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Staff Country Reports

Belize: Selected Issues

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BELIZE

Selected Issues

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Approved by Western Hemisphere Department

February 7, 2008

	Contents	Page
I.	Debt Management Strategy	2
	A. Background	2
	B. Framework	3
	C. Scenarios	3
	D. Conclusions	5
II.	Management of Oil Revenues	9
	A. Background	9
	B. The Petroleum Revenue Management Fund	9
	C. Macroeconomic Policy Implications of the Oil Fund	10
III.	Assessing Reserves Adequacy	13
	A. Background	13
	B. Measures of Reserves Adequacy	14
	C. Historical Perspective on Reserves Adequacy in Belize	14
IV.	Fiscal Cost of Liquidity Management	17

I. DEBT MANAGEMENT STRATEGY¹

A. Background

1. **As a result of expansionary macroeconomic policies during 1999–2004, Belize’s public debt increased rapidly and is currently one of the highest in the region.** At end-2006, total and external debt ratios stood at 92 and 84 percent, respectively. With these debt levels, Belize ranks eighth (out of 19 countries) with regard to total debt to GDP ratio and third (after Grenada and Guyana) in external debt category among its peers in Central America and the Caribbean.

Belize in Regional Context (Dec. 2006)
(In percent of GDP)

	Total Debt	External Debt
St. Kitts and Nevis	182.1	63.7
Jamaica	134.8	59.9
Grenada	120.3	87.7
Guyana	119.8	91.0
Antigua and Barbuda	111.2	42.8
Nicaragua	106.5	83.3
Dominica	102.5	70.9
Belize	92.1	83.8
Barbados	87.0	26.8
St. Vincent & the Grenadines	84.2	53.3
St. Lucia	66.6	43.9
Panama	57.7	45.5
Costa Rica	46.2	16.5
Dominican Republic	44.2	24.4
El Salvador	41.9	29.6
Ecuador	33.9	24.7
Haiti	33.1	29.3
Trinidad and Tobago	32.2	7.2
Guatemala	21.8	13.1

Source: WHD Staff Forecast Database.

2. **In 2005, policies were initiated to correct serious macroeconomic imbalances.** However, the adjustment efforts were not sufficient to bring the economy back onto a sustainable path, and, therefore, Belize engaged with its external private creditors to achieve a cooperative debt restructuring.

3. **Debt restructuring was completed in February 2007.** Holders of eligible debt exchanged their claims for a new 22-year bond, repayable in semi-annual installments starting in 2019. Interest rates have been set at below-market levels until 2013, at 4.25 percent in the first three years, and 6 percent in the following two years. Net present

¹ Emine Boz is the principal author of this paper.

value (NPV) gains would disappear from 2013 as the coupon rate of the exchanged debt will be reset to market-related level (8.5 percent). It is estimated that the restructuring will provide Belize with a 21 percent reduction in its debt burden in NPV terms. These gains will be largely realized by 2013.

4. **The analysis presented below seeks to identify the key parameters of an appropriate medium-term debt strategy for Belize.** The analysis concludes that Belize should target a debt ratio of around 40 percent in 2019 when the first amortization of the exchanged debt begins falling due in order to reduce liquidity risk and facilitate roll-over of due amortizations on favorable terms.

B. Framework

5. **The objective is to establish a fiscal path consistent with regaining debt sustainability and market access on favorable terms.** Two criteria are used to analyze three scenarios with different primary surpluses and debt levels:

- **Solvency.** A government is solvent if the NPV of primary surpluses is at least as large as the NPV of public debt stock. The solvency condition is met when the debt-to-GDP ratio is on a non-explosive path, i.e., it is either stable or declining.
- **Liquidity.** A government is considered liquid if its assets and available financing are sufficient to meet or roll-over its maturing liabilities. To assess liquidity risk for the case of Belize, debt service dynamics, reserve coverage, and the effects of potential imports and exports shocks are analyzed throughout the projection period.

C. Scenarios

6. **Three debt scenarios are simulated to set the ground for solvency and liquidity analysis.**

- *Scenario A* reflects an unchanged policy stance assuming primary surplus of 1.5 percent of GDP comprising primary surplus budget target in FY 2007/08 and oil permanent sustainable income (see Chapter 2).
- *Scenario B* assumes that the primary surplus target in FY 2007/08 of 3.1 percent is maintained.
- *Scenario C* assumes a front-loaded fiscal adjustment targeting a debt/GDP ratio of 40 percent in 2019 when the first amortization of the restructured debt falls due.

Belize: Fiscal Scenarios
(In percent of GDP)

	2007	2008	2009	2010	2011	2012	2015	2019	2020	2025
A										
Primary balance	2.7	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Total debt	90.2	87.9	86.5	85.3	84.6	84.4	86.0	89.5	90.7	99.0
B										
Primary balance	2.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Total debt	90.2	86.3	83.1	80.1	77.6	75.5	70.7	64.4	62.9	55.7
C										
Primary balance	2.7	3.2	3.6	4.4	4.7	4.7	4.0	3.7	3.5	2.0
Total debt	90.2	86.1	81.4	76.3	71.2	66.4	54.7	40.8	37.3	26.8

Source: Fund staff calculations.

7. **The literature on emerging markets' debt suggests that debt ratios of 40 percent or lower are generally sustainable.** For emerging market economies with on-and-off market access, Reinhart, Rogoff, and Savastano (2003) suggest a threshold of 35 percent external debt-to-GDP ratio, and IMF (2002) indicates 40 percent as a comfortable level. These thresholds need to be taken with caution as other vulnerabilities can trigger payment difficulties. For example, as pointed out in IMF (2006), about 40 percent of crises occurred at debt levels below 39 percent.

8. **A fiscal path under scenario A would not meet solvency or liquidity criteria.** Debt ratios gradually decline in scenarios B and C while they follow a U-shaped trajectory in scenario A. Under scenario A, debt ratios decline from 92 percent in 2006 to 84 percent in 2012 and pick up again when the last increase in the interest rate of the step-up bond takes place. This U-shaped trajectory suggests that the debt strategy in scenario A is unsustainable. Under scenario B, even though the debt ratios decline to 65 percent by 2019, the speed of adjustment in this scenario may not be enough to roll over the due amortizations on favorable terms by 2019. Finally, under scenario C debt ratios decline at a rapid pace reaching comfortable levels by 2019.

9. **Under scenarios A and B liquidity risks would remain significant.** The projected debt payments would correspond to 57 percent and 40 percent of the central government's revenues and grants in 2019, respectively. As demonstrated in Figure 1, when the exchanged debt starts maturing in 2019, debt service payments would jump and continue to increase through 2025, and higher borrowing requirements would be met at higher interest rates, leading to even more increasing debt ratios.

10. **Debt service obligations under scenarios A and B would exceed international reserves.** Under these scenarios, international reserves would be larger than the external debt service due until 2012 and 2017, respectively, but fall short of debt service payments in the subsequent periods (Figure 2). However, even during 2008–2017, significant risks to external reserves could emerge. To demonstrate this, the baseline projection of international reserves

was subjected to one-standard deviation imports and exports shocks, and compared with debt service payments falling due. Such deviation shocks have fairly high probability yet small magnitude. Given that imports are more volatile than exports, a wider band around reserves exists in the case of imports shocks. Assuming a normal distribution, the probability of an adverse one-standard deviation shock is 16 percent. As for its magnitude, in 2007, the assumed export shock corresponds to BZ\$89 million reduction in exports. This is about twice the estimated papaya crop loss (BZ\$41 million) due to Hurricane Dean. Moreover, coupled with an increase in imports, usually hurricanes lead to larger losses in reserves compared to a case with only export reduction. Both for import and export shocks, debt service due would fall within the one-standard deviation band of reserves suggesting that only one-standard deviation shock to exports *or* imports would be sufficient to push the reserves below the full coverage of debt-service obligations falling due.

Analysis of the Scenarios

Scenario	Solvency	Liquidity	
		Debt Service/Revenue (as of 2019)	Reserve Coverage
A	U-shaped debt trajectory, debt ratio starts picking up in 2013.	57 percent	Reserves fall short of external debt payments after 2011 and high vulnerability in case of shocks.
B	Monotonically declining debt ratio.	40 percent	One-standard deviation shock to exports <i>or</i> imports would be sufficient to push the reserves below the external debt service due.
C	Monotonically declining debt ratio.	19 percent	Reserves are sufficient to cover external debt payments even in the case of adverse import or export shocks starting from 2009.

11. **Net debt considerations do not change the conclusions significantly.** With the introduction of the new petroleum revenue management mechanism, Belize is expected to save its oil revenues with some of these savings being transferred to the budget. According to staff calculations based on current oil price projections, the cumulative savings would reach about 8 percent of GDP in 2016 (see Chapter 2). Subtracting these savings from the debt ratios does not change the conclusion that scenario A leads to unsustainable debt levels while scenario B continues to pose significant liquidity risks.

D. Conclusions

12. **A front loaded fiscal adjustment as assumed in scenario C appears most prudent.** If implemented, it would:

- Reduce debt ratios to “comfortable” levels for smooth market access at favorable terms in 2019 when the first amortization of the exchanged debt is due.

- Reduce liquidity risks by stabilizing debt service to revenue ratio at around 20 percent throughout the projection period and increasing reserve coverage as the reserves may fall short of due external debt service in case of relatively mild adverse imports or exports shocks.

Figure 1. Belize: Debt Ratios and Services Under Alternative Scenarios

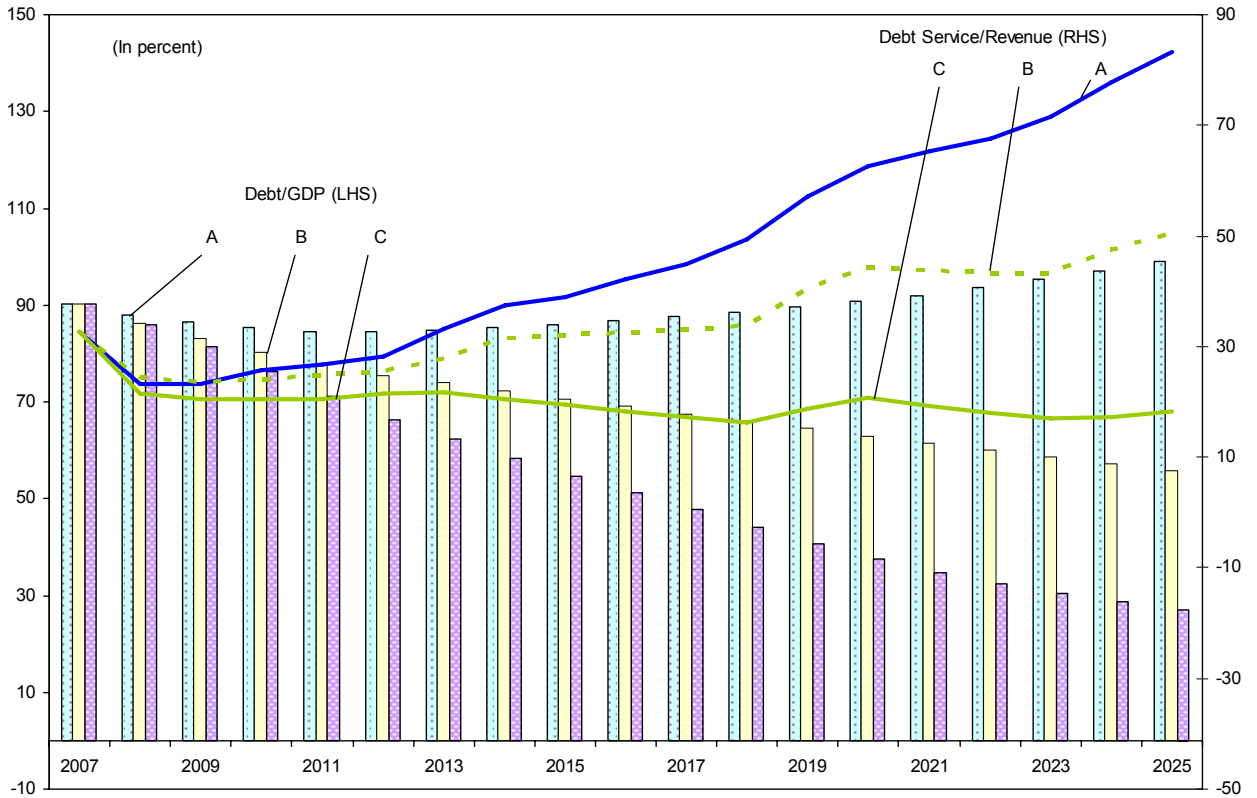
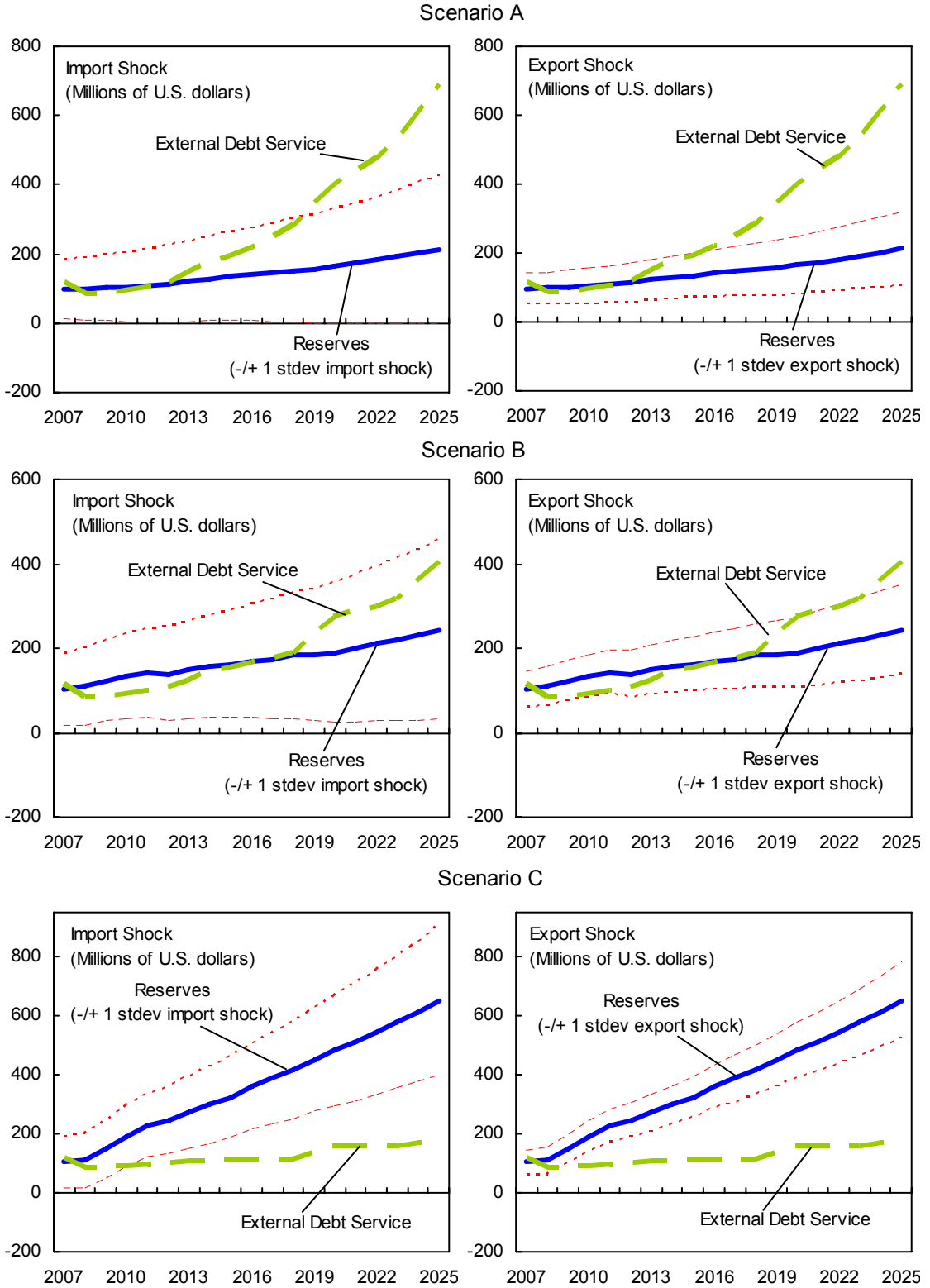


Figure 2. Belize: Import and Export Shocks



Source: Fund staff calculations.

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II. MANAGEMENT OF OIL REVENUES IN BELIZE¹

A. Background

1. **Oil was discovered in Belize in late 2005.** The volume of extracted oil reached 811,000 barrels in 2006, the first year of production, and in 2007, it will exceed one million barrels. According to industry estimates, production is expected to contract 10 percent a year, declining to 284,000 barrels in 2019, the year when oil resources will be exhausted.

2. **Belize's oil is fully exported as there are no local refining facilities.** In 2006, Belize's oil exports amounted to US\$40.6 million. In the same year, Belize imported US\$111 million worth of gasoline and other refined products. In line with the above production projections and WEO projected market price for oil, oil exports peaked at US\$57 million in 2007 (4½ percent of GDP), and would be gradually declining to US\$15 million in 2019.

3. **Until March 2008, proceeds from domestic oil production are shared fully between the Government of Belize and Belize National Energy Company.** The government collects about 10 percent of gross sales. The remainder is subject to income tax at the rate of 40 percent and royalties, approximately 5 percent. All government oil revenues are transferred to the budget.

B. The Petroleum Revenue Management Fund

4. **The recently voted bill has changed procedures for budgetary use of oil revenues.** The bill passed in parliament on August 31, 2007 and will become operational effective FY 2008/09. Government revenues from oil will be invested in an oil management fund and the budget will be receiving an amount that is calculated as a "Permanent Sustainable Income" (PSI). It is defined as real return on accumulated oil savings plus the present value of the projected stream of oil revenues until depletion; capped at 5 percent. The investment of the fund shall only be in stable convertible currencies. In exceptional circumstances, an amount in excess of the sustainable income may be transferred to the budget.

5. **Oil revenues to be managed by the oil fund are smaller than in other oil-exporting countries.** Belize's oil resources are very small relative to total government revenues and exports. Indeed, countries that have established plans for nonrenewable resource funds are typically managing fairly large resource revenues.

¹ Magda Kandil is the principal author of this paper.

Indicators for Selected Countries with Nonrenewable Resource Funds

Country 1/	Nonrenewable Resource Revenue 2/ (In percent of total govt. revenue)	Nonrenewable Resource Exports 2/ (In percent of GDP)	Average Size of Nonrenewable Resource External Shock 3/ (In percentage points of GDP 4/)
Belize 5/	3.5	1.8	0.3
Chile	8.6	10.1	1.7
Kuwait 6/	59.3	39.7	5.9
Norway	14.4	12.1	1.6
Oman	77.3	35.9	5.3
Papua New Guinea	11.4	27.9	3.4
Venezuela	58.2	19.1	4.9

Sources: IMF, World Economic Outlook (various issues); and Fund staff estimates.

1/ The nonrenewable resource for Kuwait, Norway, Oman, and Venezuelan is oil; for Chile, copper; and for Papua New Guinea, gold, copper, and oil.

2/ 1985–99.

3/ 1975–99.

4/ Average absolute value of the annual difference in the ratio of nonrenewable resource exports to GDP.

5/ Average projections 2007–19.

6/ Excludes 1991–93.

6. **The oil fund has a number of positive aspects.** Its main advantage is transparency in managing oil revenues and saving to ensure intergenerational equity. Based on present oil production assumptions, oil savings would accumulate to 8 percent of GDP in 2019.

7. **Concerns about complexity and rigidity of the oil fund could undermine its effectiveness.** For example, the bill does not explain the objectives or discuss the rationale for creating the fund. The mechanisms envisaged in the bill for managing the oil revenues and budget transfers are complex and are likely to complicate an integrated fiscal and asset management. The rigid provisions that determine the annual transfer amount from the fund to finance government operations could lead to spending inefficiencies, idle balances, and expensive and inefficient borrowing.

8. **Streamlined management of the oil fund could be considered in future.** For example, definition of petroleum receipts could include all gross revenues received directly or indirectly by the government from any petroleum operations. Annual withdrawals could be approved by parliament at the time of budget approval and the fund's management could be placed under the Ministry of Finance's responsibility. Finally, it might be considered to empower the Finance Ministry to approve the fund's investment strategy (advised by the Investment Committee) to be subsequently endorsed by the Government or the parliament.

C. Macroeconomic Policy Implications of the Oil Fund

9. **The oil fund mechanism will restrict budgeted oil revenues.** It is estimated that under the new regime oil revenues available to the budget will decline to 0.4 percent of GDP, resulting in revenue loss of 2 percent of GDP in FY 2008/09. As oil revenues are projected to contract by 10 percent every year, and absent additional oil discoveries, revenue foregone will gradually decrease until 2019 when oil production is projected to stop (Figure 1). By contrast, the PSI would gradually increase and stabilize at 0.3 percent of GDP in 2013.

Assuming that the fund’s nominal rate of return would equal the average of the six-month Libor in the last three years (5.3 percent), the stock of accumulated savings would reach 8 percent of GDP in 2019 (Figure 2). However, assuming a higher rate of return on accumulated savings, such as a historical average return of the U.S. stock market (S&P 500) of 10½ percent, the stock of accumulated savings would reach 10 percent of GDP in 2019.

Figure 1. Belize: Oil and Non-oil Revenues and Expenditure, 2007–2019

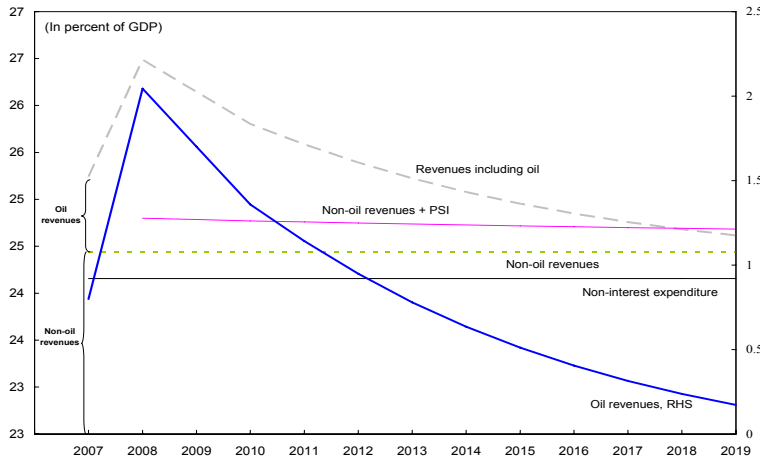
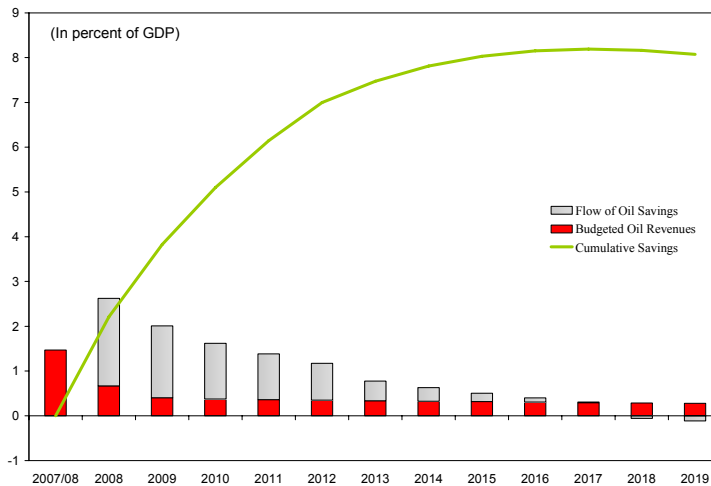


Figure 2. Belize: Oil Revenues and Savings, 2007–2019



10. **Absent additional fiscal measures, reduced oil revenue transfers would result in a smaller primary surplus starting in FY 2008/09.** Assuming unchanged non-oil primary surplus of 2007/08 forward, combined with projected PSI, the primary surplus would contract to 1½ percent of GDP. To sustain the FY 2007/08 expenditure levels, new borrowing (or revenue measures) would be needed. This, in turn, would bring the debt ratios to levels unsustainable in the long-run. Moreover, the return on savings in the oil fund may fall below the cost of borrowing, resulting in a deteriorating net debt position.

11. **Fiscal measures could compensate for the loss of oil revenues in the budget and avoid new borrowing.** These could include revenue measures, such as GST rate increases and/or expenditure restraints. Given the magnitude of budgetary revenue loss, such measures would need to yield at least 2 percent of GDP annually.

III. ASSESSING RESERVES ADEQUACY IN BELIZE¹

A. Background

1. **This note explores alternative measures of reserves adequacy and concludes that reserves target of three months of imports is a reasonable benchmark for Belize².** This reserves cover benchmark is driven principally by current account volatility and external public debt service. The analysis draws on both historical data and alternative medium-term projections.

2. **In the past 30 years, Belize's reserves have been on average equivalent to 1¾ months of imports of goods and services.** Reserves remained low in the first decade after the adoption of the fixed exchange rate regime in 1976, when on average they corresponded to around one month of imports. Thereafter, reserves increased, peaking at 3 months of imports in 1990. Subsequently the trend reversed, taking reserves below one month of imports in 2004–05 and back up to 1½ months of imports in 2006–07.

3. **As many Caribbean countries, Belize's economy is highly-open to trade.** In 2006, exports of goods and services reached 64 percent of GDP, which is high by regional standards. In the past five years, Belize performed favorably in terms of growth and inflation relative to other Caribbean countries. However, it had one of the highest levels of external debt, low reserves, and a high current account deficit, suggesting significant external vulnerability.

Selected External Sector Indicators for Caribbean Countries (2002–06)

	Reserves in Months of Imports	Five-Year Averages Relative to GDP (in percent)				GDP Growth	Inflation CPI	REER 1990=100
		Ext. Debt	Exp. of Goods	Imp. of Goods	Current Acc.			
Regional average	3.9	47.0	29.6	46.8	-7.5	3.8	8.6	113.8
Bahamas	3.1	5.8	8.9	36.2	-12.2	2.3	1.9	103.5
Barbados	6.5	27.5	11.4	42.8	-9.3	3.1	3.6	93.9
Belize	1.7	90.0	31.7	50.3	-13.9	5.7	3.2	95.7
Dominican Republic	1.5	28.2	24.9	38.9	0.7	4.9	18.9	92.7
ECCU	4.4	67.2	10.1	47.0	-20.9	3.3	2.5	94.1
Guyana	4.7	135.6	69.0	86.6	-13.2	1.0	5.8	96.0
Haiti	2.1	34.4	10.1	32.3	-5.6	0.1	19.6	100.5
Jamaica	5.6	56.7	17.2	41.6	-9.5	1.7	10.7	92.9
Trinidad and Tobago	7.1	11.5	56.4	37.8	14.6	10.2	5.8	96.9
Suriname	2.2	13.1	56.4	54.2	-5.3	5.6	14.2	271.7

Sources: Country authorities; and Fund staff estimates.

4. **Since 1976, the Belize dollar has been pegged to the U.S. dollar.** Belize does not maintain restrictions on current payments or multiple currency practices. The central bank is not engaged in selective sales or rationing of foreign exchange to the private sector and there does not appear to be an unsatisfied foreign exchange demand from commercial banks. However, compared to other countries in the region, capital account restrictions are relatively

¹ Axel Palmason is the principal author of this paper.

² Reserves are defined as external assets that are retained by the Central Bank of Belize for financing of external payment imbalances (consistent with BPM5).

extensive, and the control mechanism is not very transparent. Under the CARICOM agreement, Belize is expected to start capital account liberalization, but significant progress can be expected only when the external position is substantially strengthened.

B. Measures of Reserves Adequacy

5. International reserves adequacy is assessed using current and capital account-based measures, as well as through an optimization framework:

- **Current account-based measures.** A country's international reserves should exceed the equivalent of three months of imports of goods and services. Such a measure is particularly appropriate for countries which lack capital market access.
- **Capital account-based measures.** Reserves should exceed external obligations falling due within the following 12 months or 15–25 percent of broad money.
- **Optimization approach.** The optimal level of reserves to GDP is defined as the level that minimizes consumer's welfare loss, and is a function of the level of short-term debt, output cost of a crisis, probability of a crisis, opportunity cost of holding reserves, and relative risk aversion.³

C. Historical Perspective on Reserves Adequacy in Belize

6. **Belize's reserves are low by international standards.** However, if they were raised to the equivalent of three months of imports, they would also meet other key reserves adequacy benchmarks.

Reserves Adequacy, end-2007

	USD Millions	Months of Imports	In percent of		
			Short-Term Debt	Broad Money	GDP
Reserves	108	1.6	129	14	8
Three-months of imports equivalent	202	3.0	240	26	16

Sources: WEO; and Fund staff estimates.

- **Current account and reserves adequacy.** The analysis of historical current account data suggests that reserves in the order of three months of imports would have been adequate to finance the current account deficit in most years, except for the 2001–05 period. Such a level would also provide an adequate, if modest, cushion in the period ahead under the staff projections.

³ “Optimal Level of International Reserves for Emerging Market Countries: Formulas and Applications,” Olivier Jeanne and Romain Rancière, IMF Working Paper No. 06/229, 2006.

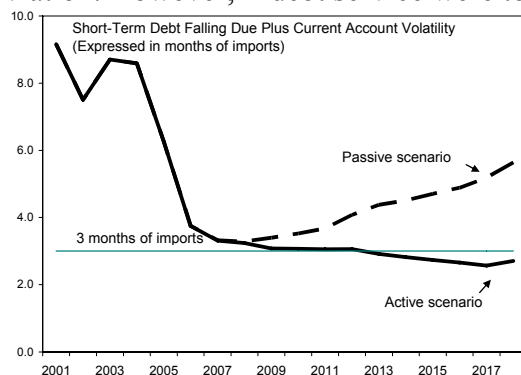
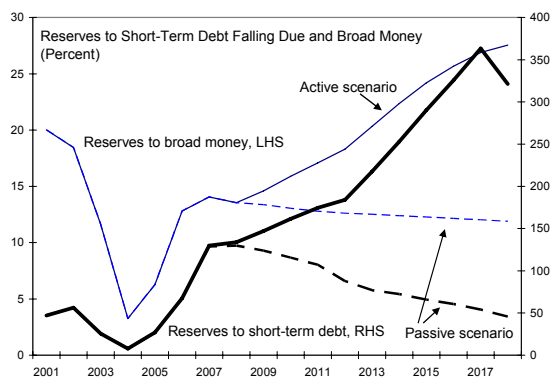
- **Capital account and reserves adequacy.** Historically, Belize’s reserves have fallen short of capital account based benchmarks. If, however, reserves had been equal to three months of imports, those benchmarks also would have been observed. It is worth noting that the indicator of M2 coverage is less relevant for Belize due to extensive capital controls.
- **Optimal reserve level.** Applying Belize’s 2006 data to the Jeanne-Ranciere model estimated for a sample of emerging market countries suggests that optimal reserves would be in the order of 13–20 percent of GDP. This is broadly within the range of model-based estimates for emerging market countries of 10–18 percent of GDP. Also, the model-based estimate reserve level range for Belize coincides with the three months of imports benchmark, which for 2007 would correspond to around 16 percent of GDP.
- **Other considerations.** External reserves can also be viewed as a cushion against hurricanes and other shocks. The largest economic impact on Belize was from hurricanes Hattie (1961) and Keith (2000), ranging between 27 percent and 33 percent of GDP. These losses corresponded to about 5–6 months of imports. In comparison, initial estimates indicate that hurricane Dean (2007) has caused damage of about 8 percent of GDP (1½ months of imports).

What reserves adequacy benchmark for the future?

7. As part of its economic strategy, Belize needs to establish a reserve target.

Historically, except immediately prior to the debt exchange, reserves equivalent to three months of imports appeared adequate. Following the debt exchange, this appears to also hold in the future when tested in the context of a staff’s medium-term active scenario. This illustrative scenario assumes growth to gradually increase to 3¾ percent; public debt to decline gradually to 40 percent of GDP by 2019; imports of goods and services to remain around 62 percent of GDP. Under this scenario, the benchmark of three months of imports of goods and services respects the criteria of short-term debt and broad money. The ratio of reserves to broad money would reach 28 percent by the end of the projection period, while reserves would be as much as three times larger than public sector external debt falling due. Moreover, reserves equivalent to three months of imports would cover short-term maturities falling due and the current account balance augmented by its one historical standard

deviation. However, if debt service were to



double due to increased borrowing or unforeseen shocks, reserves would need to increase to around 4–5 months of imports in order to remain at par with this combined measure.

8. **At present, there appears to be little risk from capital account transactions to Belize’s international reserves.** This reflects largely the absence of non-resident holdings of marketable domestic securities or large domestic foreign currency accounts. However, this would change once capital account restrictions are eliminated in line with CARICOM commitments. Moreover, in the analysis above, large external positions of Belize’s residents reported by the Bank for International Settlement (BIS) have not been taken into account. Based on locational statistics, international banks reported claims on Belize’s residents of 1.7 billion U.S. dollars and liabilities of 6.4 billion U.S. dollars in June of 2007. The claims side includes almost exclusively short-term loans to the nonbank private sector. Clearly, liabilities of this magnitude could substantially modify the above assessment. However, there are no indications that neither the assets nor the liabilities positions reported by the BIS stem from domestic activity in Belize.

IV. FISCAL COST OF LIQUIDITY MANAGEMENT¹

1. **This note evaluates the fiscal cost of the reform of liquidity management in Belize.** Currently, the Central Bank of Belize (CBB) lacks effective market-based instruments to control domestic liquidity. Existing instruments for liquidity management include reserve requirements, liquid asset requirements, and voluntary transfer of public institutions' deposits from commercial banks to the CBB.
2. **Two ceilings contribute to the rigidity of the monetary system:**
 - BZ\$100 million ceiling on outstanding T-bills, which led to the growing use of the overdraft facility by the government.
 - 3.25 percent ceiling on T-bill rates, rendering them unattractive to commercial banks as evidenced by small portion of T-bills being held outside the Central Bank.
3. **Reforms enabling more effective liquidity management involve removing the ceilings and moving to market-based interest rates.** In particular, these include; (i) removing ceilings on outstanding domestic government securities and on interest rates; (ii) converting the CBB overdraft into marketable domestic government securities; (iii) converting all government securities to market-based interest rates; and (iv) drawing down the securities held by the CBB to sterilize the planned buildup of foreign exchange reserves. Subsequently, liquidity requirements for commercial banks could be lowered.
4. **The evaluation of the fiscal cost of the aforementioned reform has involved three steps.** First, the market-based cost of government domestic debt is estimated. Second, the income statement of the Central Bank is projected. Finally, the net fiscal cost is calculated taking into account the use of government securities for liquidity sterilization and profit transfers from the Central Bank. The costs were calculated using projections of the monetary aggregates and of the Central Bank income statement anchored by staff's medium-term projections (Box 1).

Box 1. Belize: Key Assumptions for Medium-Term Projections

- *Real GDP growth*—to gradually increase to 3¾ percent, in line with higher investment.
- *Inflation*—to stabilize at 2.5 percent after 2009.
- *Fiscal Policy*—the central government budget to be financed externally.
- *Reserve accumulation*—tight financial policies and sustained private capital inflows to enable a reserve build-up to above 3 months of imports after 2016.

¹ Emine Boz is the principal author of this paper.

- Gross fiscal cost of domestic financing by the banking sector is equal to 0.7 percent of GDP.** It corresponds to the interest payments made on the outstanding government securities and overdraft. It is calculated under two different sets of interest rate assumptions. First, the current interest rates structure is applied. Next, the cost of debt is re-calculated applying market-based interest rates assumed to have a risk premium of 400 basis points, as which the restructured Belizean bond is traded in secondary markets, above United States Government T-bills and T-notes. It is assumed that all of the existing domestic debt stock is swapped with market rate securities. At this point, the gross fiscal cost would increase to 0.9 percent of GDP.

Interest Rates (In percent)	
Current rates	
Overdraft	11.0
T-bills	3.3
T-notes	9.0
Market rates 1/	
Overdraft	11.0
T-bills	9.1
T-notes	9.3

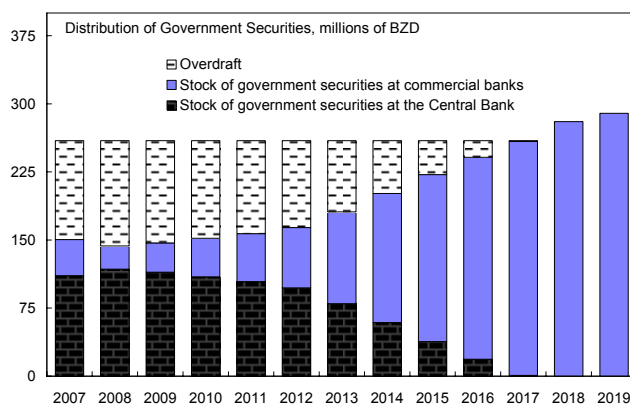
1/ Long run values.

- CBB profits transferred back to the government would cover the increase in the cost of domestic debt.** At the time all government debt is converted into instruments with market-based interest rates, gross profits of the Central Bank would increase, as it holds most of the government debt.

- Net fiscal cost of the reform is negligible in 2008.** Although gross interest costs to the government would increase significantly at the time of the reform, the bulk of these payments would be owed to the Central Bank, and subsequently transferred back as profits.

- The cost of new T-bill issuance for liquidity management will be largely associated with international reserves accumulation.** Over time, the Central Bank would draw down its holding government securities to sterilize the build-up of

reserves. With a gradual increase of commercial banks' government security holdings, the government's interest payments to them would increase. However, an external reserve accumulation assumed over the medium term would also raise the profitability of the Central Bank. This, in turn, would help reduce the net cost to the government, which nonetheless would reach 0.21 percent of GDP in 2018.



- Overall, the net additional cost of the proposed monetary strategy would be low.** This cost is estimated to be negligible in 2008, and it would increase to 0.21 percent by 2018 largely due to cover the cost of external reserves accumulation.

Fiscal Cost of Liquidity Management
Active Scenario

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
(In millions of BZD)												
Gross fiscal cost of domestic financing by the banking sector												
Current rates	0.7	0.7	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.3
Market rates	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5
Profits transferred back to the GoB												
Current rates	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Market rates	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4
Net fiscal cost of domestic financing by the banking sector												
Current rates	0.26	0.22	0.18	0.14	0.09	0.06	0.02	(0.02)	(0.06)	(0.09)	(0.14)	(0.16)
Market rates	0.26	0.23	0.20	0.16	0.14	0.13	0.13	0.13	0.12	0.11	0.08	0.05
(In percent of GDP)												
Net additional cost of switching to market rates	(0.00)	0.00	0.02	0.03	0.04	0.07	0.11	0.15	0.18	0.20	0.21	0.20
Cost of new T-bill issuance for sterilization only	-	-	-	-	-	-	-	-	-	-	-	-