INTERNATIONAL MONETARY FUND

ST. LUCIA

External and Public Debt Sustainability Analysis

Prepared by the staff of the International Monetary Fund

In consultation with World Bank Staff

July 10, 2008

This debt sustainability analysis (DSA) assesses the sustainability of St. Lucia's public and external debt. The analysis suggests that sound public finances will be key to achieving debt sustainability. Staff estimates show that public debt will remain high in the absence of continued fiscal consolidation. St. Lucia's risk of external debt distress is moderate.

I. Introduction

1. Macroeconomic performance was mixed in 2007. Growth decelerated from an annual average of 4.2 percent during 2003-06 to 1.7 percent in 2007, largely reflecting the winding down of Cricket World Cup (CWC)-related construction and declines in stayover tourist arrivals. As world food and energy prices soared, annual inflation rose to 6.8 percent by end-2007. However, substantial progress was made in reducing fiscal imbalances. With higher current revenue and lower capital expenditure, a primary surplus of 0.8 percent of GDP was achieved, representing a fiscal adjustment of 3½ percent of GDP from 2006. As a result of this fiscal improvement, the public debt-to-GDP ratio increased only slightly to 70 percent of GDP.

II. Underlying DSA Assumptions

2. The **baseline scenario** assumes that the authorities will continue the fiscal policy of sizeable overall imbalances that are financed commercially. In the medium term, growth is projected at around 4.4 percent, driven by hotel construction activities and tourism. Under this scenario, the central government primary deficit (including grants) deteriorates gradually, peaking at 1.9 percent of GDP in 2009. Compared to the 2007 Article IV Consultation DSA, growth projections remain similar while fiscal projections are more conservative given the progress in reducing fiscal imbalances in 2007.

Box 1. Baseline Macroeconomic Assumptions (2008–28)

- Real GDP growth is projected to average about 4½ percent, consistent with the stronger growth observed in the 2002-06 and reflecting the ongoing large expansion of tourism accommodation capacity. With rapidly rising world food and fuel prices, inflation is projected to remain in the high single digits in 2008 before returning to low historical averages consistent with the quasi-currency board arrangement.

- The primary balance of the central government (including grants) is projected to deteriorate gradually, peaking at 1.9 percent of GDP by 2009. On the revenue side, new measures would be limited to the introduction of a revenue-positive VAT. On the expenditure side, the wage bill would remain constant (as a share of GDP) and capital expenditure would rise steadily to 14 percent of GDP by 2011, before declining slightly to 13 percent of GDP for 2012 and beyond.

- Given uncertainty surrounding the disbursements of the European Union assistance, annual grants are conservatively projected at 0.3 percent of GDP.

- The current account deficit is projected to remain elevated and largely financed by foreign direct investment (FDI) in 2008. However, as FDI-related imports wind down and tourist receipts pick up over the medium term, the current account deficit is expected to return gradually to a more sustainable level. The projected increase in tourist arrivals is underpinned by an expansion of hotel capacity of 40 percent over the medium-term.

- FDI is assumed to remain high for 2008-10, and gradually return to its historical average of 11 percent of GDP by 2013.

III. Evaluation of Public Sector Debt Sustainability

3. At end-2007 public debt stood at about 70 percent of GDP—nearly twice the level of a decade ago—albeit still the lowest in the ECCU. Expansionary fiscal polices in 2001–02 sharply raised the fiscal deficit and debt-to-GDP ratio. In subsequent years the authorities strengthened revenue administration and tightened capital expenditure, enabling them to slow the pace of public debt build up.

4. External debt represents 46 percent of GDP, while domestic debt represents 24 percent of GDP. Regarding the stock of external debt, the largest share is owed to multilateral and bilateral creditors (around 22 percent of GDP, with the Caribbean Development Bank holding around three fifths of that share), followed by commercial creditors (around 12 percent of GDP). In the future, most of new external requirements are expected to be financed commercially through the ECCU's Regional Government Securities

Market (RGSM). On the domestic front, commercial banks are the most important lenders to the government.

Baseline scenario

5. Under the baseline scenario St. Lucia's public debt would remain high, at about 73 percent of GDP by 2013. The debt-to-GDP ratio would increase marginally to around 75 percent by 2028. All other indicators of debt sustainability follow a similar pattern of stagnation, with the NPV of debt-to revenue ratio remaining at over 230 percent by 2028.

Alternative scenarios

Adjustment scenario

6. Under this scenario a fiscal adjustment would lead to an average primary surplus of about 1½ percent of GDP over the medium term. This adjustment would restore the primary surplus to its average level during 1985-2000 and would require additional revenue enhancing measures, including the introduction of a market valuation-based property tax and a more flexible fuel pricing regime, as well as wage restraint and prioritization of capital expenditures.

7. Under this adjustment scenario St. Lucia's public debt-to-GDP ratio would decline to below 60 percent—the ECCB's benchmark—by 2012. The debt-to-GDP ratio would decline further to around 40 percent by 2028. All other indicators of debt sustainability would show a steady improvement, particularly with debt service as a share of current revenue falling from around 23 percent in 2008 to around 10 percent by 2028.

Changes in growth and primary balance

8. The sensitivity analysis (which is applied to the baseline scenario) shows that economic growth and the primary balance are the two key drivers of St. Lucia's debt dynamics. If growth is assumed to remain at one standard deviation below the baseline, the NPV of debt-to-GDP ratio will reach 118 percent by 2028 (Table 2, Scenario A3). If both annual growth and primary deficit were to be kept at historical levels (2.2 percent and 0.9 percent of GDP, respectively), the NPV of debt-to-GDP ratio would reach 112 percent by 2028 (Table 2, Scenario A1).

9. The sensitivity analysis also highlights the importance of containing expenditure if economic growth were to decline. Alternative Scenario B1, in which growth is assumed to decline to -0.6 percent for 2009 and 2010, indicates that the NPV of debt-to-GDP ratio will increase rapidly, reaching 116 percent by 2028. This is because as output slows, fiscal revenues are assumed to remain constant as a share of GDP while expenditures are assumed to remain constant in nominal terms relative to the baseline scenario, producing a substantial

and permanent deterioration of the primary balance. This, in turn, increases debt ratios markedly.

Natural disaster

10. The impact of a natural disaster on St. Lucia's debt dynamics was also analyzed (Table 2, Alternative Scenario A4). Under this scenario (which is again applied to the baseline scenario) it is assumed that a hurricane increases the primary deficit of the government by 3 percent of GDP in 2009, 2010 and 2011, before reverting to its baseline levels thereafter.[1] This shock accelerates the deterioration of the NPV of debt-to-GDP ratio, reaching 90 percent by 2011.

IV. Evaluation of External Debt Sustainability

11. St. Lucia's external debt sustainability analysis includes only public sector debt, since data on private sector external borrowing are not available. As a result, the external DSA follows a similar pattern to that of the public sector DSA.

12. Under the baseline scenario the NPV of external debt remains at about 43 percent of GDP, below the prudential threshold of 50 percent, throughout the projection period.[2] All other debt and debt service ratios also remain relatively stable and below relevant indicative thresholds.

13. Sensitivity analysis (which is applied to the baseline scenario) shows that the level of external debt is most responsive to a large shock of nominal exchange rate depreciation as the majority of external debt is denominated in U.S. dollars. With a one-time 30 percent nominal depreciation in 2009, the NPV of debt-to-GDP ratio will jump to 60 percent, breaching the debt-to-GDP threshold of 50 percent (Table 4, Scenario B6). Similarly, lower export growth and a shortfall in non-debt creating flows would also breach the debt-to-GDP threshold of 50 percent (Table 4, Scenarios B2 and B4, respectively). The export shortfall would engender a long-lived hump in the debt service-to-exports ratio, which is indicative of some liquidity concerns (Table 4, Scenario B2). The level of external debt is also responsive to a negative shock on growth and costlier terms of financing (Table 4, Scenarios B1 and A2, respectively), but these shocks do not lead to a breach of thresholds.

---

[1] The actual impact of this shock could be lower given the recent participation of St. Lucia in the Caribbean Catastrophe Insurance Facility—a regional insurance pool organized by the World Bank.

[2] The DSA uses policy-dependent external debt-burden indicators. Policy performance is measured by the Country Policy and Institutional Assessment (CPIA) index, compiled annually by the World Bank. The CPIA divides countries into three performance categories (strong, medium, and poor) based on the overall quality of its macroeconomic policies, with strong performers having higher prudential thresholds than poor performers. St. Lucia is classified by the CPIA as a strong performer, with prudential thresholds on NPV of debt-to-GDP and debt-to-exports ratios of 50 and 200 percent, respectively.

V. CONCLUSIONS

14. Absent a fiscal adjustment that would return the primary balance to its historical average, imbalances for the overall public sector would remain, leaving the ECCB's public debt benchmark of 60 percent of GDP out of reach for St. Lucia. Staff analysis shows that, with a fiscal adjustment bringing the average primary surplus (including grants) to around 1½ percent of GDP over the medium term (close to the long-term average), St. Lucia would reach the ECCB's target by 2012 and continue to bring down its public debt steadily to 40 percent of GDP by 2028.

15. On the external front St. Lucia faces a moderate risk of debt distress. The baseline scenario indicates no breach of any thresholds. Various stress tests suggest several breaches of the NPV of debt-to-GDP threshold. However, as private external debt data are unavailable, some caution should be used when interpreting these results, which cover public external debt only.

Table 1. St. Lucia: Public Sector Debt Sustainability Framework, Baseline Scenario, 2005–28
(In percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections								
	2005	2006	2007	Historical Average 1/	Standard Deviation 1/	2008	2009	2010	2011	2012	2013	Average 2008–13	2018	2028	Average 2014–28
Public sector debt 2/	67.0	66.1	70.5			69.6	70.7	71.6	73.3	73.3	72.9		74.0	74.7	
Of which															
Foreign-currency denominated	47.4	44.8	46.0			43.8	43.8	43.7	43.9	43.7	43.5		42.9	41.9	
Change in public sector debt	1.0	-0.9	4.4			-0.9	1.1	0.9	1.6	0.0	-0.4		0.2	0.0	
Identified debt-creating flows	0.3	2.0	0.9			-0.8	1.3	1.0	1.7	0.0	-0.4		0.2	-0.1	
Primary deficit	3.1	2.6	-0.9	0.9	2.5	0.1	1.9	1.3	1.7	0.5	0.1	1.0	0.6	0.6	0.7
Revenue and grants	25.9	27.1	28.7			30.3	29.9	31.2	31.5	31.6	31.8		31.8	31.7	
Of which															
Grants	0.3	0.3	0.2			1.4	0.3	0.3	0.3	0.3	0.3		0.3	0.3	
Primary (noninterest) expenditure	29.0	29.7	27.9			30.4	31.9	32.5	33.2	32.1	32.0		32.5	32.4	
Automatic debt dynamics	-2.8	-0.5	1.8			-0.9	-0.7	-0.4	-0.1	-0.4	-0.5		-0.5	-0.7	
Contribution from interest rate/growth differential	-2.0	-1.4	1.1			0.4	0.2	0.1	0.0	-0.3	-0.4		-0.4	-0.6	
Of which															
Contribution from average real interest rate	0.8	1.7	2.2			2.0	2.3	2.5	2.8	2.8	2.7		2.7	2.7	
Of which															
Contribution from real GDP growth	-2.8	-3.2	-1.1			-1.6	-2.1	-2.4	-2.7	-3.1	-3.1		-3.1	-3.3	
Contribution from real exchange rate depreciation	-0.8	0.9	0.7			-1.4	-0.9	-0.5	-0.1	-0.1	-0.1		...	...	
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	
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	
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	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	0.8	-2.9	3.5			0.0	-0.2	0.0	0.0	0.0	0.0		0.0	0.0	
NPV of public sector debt	67.0	66.1	70.5			69.6	70.7	71.6	73.3	73.3	72.9		74.0	74.7	
Of which															
Foreign-currency denominated	47.4	44.8	46.0			43.8	43.8	43.7	43.9	43.7	43.5		42.9	41.9	
Of which															
External	47.4	44.8	46.0			43.8	43.8	43.7	43.9	43.7	43.5		42.9	41.9	
NPV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Gross financing need 3/	11.7	10.4	11.8			7.3	8.6	8.0	8.1	6.8	6.4		7.4	7.8	
NPV of public sector debt-to-revenue and grants ratio (in percent)	258.2	243.9	245.4			229.6	236.2	229.5	233.0	231.7	229.0		232.4	235.2	
NPV of public sector debt-to-revenue ratio (in percent)	260.7	246.3	246.8			241.1	238.6	231.8	235.2	233.9	231.1		234.6	237.5	
Of which															
External 4/	184.6	167.0	161.2			151.6	147.9	141.5	140.9	139.4	138.1		136.0	133.4	
Debt service-to-revenue and grants ratio (in percent) 5/	33.4	28.8	44.2			23.8	22.4	21.5	20.4	20.1	19.6		21.3	22.7	
Debt service-to-revenue ratio (in percent) 5/	33.7	29.1	44.5			25.0	22.6	21.7	20.6	20.3	19.8		21.5	22.9	
Primary deficit that stabilizes the debt-to-GDP ratio	2.0	3.5	-5.2			1.0	0.8	0.4	0.1	0.5	0.5		0.5	0.7	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	4.4	4.9	1.7	2.2	2.8	2.3	3.1	3.5	4.0	4.4	4.4	3.6	4.4	4.7	4.5
Average nominal interest rate on forex debt (in percent)	4.9	5.0	5.5	3.7	1.5	5.9	6.2	6.1	6.2	6.1	6.1	6.1	6.1	6.1	6.2
Average real interest rate on domestic currency debt (in percent)	0.5	4.8	4.5	3.9	2.6	1.0	1.9	2.9	3.8	3.6	3.5	2.8	3.6	3.5	3.6
Real exchange rate depreciation (in percent, + indicates depreciation)	-1.8	2.0	1.5	-0.6	2.7	-2.9	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	5.1	1.1	1.1	3.0	2.6	5.0	4.0	3.0	2.2	2.2	2.2	3.1	2.2	2.2	2.2
Growth of real primary spending (deflated by GDP deflator, in percent)	13.5	7.3	-4.5	3.6	9.6	11.6	8.0	5.7	6.0	0.9	4.1	6.0	4.4	4.2	4.6
Grant element of new external borrowing (in percent)	...	...	6.9	6.9	...	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	...

Sources: St. Lucia authorities; and Fund staff estimates and projections.

1/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

2/ Nonfinancial public sector gross debt, government guaranteed debt, and government nonguaranteed debt.

3/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period.

4/ Revenues excluding grants.

5/ Debt service is defined as the sum of interest and amortization of medium and long-term debt.

Table 2. St. Lucia: Sensitivity Analysis for Key Indicators of Public Debt 2008–28

	Projections							
	2008	2009	2010	2011	2012	2013	2018	2028
NPV of Debt-to-GDP Ratio								
Baseline	70	71	72	73	73	73	74	75
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	70	70	72	74	76	78	89	112
A2. Primary balance is unchanged from 2008	70	69	69	69	69	68	68	65
A3. Permanently lower GDP growth 1/	70	71	73	76	77	78	88	118
A4. Natural disaster 2/	70	76	82	90	89	88	87	85
A5. Adjustment scenario	69	67	64	62	59	55	49	40
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009–10	70	74	81	84	87	88	100	116
B2. Primary balance is at historical average minus one standard deviations in 2009–10	70	72	75	76	76	76	77	77
B3. Combination of B1–B2 using one half standard deviation shocks	70	72	76	78	78	77	78	78
B4. One-time 30 percent real depreciation in 2009	70	90	91	92	92	92	93	96
B5. 10 percent of GDP increase in other debt-creating flows in 2009	70	80	81	82	82	81	82	81
NPV of Debt-to-Revenue Ratio 3/								
Baseline	230	236	230	233	232	229	232	235
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	230	235	230	235	240	244	277	352
A2. Primary balance is unchanged from 2008	230	231	221	219	218	215	212	297
A3. Permanently lower GDP growth 1/	230	238	234	240	243	244	276	372
A4. Natural disaster 2/	230	254	264	286	281	276	273	267
A5. Adjustment scenario	221	211	196	188	177	166	144	117
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009–10	230	248	258	268	274	277	312	367
B2. Primary balance is at historical average minus one standard deviations in 2009–10	230	241	240	243	242	239	241	242
B3. Combination of B1–B2 using one half standard deviation shocks	230	242	244	247	245	242	245	246
B4. One-time 30 percent real depreciation in 2009	230	301	291	294	292	288	293	301
B5. 10 percent of GDP increase in other debt-creating flows in 2009	230	267	258	261	259	256	257	254
Debt Service-to-Revenue Ratio 3/								
Baseline	24	22	21	20	20	20	21	23
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	24	23	21	20	20	21	26	34
A2. Primary balance is unchanged from 2008	24	22	20	18	17	18	20	27
A3. Permanently lower GDP growth 1/	24	23	22	21	21	21	26	38
A4. Natural disaster 2/	24	23	21	20	24	22	24	25
A5. Adjustment scenario	23	20	19	17	16	15	13	10
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009–10	24	23	24	25	26	25	29	38
B2. Primary balance is at historical average minus one standard deviations in 2009–10	24	22	23	23	21	20	22	24
B3. Combination of B1-B2 using one half standard deviation shocks	24	23	23	22	21	21	22	24
B4. One-time 30 percent real depreciation in 2009	24	24	26	25	25	25	27	32
B5. 10 percent of GDP increase in other debt-creating flows in 2009	24	22	32	25	22	21	23	26

Sources: St. Lucia authorities; and Fund staff estimates and projections.
1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of 20 (i.e., the length of the projection period).
2/ Assumes that a hurricane hits St. Lucia, increasing its primary deficit by 3 percent of GDP for 2009, 2010 and 2011, and reducing growth to zero.
3/ Revenues are defined inclusive of grants.

Table 3. St. Lucia: External Debt Sustainability Framework, Baseline Scenario, 2005–28 1/
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 1/	Standard Deviation 1/	Projections									
	2005	2006	2007			2008	2009	2010	2011	2012	2013	2008-13 Average	2018	2028	2014-28 Average
External debt (nominal) 2/	**47.4**	**44.8**	**46.0**			**43.8**	**43.8**	**43.7**	**43.9**	**43.7**	**43.5**		**42.9**	**41.9**	
Of which															
Public and publicly guaranteed (PPG)	47.4	44.8	46.0			43.8	43.8	43.7	43.9	43.7	43.5		42.9	41.9	
Change in external debt	1.3	-2.6	1.2			-2.2	0.0	-0.1	0.2	-0.2	-0.2		-0.1	-0.3	
Identified net debt-creating flows	4.1	1.9	3.5			4.7	3.7	0.6	3.7	2.9	5.0		5.3	5.3	
Noninterest current account deficit	**15.0**	**27.6**	**26.7**	**16.4**	**6.4**	**25.8**	**24.1**	**19.5**	**17.8**	**17.2**	**15.3**		**15.6**	**15.7**	15.4
Deficit in balance of goods and services	10.3	25.2	24.1			23.2	21.6	17.0	15.3	14.7	12.9		13.0	12.7	
Exports	56.8	48.7	50.7			53.7	56.0	59.3	59.4	58.8	59.4		57.6	54.1	
Imports	67.1	73.9	74.8			76.9	77.6	76.3	74.7	73.6	72.4		70.6	66.8	
Net current transfers (negative = inflow)	-1.5	-1.3	-1.3	-2.0	0.6	-1.3	-1.3	-1.4	-1.4	-1.4	-1.5		-1.3	-0.8	-1.2
Of which															
Official	0.1	0.0	0.1			0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.0	
Other current account flows (negative = net inflow)	6.1	3.7	3.9			3.9	3.9	3.9	3.9	3.9	3.9		3.9	3.9	
Net FDI (negative = inflow)	**-8.9**	**-25.1**	**-24.4**	**-13.0**	**6.6**	**-22.7**	**-21.8**	**-20.0**	**-15.0**	**-15.0**	**-11.0**		**-11.0**	**-11.0**	-11.0
Endogenous debt dynamics 3/	**-2.0**	**-0.6**	**1.2**			**1.6**	**1.3**	**1.1**	**0.9**	**0.7**	**0.7**		**0.7**	**0.6**	
Contribution from nominal interest rate	2.1	2.1	2.4			2.5	2.5	2.5	2.5	2.5	2.5		2.5	2.4	
Contribution from real GDP growth	-1.8	-2.2	-0.7			-1.0	-1.2	-1.4	-1.6	-1.8	-1.8		-1.8	-1.8	
Contribution from price and exchange rate changes	-2.3	-0.5	-0.5			…	…	…	…	…	…		…	…	
Residual (3-4) 4/	**-2.8**	**-4.5**	**-2.3**			**-6.9**	**-3.6**	**-0.7**	**-3.5**	**-3.1**	**-5.2**		**-5.4**	**-5.5**	
Of which															
Exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
NPV of external debt 5/	...	...	44.5			42.4	42.6	42.6	42.9	42.8	42.7		42.6	42.0	
In percent of exports	...	...	87.7			78.9	76.1	71.9	72.2	72.7	71.8		74.0	77.5	
NPV of PPG external debt	**...**	**...**	**44.5**			**42.4**	**42.6**	**42.6**	**42.9**	**42.8**	**42.7**		**42.6**	**42.0**	
In percent of exports	**...**	**...**	**87.7**			**78.9**	**76.1**	**71.9**	**72.2**	**72.7**	**71.8**		**74.0**	**77.5**	
In percent of government revenues	**...**	**...**	**155.0**			**139.8**	**142.4**	**136.6**	**136.4**	**135.2**	**134.2**		**133.9**	**132.2**	
Debt service-to-exports ratio (in percent)	**6.8**	**7.7**	**15.8**			**7.7**	**7.3**	**6.9**	**7.0**	**7.0**	**6.9**		**8.1**	**9.6**	
PPG debt service-to-exports ratio (in percent)	**6.8**	**7.7**	**15.8**			**7.7**	**7.3**	**6.9**	**7.0**	**7.0**	**6.9**		**8.1**	**9.6**	
PPG debt service-to-revenue ratio (in percent)	**14.8**	**13.8**	**27.8**			**13.6**	**13.7**	**13.1**	**13.2**	**13.1**	**12.9**		**14.7**	**16.4**	
Total gross financing need (billions of U.S. dollars)	0.1	0.1	0.1			0.1	0.1	0.1	0.1	0.1	0.2		0.2	0.4	
Noninterest current account deficit that stabilizes debt ratio	13.7	30.2	25.5			28.0	24.1	19.6	17.6	17.4	15.5		15.7	16.0	
Key macroeconomic assumptions															
Real GDP growth (in percent)	4.4	4.9	1.7	2.2	2.8	2.3	3.1	3.5	4.0	4.4	4.4	3.6	4.4	4.7	4.5
GDP deflator in U.S. dollar terms (change in percent)	5.1	1.1	1.1	3.0	2.6	5.0	4.0	3.0	2.2	2.2	2.2	3.1	2.2	2.2	2.2
Effective interest rate (percent) 6/	5.0	4.7	5.5	3.7	1.4	5.9	6.2	6.1	6.2	6.1	6.1	6.1	6.1	6.1	6.2
Growth of exports of goods and services (U.S. dollar terms, in percent)	7.8	-9.0	7.1	3.8	13.1	13.7	11.8	12.8	6.4	5.6	7.9	9.7	6.0	7.1	6.1
Growth of imports of goods and services (U.S. dollar terms, in percent)	19.0	17.0	4.1	6.1	10.8	10.3	8.2	4.8	4.0	5.0	5.0	6.2	6.1	8.4	6.2
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aid flows (in billions of U.S. dollars) 7/	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Of which															
Grants	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Of which															
Concessional loans	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			1.4	0.3	0.3	0.3	0.3	0.3		0.3	0.3	0.3
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			36.6	6.1	6.7	6.5	6.8	6.7		5.9	5.3	5.7
Memorandum items:															
Nominal GDP (billions of U.S. dollars)	0.9	0.9	1.0			1.0	1.1	1.2	1.3	1.3	1.4		2.0	3.8	
(NPVt-NPVt-1)/GDPt-1 (in percent)						1.0	3.3	2.8	2.9	2.7	2.8	2.6	2.9	2.7	2.8

Source: Fund staff simulations.

1/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

2 Includes public sector guaranteed and non-guaranteed external debt. Data on private external debt stocks and flows are unavailable.

3/ Derived as [r - g - r(1+g)]/(1+g+r+gr) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and r = growth rate of GDP deflator in U.S. dollar terms.

4/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

5/ Assumes that NPV of private sector debt is equivalent to its face value.

6/ Current-year interest payments divided by previous period debt stock.

7 Defined as grants, concessional loans, and debt relief.

8/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the NPV of new debt).

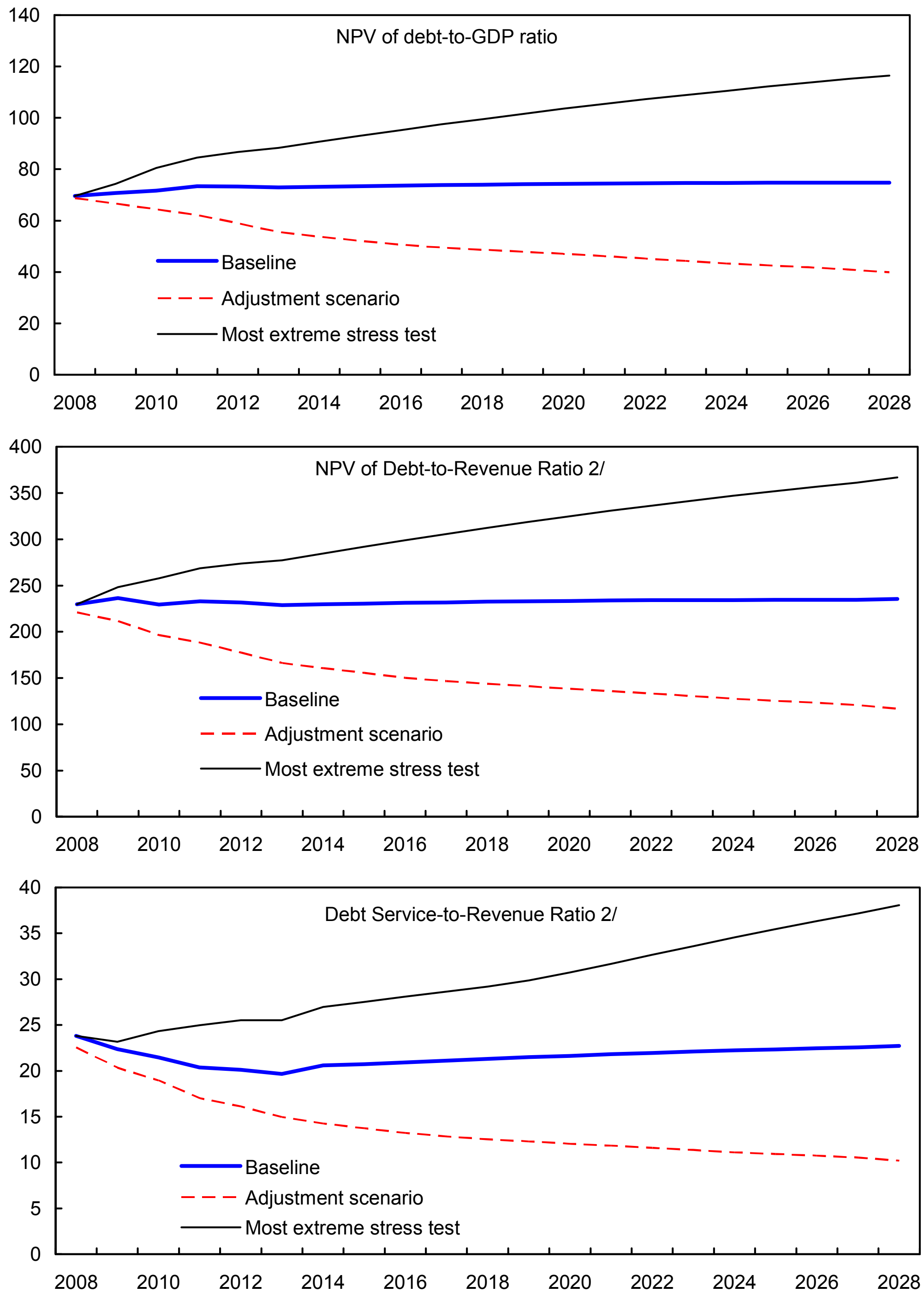
Table 4. St. Lucia: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2008–28
(In percent)

	Projections							
	2008	2009	2010	2011	2012	2013	**2018**	2028
NPV of debt-to-GDP ratio								
Baseline	42	43	43	43	43	43	**43**	42
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009–28 1/	42	44	47	47	48	46	**42**	48
A2. New public sector loans on less favorable terms in 2009–28 2/	42	43	43	44	44	44	**46**	49
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009–10	42	44	46	46	46	46	**46**	45
B2. Export value growth at historical average minus one standard deviation in 2009–10 3/	42	53	72	68	63	59	**44**	42
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009–10	42	44	45	46	45	45	**45**	45
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009–10 4/	42	58	69	65	61	57	**44**	42
B5. Combination of B1–B4 using one-half standard deviation shocks	42	52	69	66	62	59	**47**	46
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	42	60	60	60	60	60	**60**	59
NPV of debt-to-exports ratio								
Baseline	79	76	72	72	73	72	**74**	77
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009–28 1/	79	78	80	80	81	78	**72**	89
A2. New public sector loans on less favorable terms in 2009–28 2/	79	77	73	73	74	74	**79**	90
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009–10	79	76	72	72	73	72	**74**	77
B2. Export value growth at historical average minus one standard deviation in 2009–10 3/	79	117	187	176	165	152	**117**	119
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2009–10	79	76	72	72	73	72	**74**	77
B4. Net nondebt creating flows at historical average minus one standard deviation in 2009–10 4/	79	103	117	110	104	96	**76**	78
B5. Combination of B1–B4 using one-half standard deviation shocks	79	102	143	136	130	121	**101**	103
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	79	76	72	72	73	72	**74**	77
Debt service-to-exports ratio								
Baseline	8	7	7	7	7	7	**8**	10
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009–28 1/	8	7	7	8	8	8	**7**	9
A2. New public sector loans on less favorable terms in 2009–28 2/	8	7	6	7	7	7	**10**	8
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009–10	8	7	7	7	7	7	**8**	10
B2. Export value growth at historical average minus one standard deviation in 2009–10 3/	8	9	16	25	25	23	**14**	15
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009–10	8	7	7	7	7	7	**8**	10
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009–10 4/	8	7	12	16	15	15	**9**	10
B5. Combination of B1–B4 using one-half standard deviation shocks	8	8	12	18	18	17	**12**	13
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	8	7	7	7	7	7	**8**	10
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	0	0	0	0	0	0	**0**	0

Source: Fund staff projections and simulations.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and nondebt creating flows.
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline, while grace and maturity periods are the same as in the baseline.
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Figure 1. St. Lucia: Indicators of Public Debt Under Alternative Scenarios, 2008-28 1/

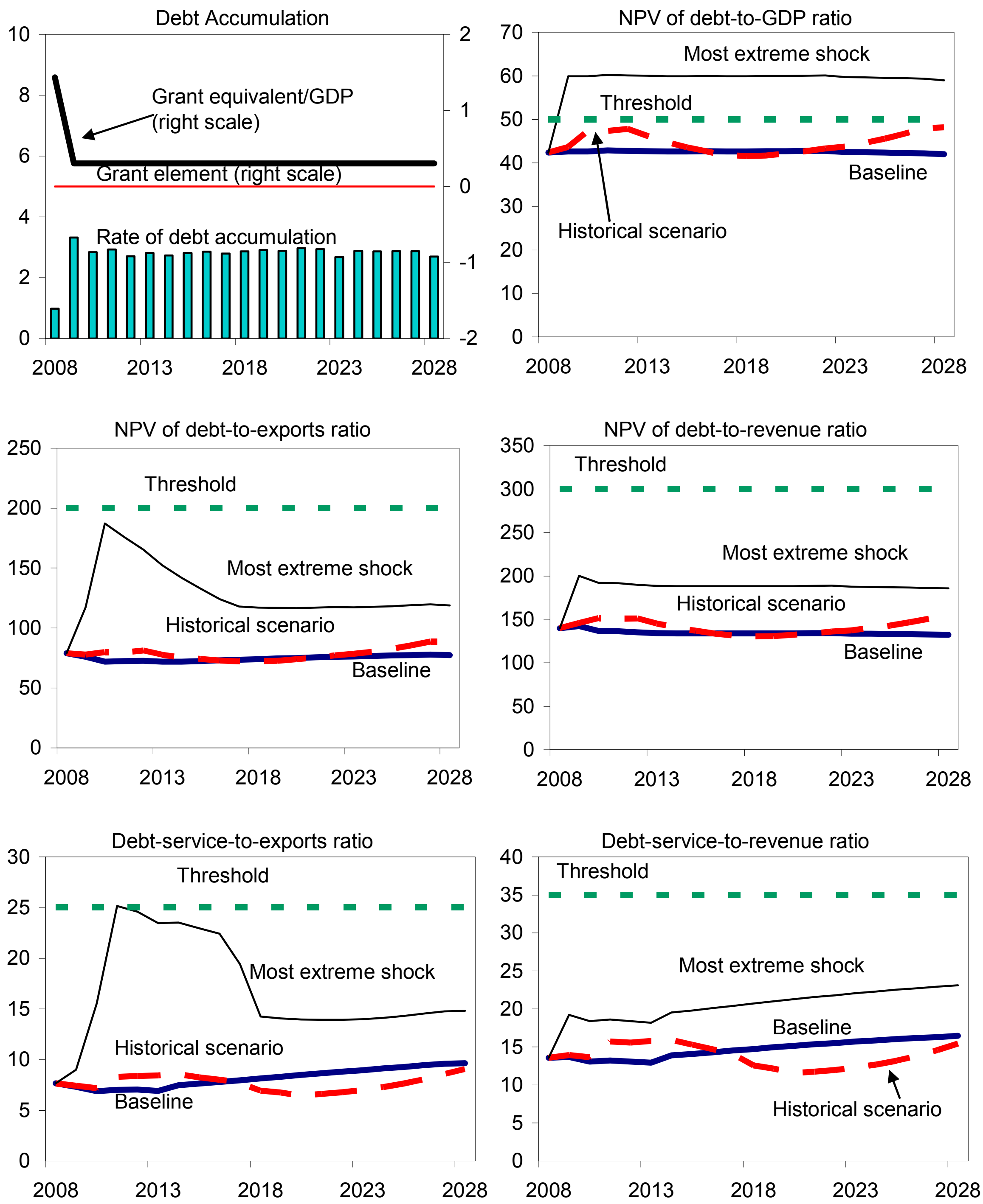


Source: Fund staff projections and simulations.

1/ Most extreme stress test is test that yields highest ratio in 2018.

2/ Revenue including grants.

Figure 2. St. Lucia: Indicators of Public and Publicly Guaranteed External Debt
Under Alternative Scenarios, 2008-28



Source: Fund staff projections and simulations.