114.4** | **119.2** | **124.6** | **131.0** | **137.5** | **144.1** | **3.7** |
| **Key Macroeconomic and Fiscal Assumptions Underlying Baseline** | | | | | | | | | | | | |
| Real GDP growth (in percent) | 3.2 | 3.6 | 2.8 | -1.3 | -3.7 | 0.3 | 2.6 | 2.9 | 2.5 | 2.5 | 2.5 | |
| Average nominal interest rate on public debt (in percent) 8/ | 7.2 | 7.0 | 7.7 | 6.4 | 6.5 | 6.3 | 6.7 | 6.7 | 7.3 | 7.2 | 7.2 | |
| Average real interest rate (nominal rate minus change in GDP deflator, in percent) | -11.6 | 5.6 | 7.9 | 6.6 | 4.0 | 3.9 | 4.2 | 4.9 | 5.3 | 5.2 | 5.2 | |
| Nominal appreciation (increase in US dollar value of local currency, in percent) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | ... | ... | ... | ... | ... | ... | |
| Inflation rate (GDP deflator, in percent) | 18.8 | 1.4 | -0.2 | -0.2 | 2.4 | 2.4 | 2.5 | 1.8 | 2.0 | 2.0 | 2.0 | |
| Growth of real primary spending (deflated by GDP deflator, in percent) | 13.5 | -2.1 | 19.0 | 3.2 | -11.6 | -1.8 | 2.3 | 2.8 | 2.3 | 2.5 | 2.5 | |
| Primary deficit | 4.5 | 2.3 | 5.8 | 4.4 | 3.8 | 3.1 | 0.8 | -1.1 | -2.0 | -2.1 | -2.1 | |

1/ Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.
2/ Derived as $[(r - \pi(1+g) - g + \alpha\varepsilon(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; $\pi$ = growth rate of GDP deflator; g = real GDP growth rate; $\alpha$ = share of foreign-currency denominated debt; and $\varepsilon$ = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).
3/ The real interest rate contribution is derived from the denominator in footnote 2/ as $r - \pi (1+g)$ and the real growth contribution as -g.
4/ The exchange rate contribution is derived from the numerator in footnote 2/ as $\alpha\varepsilon(1+r)$.
5/ For projections, this line includes exchange rate changes.
6/ Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.
7/ The key variables include real GDP growth; real interest rate; and primary balance in percent of GDP.
8/ Derived as nominal interest expenditure divided by previous period debt stock.
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Appendix Figure 1. Barbados: Public Debt Sustainability: Bound Tests 1/
(Baseline Scenario, public debt in percent of GDP)



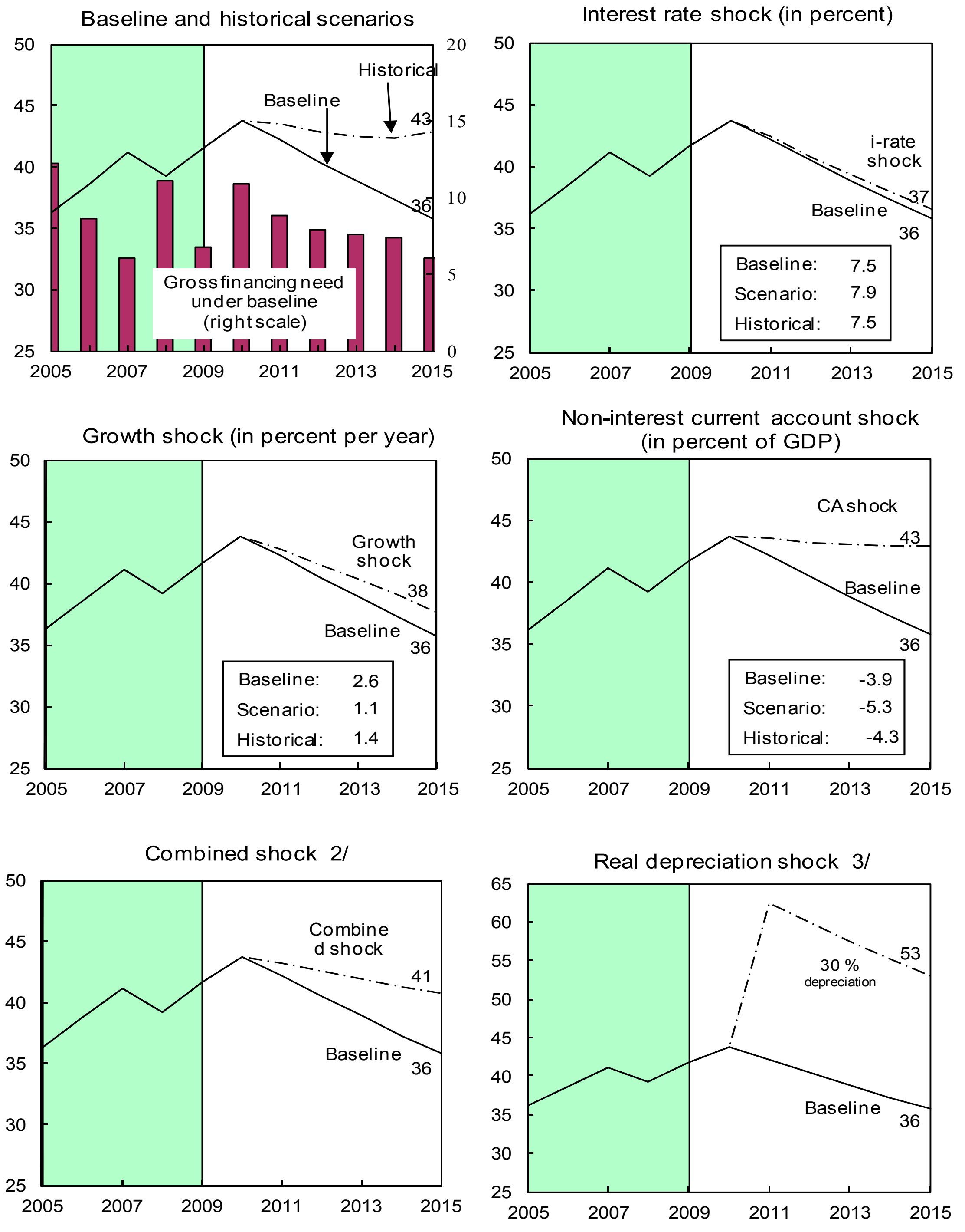

Sources: International Monetary Fund, country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.
3/ One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities occur in 2010, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

Appendix Table 2. Barbados: External Debt Sustainability Framework, 2005-2015
(Baseline Scenario)
(In percent of GDP, unless otherwise indicated)

| | Actual | | | | | Projections | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | **Debt-stabilizing non-interest current account 6/** |
| 1 **Baseline: External debt** | 36.2 | 38.6 | 41.1 | 39.2 | 41.6 | **43.7** | **42.2** | **40.5** | **38.9** | **37.3** | **35.8** | **-2.0** |
| 2 Change in external debt | -6.7 | 2.4 | 2.5 | -1.9 | 2.4 | 2.1 | -1.5 | -1.7 | -1.6 | -1.6 | -1.5 | |
| 3 Identified external debt-creating flows (4+8+9) | -1.1 | 2.3 | -2.7 | 5.4 | 5.2 | 5.1 | 3.3 | 3.0 | 2.9 | 2.7 | 2.1 | |
| 4 Current account deficit, excluding interest payments | 8.5 | 4.6 | 1.5 | 6.5 | 2.7 | 4.5 | 4.3 | 4.3 | 3.9 | 3.7 | 3.4 | |
| 5 Deficit in balance of goods and services | 11.7 | 7.3 | 5.6 | 10.0 | 2.9 | 4.4 | 4.4 | 4.4 | 4.2 | 4.1 | 3.9 | |
| 6 Exports | 45.5 | 48.8 | 52.4 | 52.5 | 46.5 | 46.4 | 46.9 | 46.7 | 46.7 | 46.8 | 46.9 | |
| 7 Imports | 57.2 | 56.1 | 58.0 | 62.5 | 49.4 | 50.8 | 51.2 | 51.1 | 51.0 | 50.9 | 50.8 | |
| 8 Net non-debt creating capital inflows (negative) | -1.7 | -2.7 | -5.8 | -4.7 | -1.2 | -3.0 | -3.0 | -3.0 | -3.0 | -3.0 | -3.0 | |
| 9 Automatic debt dynamics 1/ | -7.9 | 0.5 | 1.6 | 3.6 | 3.7 | 3.5 | 2.0 | 1.7 | 2.0 | 2.0 | 1.8 | |
| 10 Contribution from nominal interest rate | 2.2 | 2.3 | 3.0 | 3.1 | 2.8 | 3.3 | 3.1 | 2.9 | 3.0 | 2.9 | 2.7 | |
| 11 Contribution from real GDP growth | -1.3 | -1.2 | -1.4 | 0.1 | 1.9 | 0.2 | -1.0 | -1.2 | -1.0 | -0.9 | -0.9 | |
| 12 Contribution from price and exchange rate changes 2/ | -8.8 | -0.6 | 0.0 | 0.4 | -1.0 | ... | ... | ... | ... | ... | ... | |
| 13 Residual, incl. change in gross foreign assets (2-3) 3/ | -5.6 | 0.1 | 5.2 | -7.3 | -2.8 | -3.0 | -4.9 | -4.7 | -4.5 | -4.3 | -3.7 | |
| External debt-to-exports ratio (in percent) | 79.6 | 79.1 | 78.5 | 74.8 | 89.5 | 94.3 | 90.1 | 86.7 | 83.2 | 79.6 | 76.2 | |
| **Gross external financing need (in billions of US dollars) 4/** | 0.4 | 0.3 | 0.2 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | |
| in percent of GDP | 12.2 | 8.6 | 6.0 | 11.1 | 6.8 | 10.8 | 8.9 | 7.9 | 7.6 | 7.3 | 6.0 | |
| **Scenario with key variables at their historical averages 5/** | | | | | | **43.7** | **43.4** | **42.8** | **42.5** | **42.4** | **42.8** | **-1.0** |
| **Key Macroeconomic Assumptions Underlying Baseline** | | | | | | | | | | | | |
| Real GDP growth (in percent) | 3.9 | 3.6 | 3.8 | -0.2 | -4.7 | -0.5 | 2.5 | 3.0 | 2.5 | 2.5 | 2.5 | |
| GDP deflator in US dollars (change in percent) | 25.9 | 1.8 | 0.1 | -1.0 | 2.5 | 2.2 | 2.8 | 1.8 | 2.0 | 2.0 | 2.0 | |
| Nominal external interest rate (in percent) | 6.9 | 6.8 | 8.1 | 7.5 | 6.9 | 8.2 | 7.4 | 7.1 | 7.7 | 7.8 | 7.4 | |
| Growth of exports (US dollar terms, in percent) | 18.4 | 13.1 | 11.5 | -1.1 | -13.5 | 1.5 | 6.4 | 4.4 | 4.7 | 4.7 | 4.7 | |
| Growth of imports (US dollar terms, in percent) | 16.4 | 3.4 | 7.4 | 6.4 | -22.7 | 4.6 | 6.2 | 4.5 | 4.3 | 4.5 | 4.2 | |
| Current account balance, excluding interest payments | -8.5 | -4.6 | -1.5 | -6.5 | -2.7 | -4.5 | -4.3 | -4.3 | -3.9 | -3.7 | -3.4 | |
| Net non-debt creating capital inflows | 1.7 | 2.7 | 5.8 | 4.7 | 1.2 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |

1/ Derived as $[r - g - \rho(1+g) + \varepsilon\alpha(1+r)]/(1+g+\rho+g\rho)$ times previous period debt stock, with r = nominal effective interest rate on external debt; $\rho$ = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, $\varepsilon$ = nominal appreciation (increase in dollar value of domestic currency), and $\alpha$ = share of domestic-currency denominated debt in total external debt.
2/ The contribution from price and exchange rate changes is defined as $[-\rho(1+g) + \varepsilon\alpha(1+r)]/(1+g+\rho+g\rho)$ times previous period debt stock. $\rho$ increases with an appreciating domestic currency ($\varepsilon > 0$) and rising inflation (based on GDP deflator).
3/ For projection, line includes the impact of price and exchange rate changes.
4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.
5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.
6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Appendix Figure 2. Barbados: External Debt Sustainability: Bound Tests 1/
(Baseline Scenario; external debt in percent of GDP)



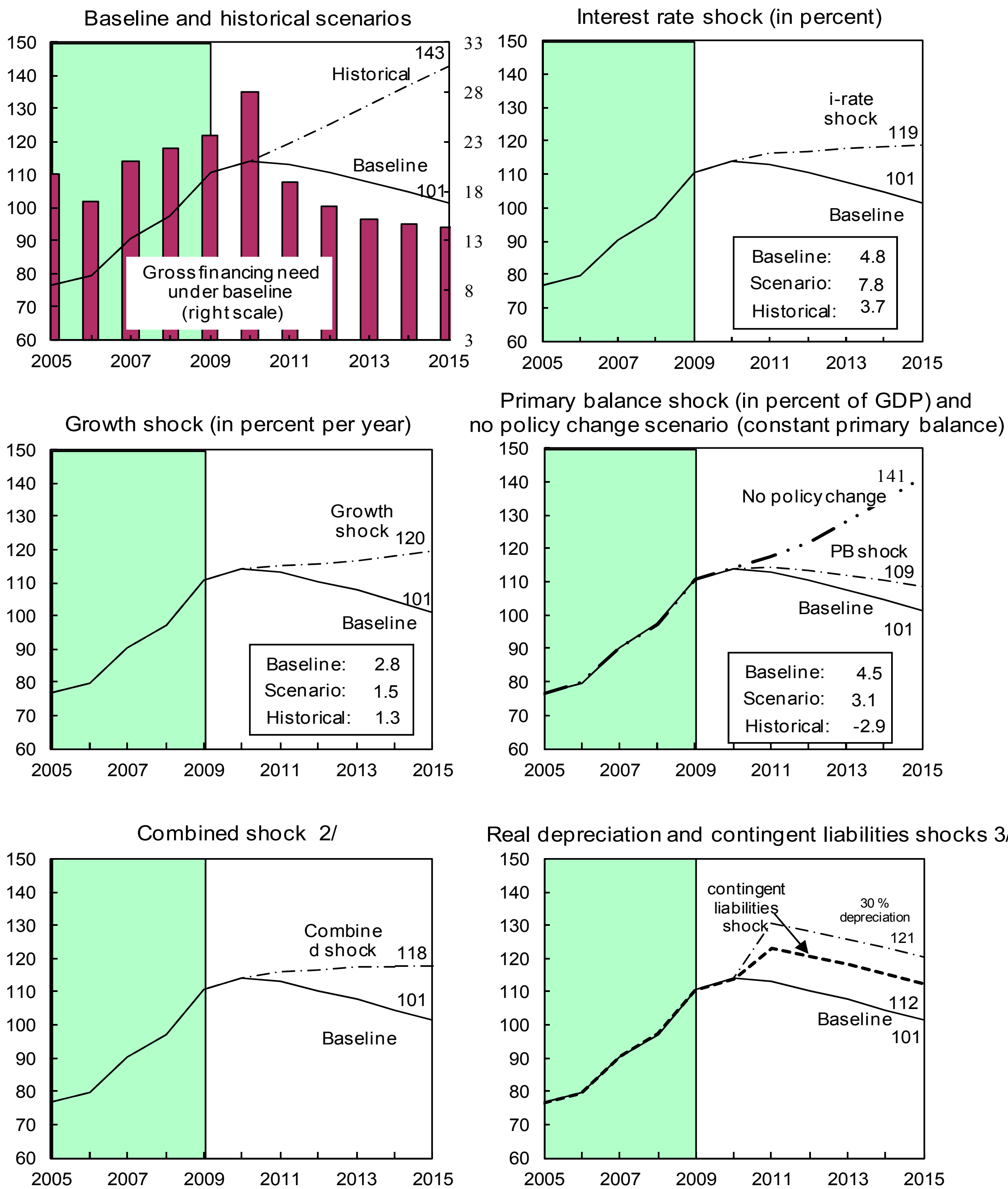

Sources: International Monetary Fund, Country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
3/ One-time real depreciation of 30 percent occurs in 2010.

Appendix Table 3. Barbados: Public Sector Debt Sustainability Framework, 2005-2015
Adjustment Scenario
(In percent of GDP, unless otherwise indicated)

| | Actual | | | | | Projections | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | **Debt-stabilizing primary balance 9/** |
| 1 **Baseline: Public sector debt 1/** | 76.6 | 79.6 | 90.4 | 97.3 | 110.6 | **114.1** | **113.0** | **110.4** | **107.7** | **104.6** | **101.3** | **2.6** |
| o/w foreign-currency denominated | 23.6 | 24.5 | 28.3 | 28.1 | 31.9 | 33.6 | 31.6 | 30.1 | 28.9 | 27.8 | 26.7 | |
| 2 Change in public sector debt | -5.3 | 3.0 | 10.8 | 6.9 | 13.4 | 3.4 | -1.1 | -2.6 | -2.7 | -3.1 | -3.3 | |
| 3 Identified debt-creating flows (4+7+12) | -5.8 | 3.7 | 9.8 | 11.7 | 11.5 | 6.7 | -1.1 | -2.6 | -2.7 | -2.9 | -3.3 | |
| 4 Primary deficit | 4.5 | 2.3 | 5.8 | 4.4 | 3.8 | 3.1 | -1.3 | -3.6 | -5.6 | -5.9 | -6.0 | |
| 5 Revenue and grants | 42.1 | 41.8 | 45.2 | 48.9 | 45.1 | 44.7 | 48.2 | 50.3 | 51.5 | 51.6 | 51.6 | |
| 6 Primary (noninterest) expenditure | 46.6 | 44.1 | 51.0 | 53.3 | 48.9 | 47.8 | 46.9 | 46.6 | 45.9 | 45.7 | 45.5 | |
| 7 Automatic debt dynamics 2/ | -10.3 | 1.4 | 3.9 | 7.2 | 7.7 | 3.6 | 0.2 | 1.1 | 2.8 | 2.9 | 2.7 | |
| 8 Contribution from interest rate/growth differential 3/ | -10.3 | 1.4 | 3.9 | 7.2 | 7.7 | 3.6 | 0.2 | 1.1 | 2.8 | 2.9 | 2.7 | |
| 9 Of which contribution from real interest rate | -8.2 | 4.1 | 6.1 | 6.0 | 4.1 | 3.7 | 2.5 | 3.9 | 6.0 | 6.0 | 6.2 | |
| 10 Of which contribution from real GDP growth | -2.2 | -2.6 | -2.2 | 1.2 | 3.6 | -0.2 | -2.3 | -2.8 | -3.2 | -3.1 | -3.5 | |
| 11 Contribution from exchange rate depreciation 4/ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | ... | ... | ... | ... | ... | ... | |
| 12 Other identified debt-creating flows | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 13 Privatization receipts (negative) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 14 Recognition of implicit or contingent liabilities | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 15 Other (specify, e.g. bank recapitalization) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 16 Residual, including asset changes (2-3) 5/ | 0.5 | -0.6 | 1.0 | -4.8 | 1.8 | -3.3 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | |
| Public sector debt-to-revenue ratio 1/ | 181.8 | 190.5 | 200.1 | 199.0 | 245.4 | 255.3 | 234.3 | 219.6 | 209.2 | 202.9 | 196.4 | |
| **Gross financing need 6/** | 19.7 | 16.9 | 21.0 | 22.3 | 23.6 | 28.1 | 18.9 | 16.5 | 15.2 | 14.7 | 14.3 | |
| in billions of U.S. dollars | 0.7 | 0.7 | 0.8 | 0.9 | 0.9 | 1.1 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | |
| **Scenario with key variables at their historical averages 7/** | | | | | | **114.1** | **119.5** | **125.2** | **131.0** | **136.9** | **143.0** | **3.3** |
| **Scenario with no policy change (constant primary balance) in 2010-2015** | | | | | | **114.1** | **117.4** | **121.7** | **128.0** | **134.4** | **141.0** | **3.6** |
| **Key Macroeconomic and Fiscal Assumptions Underlying Baseline** | | | | | | | | | | | | |
| Real GDP growth (in percent) | 3.2 | 3.6 | 2.8 | -1.3 | -3.7 | 0.1 | 2.1 | 2.6 | 3.0 | 3.0 | 3.5 | |
| Average nominal interest rate on public debt (in percent) 8/ | 7.2 | 7.0 | 7.7 | 6.4 | 6.5 | 6.3 | 6.7 | 6.7 | 7.2 | 7.2 | 7.2 | |
| Average real interest rate (nominal rate minus change in GDP deflator, in p | -11.6 | 5.6 | 7.9 | 6.6 | 4.0 | 3.5 | 2.4 | 3.7 | 5.7 | 5.9 | 6.2 | |
| Nominal appreciation (increase in US dollar value of local currency, in perc | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | ... | ... | ... | ... | ... | ... | |
| Inflation rate (GDP deflator, in percent) | 18.8 | 1.4 | -0.2 | -0.2 | 2.4 | 2.8 | 4.2 | 3.0 | 1.5 | 1.4 | 1.0 | |
| Growth of real primary spending (deflated by GDP deflator, in percent) | 13.5 | -2.1 | 19.0 | 3.2 | -11.6 | -2.2 | 0.3 | 1.9 | 1.4 | 2.7 | 3.1 | |
| Primary deficit | 4.5 | 2.3 | 5.8 | 4.4 | 3.8 | 3.1 | -1.3 | -3.6 | -5.6 | -5.9 | -6.0 | |

1/ Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.
2/ Derived as $[(r - \pi(1+g) - g + \alpha\varepsilon(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; $\pi$ = growth rate of GDP deflator; g = real GDP growth rate; $\alpha$ = share of foreign-currency denominated debt; and $\varepsilon$ = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).
3/ The real interest rate contribution is derived from the denominator in footnote 2/ as $r - \pi\ (1+g)$ and the real growth contribution as -g.
4/ The exchange rate contribution is derived from the numerator in footnote 2/ as $\alpha\varepsilon(1+r)$.
5/ For projections, this line includes exchange rate changes.
6/ Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.
7/ The key variables include real GDP growth; real interest rate; and primary balance in percent of GDP.
8/ Derived as nominal interest expenditure divided by previous period debt stock.
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Appendix Figure 3. Barbados: Public Debt Sustainability: Bound Tests 1/
(Adjustment Scenario, public debt in percent of GDP)




Sources: International Monetary Fund, country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.
3/ One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities occur in 2010, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

Appendix Table 4. Barbados: External Debt Sustainability Framework, 2005-2015
(Adjustment Scenario)
(In percent of GDP, unless otherwise indicated)

| | | **Actual** | | | | | **Projections** | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | **Debt-stabilizing non-interest current account 6/** |
| 1 | **Baseline: External debt** | 36.2 | 38.6 | 41.1 | 39.2 | 41.6 | **43.7** | **42.4** | **40.9** | **39.1** | **37.3** | **35.4** | **-2.4** |
| 2 | Change in external debt | -6.7 | 2.4 | 2.5 | -1.9 | 2.4 | 2.1 | -1.3 | -1.6 | -1.8 | -1.8 | -1.9 | |
| 3 | Identified external debt-creating flows (4+8+9) | -1.1 | 2.3 | -2.7 | 5.4 | 5.2 | 5.1 | 2.3 | 1.9 | 1.5 | 1.3 | 0.8 | |
| 4 | Current account deficit, excluding interest payments | 8.5 | 4.6 | 1.5 | 6.5 | 2.7 | 4.5 | 3.0 | 2.9 | 2.6 | 2.5 | 2.4 | |
| 5 | Deficit in balance of goods and services | 11.7 | 7.3 | 5.6 | 10.0 | 2.9 | 4.4 | 3.1 | 3.1 | 2.9 | 2.9 | 2.9 | |
| 6 | Exports | 45.5 | 48.8 | 52.4 | 52.5 | 46.5 | 46.4 | 47.1 | 47.1 | 47.0 | 46.9 | 46.7 | |
| 7 | Imports | 57.2 | 56.1 | 58.0 | 62.5 | 49.4 | 50.8 | 50.2 | 50.2 | 49.9 | 49.8 | 49.6 | |
| 8 | Net non-debt creating capital inflows (negative) | -1.7 | -2.7 | -5.8 | -4.7 | -1.2 | -3.0 | -3.0 | -3.0 | -3.0 | -3.0 | -3.0 | |
| 9 | Automatic debt dynamics 1/ | -7.9 | 0.5 | 1.6 | 3.6 | 3.7 | 3.5 | 2.3 | 2.0 | 1.9 | 1.8 | 1.4 | |
| 10 | Contribution from nominal interest rate | 2.2 | 2.3 | 3.0 | 3.1 | 2.8 | 3.3 | 3.1 | 3.0 | 3.0 | 2.9 | 2.6 | |
| 11 | Contribution from real GDP growth | -1.3 | -1.2 | -1.4 | 0.1 | 1.9 | 0.2 | -0.8 | -1.0 | -1.2 | -1.1 | -1.2 | |
| 12 | Contribution from price and exchange rate changes 2/ | -8.8 | -0.6 | 0.0 | 0.4 | -1.0 | ... | ... | ... | ... | ... | ... | |
| 13 | Residual, incl. change in gross foreign assets (2-3) 3/ | -5.6 | 0.1 | 5.2 | -7.3 | -2.8 | -3.0 | -3.6 | -3.5 | -3.3 | -3.0 | -2.7 | |
| | External debt-to-exports ratio (in percent) | 79.6 | 79.1 | 78.5 | 74.8 | 89.5 | 94.3 | 90.1 | 86.8 | 83.2 | 79.5 | 75.9 | |
| | **Gross external financing need (in billions of US dollars) 4/** | 0.4 | 0.3 | 0.2 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | |
| | in percent of GDP | 12.2 | 8.6 | 6.0 | 11.1 | 6.8 | 10.8 | 7.6 | 6.7 | 6.3 | 6.1 | 5.0 | |
| | **Scenario with key variables at their historical averages 5/** | | | | | | **43.7** | **44.7** | **45.4** | **46.4** | **47.6** | **49.1** | **-0.8** |
| | **Key Macroeconomic Assumptions Underlying Baseline** | | | | | | | | | | | | |
| | Real GDP growth (in percent) | 3.9 | 3.6 | 3.8 | -0.2 | -4.7 | -0.5 | 2.0 | 2.5 | 3.0 | 3.0 | 3.5 | |
| | GDP deflator in US dollars (change in percent) | 25.9 | 1.8 | 0.1 | -1.0 | 2.5 | 2.2 | 2.8 | 1.8 | 2.0 | 2.0 | 2.0 | |
| | Nominal external interest rate (in percent) | 6.9 | 6.8 | 8.1 | 7.5 | 6.9 | 8.2 | 7.5 | 7.4 | 7.8 | 7.8 | 7.4 | |
| | Growth of exports (US dollar terms, in percent) | 18.4 | 13.1 | 11.5 | -1.1 | -13.5 | 1.5 | 6.4 | 4.3 | 4.8 | 4.9 | 5.0 | |
| | Growth of imports (US dollar terms, in percent) | 16.4 | 3.4 | 7.4 | 6.4 | -22.7 | 4.6 | 3.5 | 4.3 | 4.4 | 4.8 | 5.1 | |
| | Current account balance, excluding interest payments | -8.5 | -4.6 | -1.5 | -6.5 | -2.7 | -4.5 | -3.0 | -2.9 | -2.6 | -2.5 | -2.4 | |
| | Net non-debt creating capital inflows | 1.7 | 2.7 | 5.8 | 4.7 | 1.2 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |

1/ Derived as [r - g - ρ(1+g) + εα(1+r)]/(1+g+ρ+gρ) times previous period debt stock, with r = nominal effective interest rate on external debt; ρ = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, ε = nominal appreciation (increase in dollar value of domestic currency), and α = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as [-ρ(1+g) + εα(1+r)]/(1+g+ρ+gρ) times previous period debt stock. ρ increases with an appreciating domestic currency ($\varepsilon > 0$) and rising inflation (based on GDP deflator).

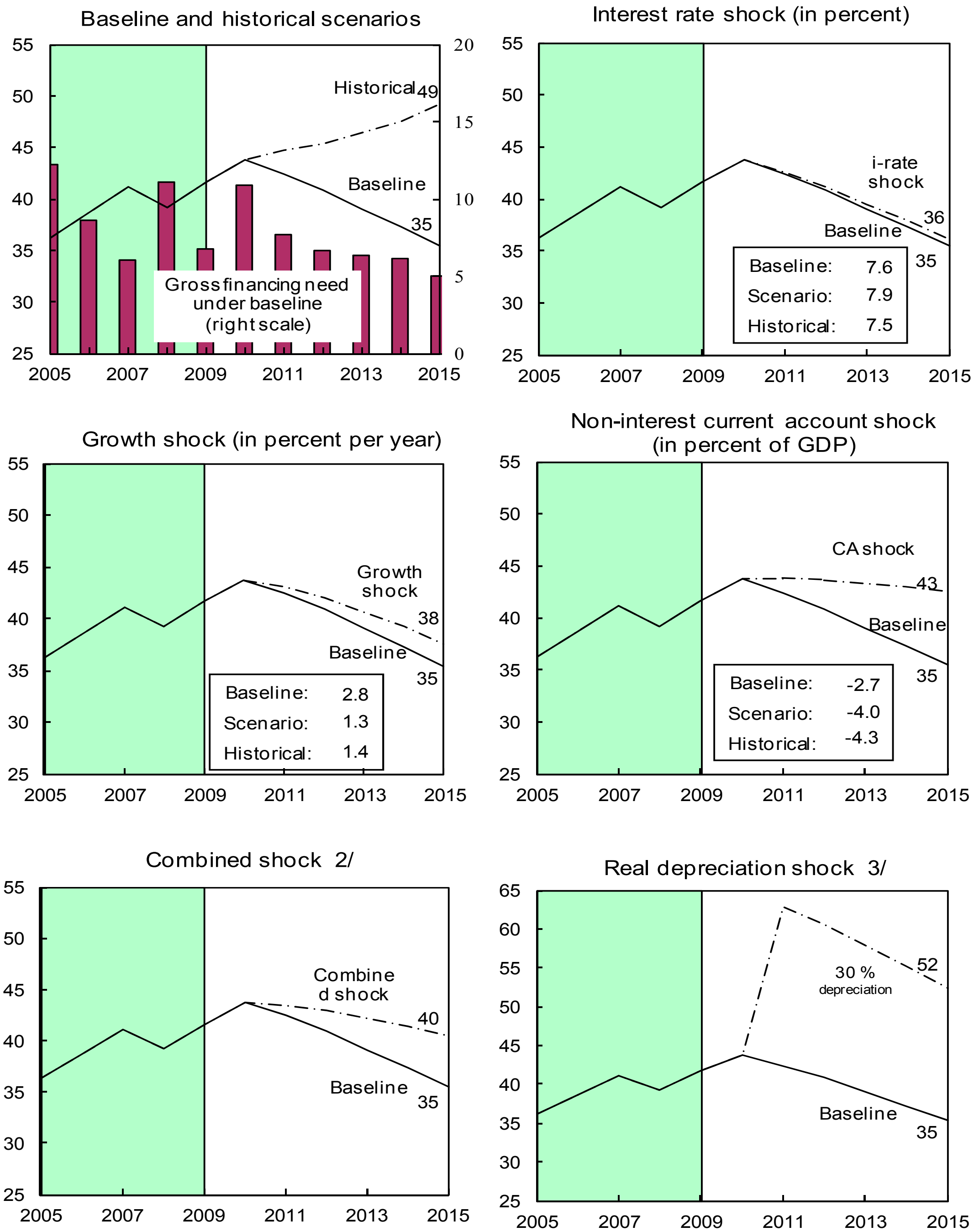
3/ For projection, line includes the impact of price and exchange rate changes.

4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Appendix Figure 4. Barbados: External Debt Sustainability: Bound Tests 1/
(Adjustment Scenario; external debt in percent of GDP)




Sources: International Monetary Fund, Country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
3/ One-time real depreciation of 30 percent occurs in end-2010.

## Appendix II. Status of Implementation of the 2008 FSAP-Update Recommendations

The 2008 Financial System Stability Assessment-Update noted that several of the shortcomings identified during the 2002 FSAP had been addressed. However, it noted that regulatory reforms were still needed to increase the flexibility and stability of the financial system, including the following key reforms:

- ✓ Establishing a clear legal framework for the consolidated supervision of banking groups and enhancing home/host cooperation;
- ✓ Updating the regulations on capital adequacy, asset classification, and loan-loss provisioning;
- ✓ Ensuring that the mandate and structure of the upcoming Financial Services Commission were adequate for the effective supervision of the non banking financial sector.

At the time of the 2010 Article IV Consultation with Barbados, the authorities reported progress in the following areas:

- ✓ Amendments are being drafted to strengthen the legal framework for consolidated supervision, and a MOU was finalized with the Canadian authorities (a critical step given the importance of Canadian banks in Barbados);
- ✓ Amendments are being considered to upgrade asset classification and provisioning, and capital adequacy regulations will be updated in the future;
- ✓ Amendments are also being considered to establish related-party lending and large exposures limits, including for aggregate large exposure;
- ✓ Legislation to establish the Financial Services Commission (FSC) has been approved by the Attorney General, in preparation for its submission to Parliament.

INTERNATIONAL MONETARY FUND

BARBADOS

**Staff Report for the 2010 Article IV Consultation**

**Informational Annex**

Prepared by the Western Hemisphere Department

November 10, 2010

Contents | Page

Appendices

## APPENDIX I. BARBADOS—FUND RELATIONS

As of September 30, 2010

I. **Membership Status**: Joined 12/29/1970; Article VIII

| II. **General Resources Account**: | **SDR million** | **Percent Quota** |
|---|---|---|
| Quota | 67.50 | 100.00 |
| Fund holdings of currency | 61.74 | 91.47 |
| Reserve position in Fund | 5.77 | 8.55 |

| III. **SDR Department**: | **SDR million** | **Percent of Allocation** |
|---|---|---|
| Net cumulative allocation | 64.37 | 100.00 |
| Holdings | 56.33 | 87.51 |

IV. **Outstanding Purchases and Loans**: None

V. **Financial Arrangements**:

| Type | Approval date | Expiration date | Amount approved (SDR million) | Amount drawn (SDR million) |
|---|---|---|---|---|
| Stand-by | 02/07/1992 | 05/31/1993 | 23.89 | 14.67 |
| Stand-by | 10/01/1982 | 05/31/1984 | 31.88 | 31.88 |

VI. **Projected Obligations to Fund**
(SDR million; based on existing use of resources and present holdings of SDRs):

| | **Forthcoming** | | | | |
|---|---|---|---|---|---|
| | **2010** | **2011** | **2012** | **2013** | **2014** |
| Principal | | | | | |
| Charges/Interest | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 |
| Total | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 |

VII. **Exchange Rate Arrangements**:

The Barbados dollar has been pegged to the U.S. dollar since mid-1975 at the rate of BDS$2.00 = US$1.00. There are no restrictions on the making of payments and transfers for current international transactions subject to approval under Article VIII. There are exchange controls on some invisibles, but bona fide transactions are approved. All capital outflows and certain capital inflows require approval. The authorities accepted the obligations of Article VIII, Sections 2, 3, and 4 on November 3, 1993.

VIII. **Last Article IV Consultation**

The last Article IV consultation was concluded by the Executive Board on September 10, 2009; and the staff report was issued as IMF Country Report No. 09/291. Barbados is on the standard 12-month consultation cycle.

IX. **Technical Assistance (2005-09)**:

| Department | Dates | Purpose |
|---|---|---|
| MCM | September 2010 | Stress testing of banks |
| CARTAC | September 2010 | BOP, and compilation of International Investment Position |
| CARTAC | 2006-2009 | National accounts, revising current GDP data |
| CARTAC | April 2009 | Government finance statistics workshop |
| STA | February 2009 | Monetary and financial statistics |
| CARTAC | Ongoing | Rebasing national accounts |
| FAD | March 2008 | Administration of indirect taxes and customs |
| CARTAC | January 2008 | Revenue collection enforcement |
| STA | January 2008 | Monetary and financial statistics |
| STA | December 2006 | Monetary and financial statistics |

X. **Resident Representative**:

The resident representative post was closed in January 1995.

## APPENDIX II. BARBADOS—RELATIONS WITH THE WORLD BANK GROUP
As of July 31, 2010

1. Barbados graduated from World Bank financing in 1993, but has continued to borrow on an exceptional basis. Two regional HIV/AIDS projects were approved in 2001 and 2008. The second HIV/AIDS Project (US$35 million), which became effective in January 2009, is supporting the implementation of the 2008–2013 Barbados National HIV/AIDS Strategic Plan, specifically to promote: (i) adoption of safe behaviors, in particular amongst the most vulnerable groups; (ii) access to prevention, treatment and social care, in particular for the most vulnerable groups; (iii) capacity of organizational and institutional structures that govern the NAP; and (iv) use of quality data for problem identification, strategy definition and measuring results.

**Statement of World Bank Loans**
(In millions of U.S. dollars)

| | Approval Year | Approved Amount | Undisbursed Balance | Disbursed and Outstanding Balance |
|---|---|---|---|---|
| Total IBRD: | | 153.4 | 28.8 | 17.5 |
| *of which outstanding loans:* | | | | |
| Barbados Second HIV/AIDS Project | 2008 | 35.0 | 28.8 | 6.2 |
| Caribbean HIV/AIDS I-Barbados | 2001 | 15.2 | - | 11.2 |

**Disbursements and Debt Service**
(Fiscal Year ending June 30th - in millions of U.S. dollars)

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|---|---|---|
| Total Disbursements | 0.2 | 1.4 | 3.5 | 2.5 | 4.0 | 1.9 | 1.8 | 1.6 | 4.7 |
| Repayments | 2.2 | 1.9 | 1.9 | 1.9 | 1.9 | 2.1 | 1.0 | 0.9 | 1.3 |
| Net Disbursements | -2.1 | -0.5 | 1.6 | 0.6 | 2.0 | -0.2 | 0.7 | 0.7 | 3.3 |
| Interest and fees | 1.1 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 0.7 |

## APPENDIX III. BARBADOS—RELATIONS WITH THE INTER-AMERICAN DEVELOPMENT BANK

As of October 27, 2010

The Inter-American Development Bank (IADB) has a portfolio of eleven loans to Barbados totaling US$184 million of which US$9 million has been disbursed, leaving US$175 million remaining to be disbursed. The portfolio is relatively 'young' with only one operation having been approved before 2005 and eight operations amounting to 90 percent of the portfolio in value terms approved since 2008. Execution of this portfolio of operations is programmed to take until 2015.

### Current Loan Portfolio

| Name | Approval Date | Amount in US$ | |
|---|---|---|---|
| | | Approved | Disbursed |
| Administration of Justice | 2001 | 8,750,000 | 2,743,210 |
| Modernization of Customs, Excise and VAT | 2005 | 4,400,000 | 2,594,930 |
| Modernization of the Barbados National Standards System | December 2007 | 5,000,000 | 669,050 |
| Housing and Neighbourhood Upgrading Program - Phase I | January 2008 | 30,000,000 | 1,758,696 |
| Modernization of the Barbados Statistical Service | July 2008 | 5,000,000 | 292,305 |
| PEF:Agricultural Health and Food Safety Program Preparation (Project Preparation Facility) | December 2008 | 1,092,000 | 392,200 |
| Modernization of the Barbados National Procurement System | December 2008 | 5,000,000 | 500,000 |
| Water & Sanitation System Upgrade | December 2009 | 50,000,000 | 0 |
| Agricultural Health & Food Control | December 2009 | 20,000,000 | 0 |
| Competitiveness Program | December 2009 | 10,000,000 | 0 |
| Support for Sustainable Energy Framework | September 2010 | 45,000,000 | 0 |
| **Total** | | 184,242,000 | 8,950,391 |

In addition to the loan portfolio, the IADB has an active technical cooperation portfolio of twelve operations totaling US$5.4 million, six of which are Multilateral Investment Fund grants amounting to US$2.1 million.

**2010 Lending Program**

Two loans totaling US$40 million are scheduled for approval in the 4th quarter of 2010, in addition to the US$45 million that was already approved in September for the Sustainable Energy Framework support loan.

**2010 Lending Program**

| Lending Program 2010 (Public Sector) | Amount (in US$ millions) |
|---|---|
| Sustainable Energy Implementation | 10 |
| Coastal Risk Management | 30 |
| Total | 40 |

Note: this lending program does not include operations already approved in 2010

**Net Cash Flow**

Barbados has experienced a negative net cash flow with respect to the IADB over the last decade averaging *negative* US$7 million during 2001-09 and reaching a low point of *negative* US$20 million in 2006. Following a significant rise in disbursements in 2009, the net cash flow turned positive and is expected to reach US$29 million in 2010.

**Cash Flow Indicators**

| (US$ million) | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010e |
|---|---|---|---|---|---|---|---|---|---|---|
| Approvals | 8.8 | 17.0 | 0.0 | 0.0 | 4.4 | 0.7 | 5.0 | 41.1 | 49.0 | 85.0 |
| Disbursements | 24.2 | 15.8 | 16.0 | 7.9 | 4.4 | 2.2 | 2.8 | 18.5 | 30.4 | 54.9 |
| Repayments | 7.9 | 8.1 | 11.0 | 13.8 | 12.2 | 15.6 | 15.9 | 19.7 | 18.7 | 20.0 |
| Interest and Commissions | 7.9 | 7.2 | 8.2 | 7.4 | 7.1 | 6.5 | 6.3 | 6.2 | 6.2 | 6.3 |
| **Net cash flow** | **8.4** | **0.5** | **-3.2** | **-13.3** | **-14.9** | **-19.9** | **-19.4** | **-7.4** | **5.5** | **28.6** |
| **Debt outstanding** | **143.9** | **151.6** | **156.6** | **150.7** | **150.1** | **140.6** | **133** | **149.1** | **160** | **157.6** |

Note: The projections and approvals for 2010 includes a PBL of $45 million.

## APPENDIX IV. BARBADOS—RELATIONS WITH CARIBBEAN DEVELOPMENT BANK

As of September 30, 2010

The Caribbean Development Bank (CDB) approved US$291.3 million (net) in loans, contingent loans, equity and grants to Barbados over the period 1970 to September 30, 2010. This represents 8.9 percent of total approvals to CDB's borrowing member countries.

Of the total funds approved, (US$79.3 million or 27.2 percent) were allocated to the productive sectors, which comprise agriculture, forestry & fishing; manufacturing; and tourism. A total of US$45.5 million or 15.7 percent of the total was allocated to the manufacturing sector, while tourism accounted forUS$29.5 million, or 10.1 percent.

Economic infrastructure accounted for US$158.3 million or 54.3 percent of approved funds. Of these funds, US$101.0 million (34.6 percent) were allocated to the transportation and communication, US$50.8 million (17.4 percent) to the education, and US$3.2 million (1.1 percent) to the health sectors.

Table 1
CDB Loans, Equity and Grants Approved (Net) to Barbados 1970− 30, September 2010

| Sector | Total Value (US million) | % |
|---|---|---|
| Agriculture | 4.2 | 1.4 |
| Manufacturing | 45.5 | 15.7 |
| Tourism | 29.5 | 10.1 |
| Mining | 0.1 | 0.0 |
| **Sub-total** | **79.3** | **27.2** |
| Power and Energy | 0.1 | 0.0 |
| Water | 1.8 | 0.6 |
| Transportation & Communication | 101.0 | 34.6 |
| Housing | 1.4 | 0.5 |
| Education | 50.8 | 17.4 |
| Health and Sanitation | 3.2 | 1.1 |
| **Sub-total** | **158.3** | **54.2** |
| Multi-Sector | 53.7 | 18.6 |
| **Sub-total** | **53.7** | **18.6** |
| **Total** | **291.3** | **100.0** |

Source: Caribbean Development Bank.

In order to provide a strategic focus to guide CDB's interventions in Barbados, CDB has prepared a Country Strategy Paper (CSP), outlining its overall intervention strategy for Barbados over the period 2010–13 to achieve the following outcomes: macroeconomic stability; renewed and improved physical and environmental infrastructure; a more competitive productive sector; and enhanced social development. The CSP is consistent with the Government's own development objectives.

Table 2. Approvals of Loans, Contingent Loans, Equity and Grants (Net) 2002–10

| | Annual approvals US$ Millions |
|---|---|
| 2002 | 15.0 |
| 2003 | 13.5 |
| 2004 | 0.1 |
| 2005 | 0.1 |
| 2006 | 24.4 |
| 2007 | 32.7 |
| 2008 | 0.1 |
| 2009 | 12.9 |
| 2010 (September 30) | 1.0 |

Source: Caribbean Development Bank.

Table 3. CDB – Disbursements and Undisbursed Balances to Barbados 2002 – September 30, 2010 (US$ millions)

| **Year** | **Disbursements During the Year** | **Undisbursed Balance at the End of the Year** |
|---|---|---|
| 2002 | 3.8 | 79.7 |
| 2003 | 17.2 | 76.0 |
| 2004 | 19.9 | 56.1 |
| 2005 | 8.6 | 47.5 |
| 2006 | 9.3 | 62.2 |
| 2007 | 23.6 | 71.3 |
| 2008 | 25.2 | 47.2 |
| 2009 | 16.8 | 46.1 |
| 2010 (September 30) | 1.3 | - |

Source: Caribbean Development Bank.

## APPENDIX V. BARBADOS—STATISTICAL ISSUES

1. While data provision has some shortcomings, it is broadly adequate for surveillance purposes. Barbados participates in the General Data Dissemination System, with metadata and the authorities' plans for improving the statistical base posted on the Fund's Dissemination Standards Bulletin Board.

### Real Sector

2. The Barbados Statistical Services compiles national accounts statistics according to the 1968 SNA manual. A lack of current, reliable source data on nonsugar agriculture, private construction, and nontourism service activities affects production-based GDP estimates. To address some of the weaknesses in this area the authorities initiated a census of economic activity in June 2005. The census covered tourism, financial businesses, and transport and communications. Expenditure-based GDP estimates are derived from selected surveys; the household survey yields a reliable estimate of aggregate consumption, but the external trade and investment surveys suffer from certain weaknesses. Constant price GDP estimates, compiled by the Central Bank of Barbados (CBB), have an outdated 1974 base year; the authorities are currently updating the base year to 2000 in order to facilitate comparison within the Caribbean Community area. The authorities, with the assistance of CARTAC, recently completed a revision of the national accounts data. They published the revised GDP series in current prices, which revealed that current GDP had been underestimated in 2008 by about 10 percent. However, the revised *current* price GDP data are not consistent with the *constant* price GDP data, which rely on 1974 as the base year, and there are no meaningful GDP deflator data linking both series. These data shortcomings add some uncertainty to GDP analyses and projections, as presented in the staff report. An early rebasing of the constant price GDP data should be a high priority.

3. Despite recent initiatives to update the consumer price index and the index of industrial production, potential misalignments in real estate prices are not addressed due to the absence of a systematic index of property prices. The consumer price index uses an expenditure basket for 1998–99 for its July 2001=100 series introduced in January 2002. The index of industrial production is based on the sectoral weights from 1982; the authorities are currently working towards rebasing the series to 1994. Since these outdated base years do not necessarily reflect the current structure of consumption and production, they possibly distort the derived price data.

### Government finance statistics

4. Fairly comprehensive and up-to-date above-the-line data are available for the general government, but government transfers are reported with a lag. As a result of the incomplete coverage of off-budget transactions, a discrepancy exists between the overall balance and financing data in some years. Public enterprise data are not systematically and promptly reported to the Ministry of Finance. Financial sector data on public sector net domestic borrowing usually cannot be fully reconciled with above-the-line fiscal data, partly because of limited availability of nonbank financial sector information. This reduces the degree of certainty about the actual fiscal position. The authorities introduced accrual accounting of public finance in April 2007.

**Monetary and financial statistics**

5. While some weaknesses remain with respect to the overall quality, coverage, and timeliness of the monetary and financial statistics, they do not hinder Fund surveillance. The 2007 and 2008 STA missions found that the quality of monetary and financial statistics was compromised by various methodological problems, misclassifications, and the inconsistent application of residency criterion. The technical assistance missions recommended correcting a number of misclassifications of accounting data and assisted the CBB in compiling the standardized report forms (SRFs). The CBB has recently started compiling monetary statistics based on the SRFs, which include comprehensive detailed depository corporations' data.

**External sector statistics**

6. Lags in the compilation of merchandise trade data, and infrequent and incomplete information on the activities of the offshore sector, limit the timeliness of the external current account balance estimates. Estimates of the components of the external financial account need to be improved. The authorities, with assistance from CARTAC, are working on compiling data on the net international investment position of Barbados.

## BARBADOS: TABLE OF COMMON INDICATORS REQUIRED FOR SURVEILLANCE

As of September 30, 2010

| | Date of latest observation | Date received | Frequency of Data[7] | Frequency of Reporting[7] | Frequency of publication[7] |
|---|---|---|---|---|---|
| Exchange Rates | Fixed | | | | |
| International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1] | 7/31/10 | 7/31/10 | M | M | W |
| Reserve/Base Money | 7/31/10 | 7/31/10 | M | M | M |
| Broad Money | 5/31/10 | 8/22/10 | M | M | M |
| Central Bank Balance Sheet | 5/31/10 | 8/22/10 | M | M | M |
| Consolidated Balance Sheet of the Banking System | 5/31/10 | 8/22/10 | M | M | M |
| Interest Rates[2] | 7/31/10 | 7/31/10 | M | M | M |
| Consumer Price Index | 7/31/10 | 7/31/10 | M | M | M |
| Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4] | 6/30/10 | 9/14/10 | Q | Q | Q |
| Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government | 6/30/10 | 9/14/10 | Q | Q | Q |
| Stocks of Central Government and Central Government-Guaranteed Debt[5] | 3/31/09 | 9/14/10 | Q | Q | Q |
| External Current Account Balance | 12/09 | 9/14/10 | A | A | Q |
| Exports and Imports of Goods and Services | 12/09 | 9/14/10 | A | A | M |
| GDP/GNP | 2009 | 9/14/10 | A | A | Q |
| Gross External Debt | 12/31/09 | 9/14/10 | A | A | M |
| International Investment Position[6] | | | | | |

[1]Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Includes external gross financial asset and liability positions vis a vis nonresidents.
[7] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).

INTERNATIONAL MONETARY FUND

BARBADOS

**Staff Report for the Article IV Consultation—Supplementary Information**

Prepared by the Western Hemisphere Department

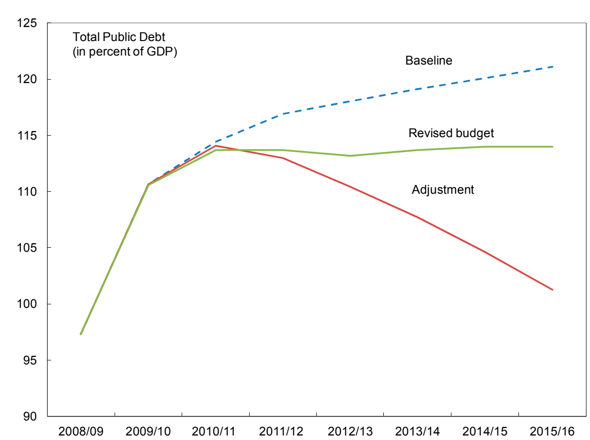
Approved by David J. Robinson and James Roaf

November 30, 2010

1. **On November 22, Minister Sinckler presented a supplementary budget to Parliament.** He proposed a number of revenue and spending measures with a net fiscal effort of BDS$149 million (or 1¾ percent of GDP) on an annualized basis. The most important measures include:

- **On the revenue side**, about BDS$180 million higher revenue on an annualized basis by (1) raising the VAT rate from 15 percent to 17.5 percent for a period of 18 months effective December 1, 2010; (2) removing various deductions for travel, entertainment, and investment from taxable income; (3) raising the gasoline excise tax and some other fees, while reducing the environmental levy on imported goods; and (4) raising by one-third public bus fares, which have remained unchanged since the early 1990s, thus allowing lower government transfers to the transport board.

- **On the expenditure side,** additional net spending of BDS$31 million by increasing (1) transfers to the Barbados Tourism Authority; (2) pension payments; and (3) welfare grants and food voucher payments. The authorities also plan to establish a grant to finance primary school textbooks, while limiting the free enrollment period in the public university. New programs to shore up the private sector include a tax credit for businesses that generate additional employment, and a loan-guarantee facility to support investment in the tourism sector.




2. **The proposed measures would contribute to the much required fiscal consolidation, particularly in the early years.** Moreover, some of the additional spending is targeted at vulnerable segments of society and at supporting business investment. However, the fiscal effort would not be as large as in the staff's adjustment scenario, most notably because the VAT increase would be

reversed in 18 months. Accordingly, while the debt would stabilize at about 114 percent of GDP in FY 2015/16 under the staff's economic assumptions, it would remain very elevated.

3. **Overall, the staff believes that the recently announced supplementary budget is an important first step toward fiscal consolidation, but would stress that additional measures will be needed to put public debt firmly on a downward path, as envisaged in the authorities medium-term strategy.**

INTERNATIONAL MONETARY FUND
*Public Information Notice*
EXTERNAL RELATIONS DEPARTMENT

Public Information Notice (PIN) No. 10/159
FOR IMMEDIATE RELEASE
December 15, 2010

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

# IMF Executive Board Concludes 2010 Article IV Consultation with Barbados

On November 29, 2010, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Barbados.[1]

**Background**

The global economic crisis has hit Barbados particularly hard, by adversely impacting all of its key economic activities, including tourism, financial services, and real estate investment. After contracting by almost 5 percent in 2009, output is expected to continue its decline in 2010, albeit at a slower rate. The weak economy has led to a steady increase in the unemployment rate which reached 10.7 percent in the second quarter of 2010, up from 7.4 percent in 2007. While average inflation fell in 2009, it has picked up in 2010 and is expected to end the year at about 5 percent, fueled by higher energy prices, before receding again. Lower government revenues and higher expenditures are contributing to persistently large fiscal imbalances. Thus, the nonfinancial public sector deficit is expected to remain at around 7 percent of GDP in Fiscal Year 2010/11 (April to March), only marginally lower than in the previous two fiscal years. As a result, public debt continues to grow and could approach 115 percent of GDP by the end of the current fiscal year.

The external current account deficit narrowed in 2009 to 5.5 percent of Gross Domestic Product, down from almost 10 percent in the previous year, thanks to a recession-induced contraction of imports and lower petroleum prices. Lower tourism receipts, the near-stop in

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

foreign direct investment inflows in 2009, and a US$100 million bond repayment in mid-2010 put the country's reserves under severe pressure. However, the Special Drawing Rights allocations of US$85 million in 2009, in addition to two foreign bond placements in 2009 and 2010, totaling US$220 million, boosted international reserves, which are expected to end 2010 above US$700 million.

**Executive Board Assessment**

Executive Directors noted that the global crisis severely impacted the Barbados economy, especially its key sectors—tourism, financial services, and real estate. The economy is expected to rebound gradually but downside risks persist mainly from the uncertain global economic environment.

Directors commended the authorities for adopting a Medium-Term Fiscal Strategy aimed at generating a balanced budget and reducing the high public debt-to-GDP ratio. They welcomed the recent measures to raise VAT rates and public transportation tariffs, while boosting spending targeted at vulnerable segments of society. Directors emphasized that to place public debt on a sustainable path, additional measures will be necessary. They encouraged efforts aimed at broadening the tax base, making the VAT increase permanent, raising corporate tax rates, and streamlining government operations, while continuing to rein in current spending. Prioritizing expenditure would also make room for moderate increases in capital spending to support medium-term growth.

Directors observed that the peg to the U.S. dollar has provided a valuable anchor to Barbados. Noting that Barbados' real exchange rate may have become somewhat overvalued, they called for decisive fiscal adjustment to safeguard the viability of the peg. Directors viewed the current monetary policy stance as broadly appropriate. They recommended maintaining spreads between the minimum deposit rate and policy rates in core economies at levels consistent with prevailing market conditions.

Directors noted that banks in Barbados remain healthy. While nonperforming loans have increased, robust capital bases provide effective cushions against future losses. They commended the authorities for strengthening bank oversight, including by creating a financial stability unit in the central bank. Implementing the recommendations of the 2008 FSAP Update and more detailed data collection on banks' loan portfolio will further strengthen supervision and stress-testing exercises.

Directors welcomed the authorities' efforts to improve the supervision of nonbank financial institutions, an area of weakness highlighted by the recent demise of two insurance companies. They called for timely action to consolidate nonbank financial supervision into the Financial Services Commission and underscored the need to resolve the problematic insurance companies to lift market uncertainty and provide clarity on contingent fiscal costs.

Directors acknowledged the relatively good business environment in Barbados. However, in light of the country's weak productivity growth, they saw merit in further streamlining government agencies and procedures, and looking for ways to broaden growth sources.

***Public Information Notices (PINs)*** form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case. The staff report (use the free Adobe Acrobat Reader to view this pdf file) for the 2010 Article IV Consultation with Barbados is also available.

## Barbados: Selected Economic Indicators

| | | | | Prel. | Proj. | |
|---|---|---|---|---|---|---|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| (Annual percentage change) | | | | | | |
| **Output and prices** | | | | | | |
| Real GDP | 3.6 | 3.8 | -0.2 | -4.7 | -0.5 | 2.5 |
| Nominal GDP | 5.4 | 3.9 | -1.2 | -2.3 | 1.7 | 5.3 |
| Consumer prices | 7.3 | 4.0 | 8.1 | 3.7 | 5.0 | 3.5 |
| **Money and credit** | | | | | | |
| Net domestic assets | 14.2 | 9.4 | 11.3 | 3.1 | 4.0 | 8.2 |
| *Of which*: private sector credit | 13.2 | 6.4 | 11.1 | 1.4 | -0.2 | 4.1 |
| Broad money | 11.3 | 13.2 | 2.8 | 2.8 | 4.6 | 6.3 |
| (In percent of GDP, unless otherwise indicated) | | | | | | |
| **Public sector operations** 1/ | | | | | | |
| Overall balance | -3.9 | -8.6 | -7.2 | -7.3 | -7.0 | -5.0 |
| Central government balance | -2.7 | -5.0 | -5.0 | -9.1 | -8.8 | -6.9 |
| Off-budget activities | -3.5 | -5.0 | -3.3 | 0.1 | 0.0 | 0.0 |
| National Insurance Scheme balance | 3.4 | 3.2 | 3.1 | 2.9 | 2.9 | 3.1 |
| Public enterprises' balance | -1.2 | -1.8 | -2.0 | -1.2 | -1.2 | -1.2 |
| Primary balance | -0.8 | -4.7 | -3.3 | -2.9 | -2.5 | -0.2 |
| Public sector debt 2/ | 79.6 | 90.4 | 97.3 | 110.7 | 114.4 | 116.9 |
| **External sector** | | | | | | |
| External current account balance | -6.9 | -4.5 | -9.6 | -5.5 | -7.9 | -7.4 |
| External debt 3/ | 24.5 | 28.3 | 28.1 | 31.9 | 33.7 | 32.1 |
| Gross international reserves (in millions of US$) | 597.0 | 774.0 | 678.1 | 745.4 | 706.5 | 691.7 |
| **Memorandum item:** | | | | | | |
| Nominal GDP (in millions of Barbados dollars) | 7,769 | 8,075 | 7,976 | 7,790 | 7,925 | 8,347 |

Sources: Barbados authorities; and IMF staff estimates and projections.
1/ Fiscal year (April to March).
2/ Includes central government and government-guaranteed debt; end of fiscal year.
3/ Includes public sector and nonfinancial private sector debt, end of fiscal year.