



INTERNATIONAL MONETARY FUND

# ST. VINCENT AND THE GRENADINES

## STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

October 13, 2011

Approved By  
**David Vegara and  
Jan Kees Martijn**

Prepared by the Staff of the International Monetary Fund.

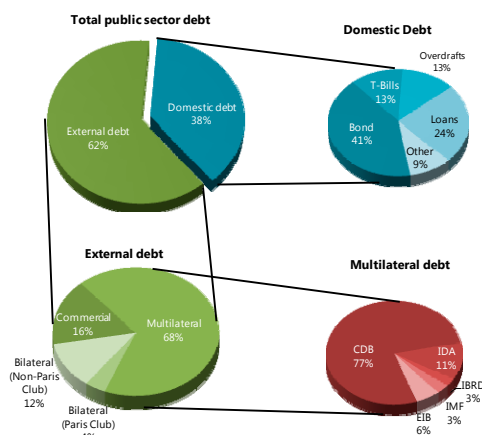
*The current Debt Sustainability Analysis (DSA) indicates that, under the baseline scenario discussed in the staff report, St. Vincent and the Grenadines' risk of external debt distress remains moderate. Despite rising in recent years, the public debt to GDP ratio is projected to resume to a sustainable trajectory over the medium term in light of the authorities' commitment to undertake fiscal consolidation measures and the projected rebound in economic growth.*

## INTRODUCTION

1. **St. Vincent and the Grenadines' economy has been buffeted by a string of adverse shocks in the last 3 years.** Economic activity contracted by about 1.6 percent per annum, on average, during 2008–10, reflecting the impacts of the global slowdown that began in 2007, the international commodity price increases in 2008–09, and more recently the draught in the first half of 2010 and Hurricane Tomas at end-2010. Government efforts to counter these impacts resulted in a reversal of the 1.1 percent of GDP primary surplus in 2008 to a deficit of 2.9 percent of GDP in 2010. At the same time, the public sector debt-to-GDP ratio increased by 9.8 percentage points over the two year period to 66.8 percent in 2010. External debt constituted around 62 percent of the public sector debt at end-2010, of which about two-thirds is multilateral debt. The Caribbean Development Bank (CDB) is owed the bulk of the multilateral debt.<sup>1</sup> The central government owed about 83 percent of the total public sector debt at end-2010, with the rest owed by state-owned enterprises

<sup>1</sup> CDB's share at end-2010 was inflated partly by the EC\$100 million disbursement made in 2010 to help facilitate the privatization of the former National Commercial Bank.

### Public Sector Debt, end-2010 (In percent)



2. **The fiscal stance for this year is expected to be tighter than earlier projections, reflecting financing shortfalls.** Revenue outturns and external disbursements for the first 7 months of the year fell short of expectations. While marginal improvements in revenues are expected, the outlook for external disbursement remains gloomy for the rest of the year. As usual, the brunt of financing shortfalls will fall on capital expenditure, where less than half of the planned projects are expected to be executed. The overall deficit is expected to be lower by 1.4 percentage points of GDP than earlier projections and the central government debt for 2011 is projected at 56 percent of GDP, 2 percentage points lower than projected at the time of the RCF.

## UNDERLYING DSA ASSUMPTIONS

### 3. The DSA analysis is based on the following macroeconomic framework, assuming that the authorities will implement the policies discussed in the staff report.

- Growth and Inflation:** While expected to decline by 0.4 percent this year, the economy is projected to grow by 2 percent in 2012, supported by a rebound in agriculture and construction activities and modest recovery in tourism and FDI flows. Over the medium term, growth is projected to reach its potential level of 3½ percent, reflecting improved employment and consumption conditions in tourism and FDI source countries. End-period inflation is projected to reach around 3.1 percent in 2011, reflecting the uptick in international food and fuel prices. Over the medium term, inflation is projected to revert to its long-term path of around 2½ percent, anchored by the currency board arrangement.
- Fiscal Balance:** While the central government's primary balance is projected to register a deficit of 0.3 percent of GDP in 2011, over the medium-term it is assumed that the primary balance will register surpluses in the range of 2 percent of GDP, in line with the authorities' commitment in the context of the recent

RCF discussions.<sup>2</sup> Revenue is projected to increase over the medium term, reflecting the authorities' plan to implement a number of revenue enhancing measures such as implementation of market-based property tax, improvements in compliance and enhancement of tax audits, and streamlining exemptions. Central government external grants, which peaked in 2009, are projected to decline to around 2 percent of GDP over the medium term and further fall to 1½ percent of GDP in the long term. On the other hand, expenditures in percent of GDP are assumed to gradually fall to the pre-crisis level, reflecting the planned expenditure saving measures discussed in the staff report.

- External Sector:** The current account deficit is projected to narrow in 2011 primarily due to falls in imports and is expected to continue narrowing to around 16.7 percent of GDP by 2016. Tourism and FDI are assumed to rebound as economic recovery strengthens in source countries (mainly North America and Europe), over the medium term. The grant element of new external borrowing is projected to fall over the medium to long term, reflecting

<sup>2</sup> The fiscal balance numbers discussed in the assumptions reflect only that of central government, whereas the DSA includes both the central government and state-owned enterprises. The primary deficit for the consolidated public sector, that is, including both the central government and the state owned enterprises, is somewhat higher in the short-term reflecting increased capital spending by the electricity company and the International Airport Development Corporation.

difficulty of accessing concessional resources as per capita income increases, however, the grant element will continue to remain high in the near to medium term

in line with the central government's commitment not to borrow on non-concessional terms.

## EVALUATION OF PUBLIC SECTOR DEBT SUSTAINABILITY

**4. Although the public sector debt has risen in recent years, the authorities' planned fiscal measures are expected to ensure debt sustainability over the medium-term.** The public sector debt-to-GDP ratio is projected to peak at 72 percent by 2013, the year when the International Airport project is expected to be completed. The debt trajectory is expected to start a downward trend afterwards, reflecting fiscal consolidation measures that the authorities plan to take combined with the projected rebound in economic growth, as discussed in the staff report. The public debt-to-GDP ratio is projected to fall to 54 percent of GDP by 2020, below the ECCB's recommended threshold of 60 percent.

**5. Sensitivity analysis shows that higher primary deficits are key vulnerabilities for St. Vincent and the Grenadine's debt dynamics.** Under a scenario where the primary balance is unchanged at the 2011 level, the Present Value (PV) of debt-to-GDP ratio would reach 78 percent in 2021 and 85 percent in 2031, compared to the base line levels of 49 percent and 34 percent in 2021 and 2031, respectively (Table 1b, Scenario A2). A scenario with

permanently lower GDP growth also poses a significant risk, increasing the PV of debt-to-GDP ratio to 65 percent in 2021 and 84 percent in 2031.<sup>3</sup>

<sup>3</sup> The permanently lower GDP growth is calculated as the baseline level minus one standard deviation divided by the square root of the projection period.

## EVALUATION OF EXTERNAL DEBT SUSTAINABILITY

### 6. St. Vincent and the Grenadines' risk of external debt distress remains moderate.

Under the baseline scenario, the PV of public sector external debt is estimated at 41 percent of GDP in 2011 and is projected to decline to 26 percent of GDP by 2021, well below the threshold value of 50 percent<sup>4</sup> (Table 2b). The present values of debt and debt service to- export and revenue ratios also remain below the respective thresholds under the baseline scenario. Nevertheless, some of these ratios including the PV of debt-to-GDP ratio and the PV of debt-to-export ratio would briefly exceed the respective prudential thresholds under the alternative scenario of 'most extreme shocks' (Figure 1 and Table 2b).

**7. Sensitivity analysis shows that St. Vincent and the Grenadines' external debt dynamics is vulnerable to changes in the nominal exchange rate.** The stress test assuming a one-time 30 percent nominal depreciation relative to the baseline in 2012 indicates that the

PV of external debt-to-GDP ratio would jump to 55 percent, breaching the country-specific threshold of 50 percent (Table 2b, Scenario B6).

<sup>4</sup> The DSA uses policy-dependent external debt burden indicators. Policy performance is measured by the Country Policy and Institutional Assessment Index (CPIA), compiled annually by the World Bank, categorizing countries into three groups based on the quality of their macroeconomic policies (strong, medium, and poor). St. Vincent and the Grenadines is classified as a strong performer, with the thresholds on PV of debt-to-GDP, debt-to-exports, and debt-to-revenue of 50, 200 and 300 percent, respectively.

## ALTERNATIVE SCENARIO: ADDITIONAL BORROWING FOR THE AIRPORT PROJECT

### 8. **Additional borrowing in commercial terms to finance the airport project, in the rare event that all expected grants, concessional borrowing, and revenues from land sales are not available in 2012 and 2013, would increase the risk of debt distress.**

To date, financing for the airport project has largely come from external grants and concessional loans from donors (mainly from Cuba, Venezuela, Taiwan POC with small amounts from a number of other donors) and through land sales and privatization receipts. Going forward, financing is expected to come from the same sources.<sup>5</sup> In the event that these funds are not available and the government decides to finance the project through commercial borrowing, the public sector debt-to-GDP ratio would jump to 82 percent and the PV of public sector external debt will jump to 47 percent, closer to the 50 percent threshold, in 2013. While the rating for the risk of external debt distress remains moderate, the debt dynamics is highly vulnerable to macroeconomic shocks. The PV of external debt-to-GDP ratio, the PV of external debt to export ratio, and the PV of debt

service to export ratio, would breach the corresponding country-specific thresholds under the 'extreme shocks' scenario (Figure 3).

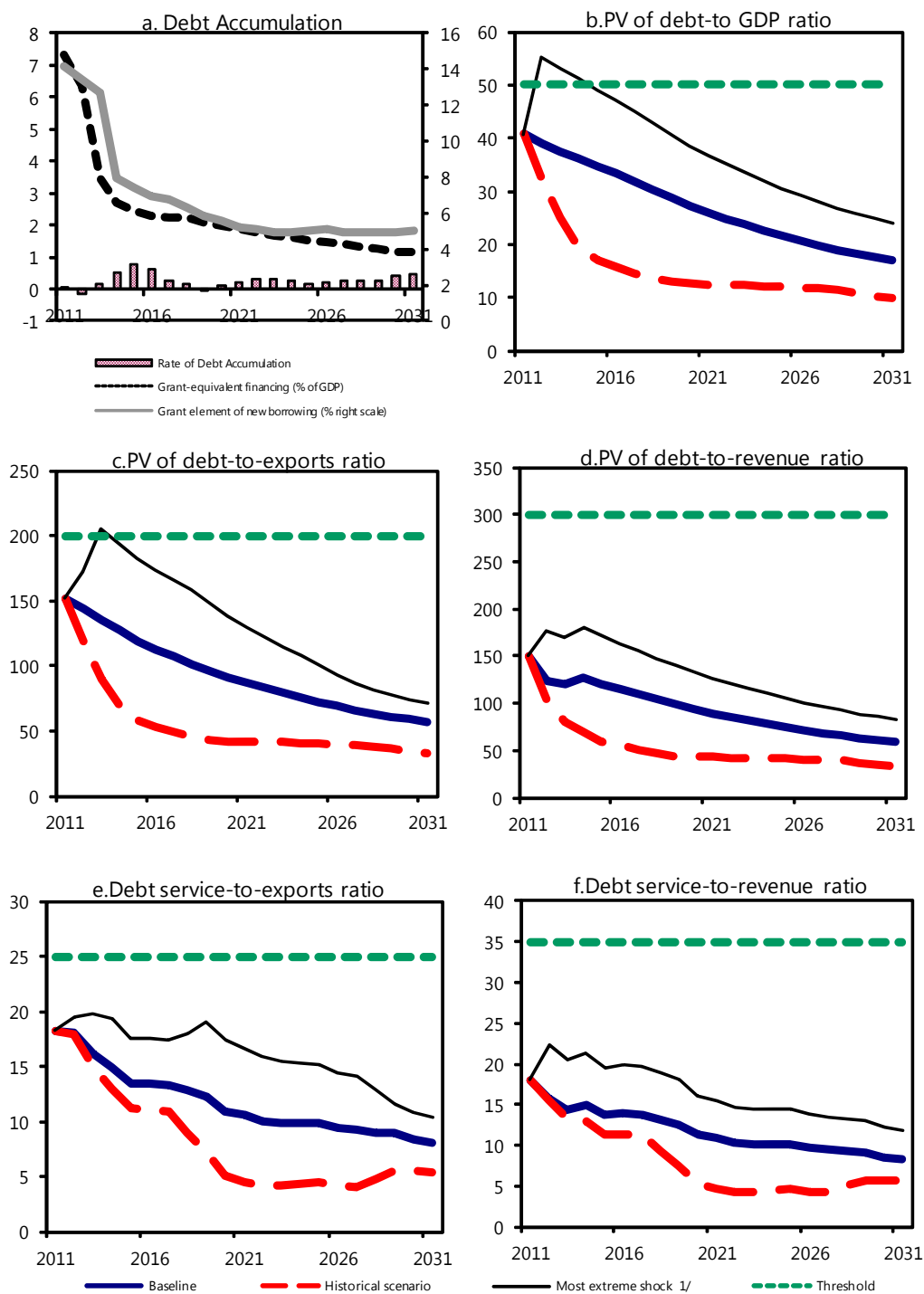
<sup>5</sup> The project is expected to be completed by end-2013.

## CONCLUSION

**9. St. Vincent and the Grenadines' public debt is projected to revert to a sustainable trajectory over the medium term and the external debt distress remains moderate.** While the fiscal situation has been deteriorating in recent years, the authorities have stepped up fiscal consolidation measures, both on the

revenue and expenditure fronts. These, along with projected improvements in economic prospects are expected to improve the fiscal situation and reduce the public debt-to-GDP ratio to 52 percent by 2021.

Figure 1. St. Vincent & the Grenadines: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2011-2031 1/

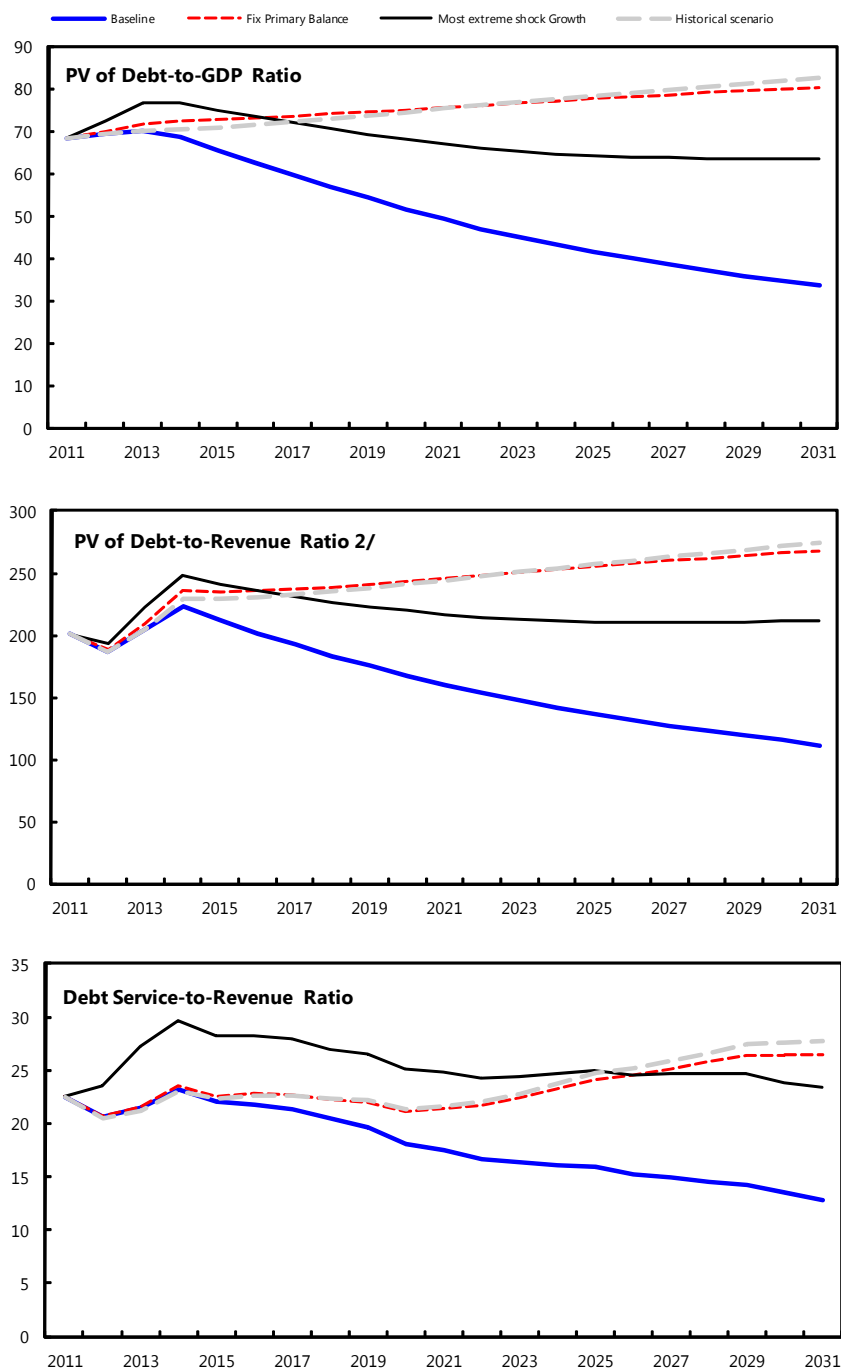


Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress shock in Figures b-f refers to a combination of shocks to key macroeconomic variables such as real GDP, primary balance, and the exchange rate.



Figure 2. St. Vincent & the Grenadines: Indicators of Public Debt Under Alternative Scenarios, 2011-2031 1/

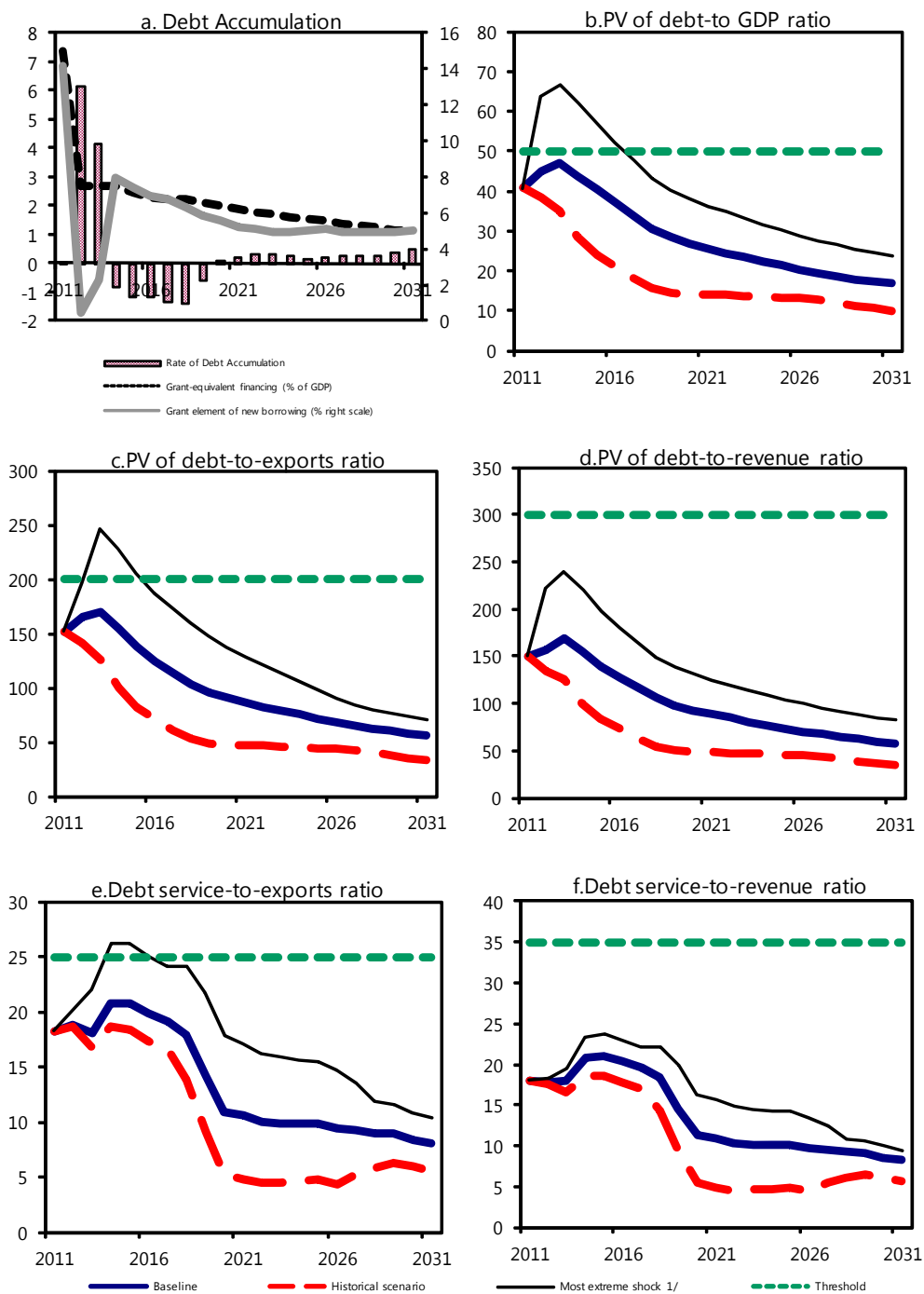


Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress shock in Figures b-f refers to a combination of shocks to key macroeconomic variables such as real GDP, primary balance, and the exchange rate.

2/ Revenues are defined inclusive of grants.

Figure 3. St. Vincent & the Grenadines: Indicators of Public and Publicly Guaranteed External Debt under 'Commercial Borrowing for the Airport' Scenario, 2011-2031 1/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress shock in Figures b-f refers to a combination of shocks to key macroeconomic variables such as real GDP, primary balance, and the exchange rate.

Table 1a. St. Vincent & the Grenadines: Public Sector Debt Sustainability Framework, Baseline Scenario, 2008-2031  
(In percent of GDP, unless otherwise indicated)

	Actual			Average <sup>5/</sup>	Standard Deviation <sup>5/</sup>	Estimate					Projections				
	2008	2009	2010			2011	2012	2013	2014	2015	2016	2011-16 Average		2021	2031
<b>Public sector debt 1/</b>	57.0	64.9	66.8			69.2	71.0	71.9	70.5	67.6	64.7		51.5	35.6	
o/w foreign-currency denominated	30.2	33.3	41.7			41.7	40.5	39.5	38.2	36.9	35.7		28.2	19.2	
Change in public sector debt	1.5	7.9	1.9			2.4	1.7	0.9	-1.4	-2.9	-2.9		-2.4	-1.2	
Identified debt-creating flows	-2.0	7.0	5.0			2.7	1.4	0.6	-1.7	-2.9	-2.9		-2.4	-1.2	
Primary deficit	-3.8	1.4	5.2	1.4	2.7	1.7	1.1	0.6	-0.7	-1.5	-1.7	-0.1	-1.5	-0.5	-1.1
Revenue and grants	36.0	34.2	31.0			34.0	37.1	34.2	30.7	30.9	31.0		30.7	30.0	
of which: grants	5.9	7.0	4.9			6.8	5.8	3.0	2.4	2.2	2.0		1.7	1.0	
Primary (noninterest) expenditure	32.1	35.6	36.3			35.7	38.3	34.9	30.0	29.4	29.3		29.2	29.4	
Automatic debt dynamics	1.8	5.6	2.1			2.3	0.3	0.0	-1.0	-1.4	-1.1		-0.9	-0.7	
Contribution from interest rate/growth differential	2.0	4.7	2.9			2.1	0.8	0.5	-0.3	-1.0	-0.9		-0.7	-0.5	
of which: contribution from average real interest rate	1.7	3.4	1.7			1.8	2.2	1.9	1.5	1.4	1.4		1.1	0.7	
of which: contribution from real GDP growth	0.3	1.3	1.2			0.3	-1.4	-1.4	-1.8	-2.4	-2.3		-1.8	-1.2	
Contribution from real exchange rate depreciation	-0.1	0.9	-0.8			0.3	-0.5	-0.5	-0.8	-0.5	-0.2		...	...	
Other identified debt-creating flows	0.0	0.0	-2.3			-1.3	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	0.0	0.0	-2.3			-1.3	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, 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	
Residual, including asset changes	3.5	0.9	-3.1			-0.3	0.3	0.3	0.3	0.0	0.0		0.0	0.0	
<b>Other Sustainability Indicators</b>															
<b>PV of public sector debt</b>			66.3			68.2	69.4	70.0	68.4	65.4	62.5		49.2	33.4	
o/w foreign-currency denominated	...	...	41.2			40.7	38.9	37.5	36.1	34.7	33.4		25.9	17.0	
o/w external	...	...	41.2			40.7	38.9	37.5	36.1	34.7	33.4		25.9	17.0	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	3.3	9.0	13.1			9.3	8.8	8.0	6.4	5.3	5.0		3.8	3.3	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	213.4			200.8	186.8	204.4	222.7	211.6	201.4		160.2	111.6	
PV of public sector debt-to-revenue ratio (in percent)	...	...	253.2			251.1	221.7	224.2	241.6	227.5	215.6		169.9	115.6	
o/w external 3/	...	...	157.3			149.9	124.3	120.3	127.4	120.8	115.4		89.3	58.9	
Debt service-to-revenue and grants ratio (in percent) 4/	19.9	22.3	25.4			22.5	20.7	21.5	23.2	22.0	21.8		17.5	12.9	
Debt service-to-revenue ratio (in percent) 4/	23.8	28.1	30.2			28.2	24.5	23.6	25.2	23.7	23.3		18.6	13.3	
Primary deficit that stabilizes the debt-to-GDP ratio	-5.3	-6.5	3.3			-0.7	-0.6	-0.3	0.7	1.4	1.1		0.9	0.7	
<b>Key macroeconomic and fiscal assumptions</b>															
Real GDP growth (in percent)	-0.6	-2.3	-1.8	2.7	3.4	-0.4	2.0	2.0	2.5	3.5	3.5	2.2	3.5	3.5	3.5
Average nominal interest rate on forex debt (in percent)	4.9	5.0	4.3	4.0	0.8	3.8	4.2	3.7	3.6	3.6	3.6	3.7	3.5	3.6	3.5
Average real interest rate on domestic debt (in percent)	3.3	8.0	2.0	3.8	3.7	4.5	3.3	2.6	1.5	1.8	2.3	2.7	2.5	1.9	2.4
Real exchange rate depreciation (in percent, + indicates depreciation)	-0.5	2.7	-2.4	-0.5	3.1	0.6	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	2.7	-1.6	3.7	2.9	3.5	1.5	2.2	2.1	2.9	2.5	2.2	2.2	2.2	2.2	2.2
Growth of real primary spending (deflated by GDP deflator, in percent)	0.0	0.1	0.0	0.1	0.1	0.0	0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Grant element of new external borrowing (in percent)	...	...	...	...	...	14.2	13.4	12.7	7.9	7.4	7.0	10.4	5.3	5.0	...

Sources: Country authorities; and staff estimates and projections.

1/ Gross debt of central government and nonfinancial state-owned enterprises.

2/ 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.

3/ Revenues excluding grants.

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

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

Table 1b.St. Vincent &amp; the Grenadines: Sensitivity Analysis for Key Indicators of Public Debt 2011-2031

	Projections							
	2011	2012	2013	2014	2015	2016	2021	2031
<b>PV of Debt-to-GDP Ratio</b>								
<b>Baseline</b>	68	69	70	68	65	62	49	33
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	68	69	70	70	71	71	75	82
A2. Primary balance is unchanged from 2011	68	70	72	72	73	73	75	80
A3. Permanently lower GDP growth 1/	68	70	72	71	70	68	65	83
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2012-20	68	72	77	77	75	73	67	63
B2. Primary balance is at historical average minus one standard deviations in 2012-201	68	72	76	75	72	69	55	38
B3. Combination of B1-B2 using one half standard deviation shocks	68	72	75	74	72	69	58	47
B4. One-time 30 percent real depreciation in 2012	68	87	88	86	82	79	66	51
B5. 10 percent of GDP increase in other debt-creating flows in 2012	68	80	80	78	75	72	58	41
<b>PV of Debt-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	201	187	204	223	212	201	160	112
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	201	187	205	230	229	230	244	274
A2. Primary balance is unchanged from 2011	201	188	209	236	235	235	246	268
A3. Permanently lower GDP growth 1/	201	189	209	232	224	219	210	277
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2012-20	201	194	223	248	241	236	217	211
B2. Primary balance is at historical average minus one standard deviations in 2012-201	201	195	223	243	232	221	179	128
B3. Combination of B1-B2 using one half standard deviation shocks	201	193	219	241	231	222	189	155
B4. One-time 30 percent real depreciation in 2012	201	235	256	279	266	255	214	172
B5. 10 percent of GDP increase in other debt-creating flows in 2012	201	214	234	255	243	233	189	137
<b>Debt Service-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	23	21	21	23	22	22	18	13
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	23	21	21	23	22	23	22	28
A2. Primary balance is unchanged from 2011	23	21	22	23	23	23	21	27
A3. Permanently lower GDP growth 1/	23	21	22	24	23	23	20	25
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2012-20	23	21	23	25	24	24	21	21
B2. Primary balance is at historical average minus one standard deviations in 2012-201	23	21	22	24	23	23	20	14
B3. Combination of B1-B2 using one half standard deviation shocks	23	21	22	24	23	23	20	17
B4. One-time 30 percent real depreciation in 2012	23	23	27	30	28	28	25	23
B5. 10 percent of GDP increase in other debt-creating flows in 2012	23	21	23	25	23	23	21	15

Sources: Country authorities; and staff estimates and projections.  
1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.  
2/ Revenues are defined inclusive of grants.

Table 2a.: External Debt Sustainability Framework, Baseline Scenario, 2008-2031 1/  
(In percent of GDP, unless otherwise indicated)

	Actual			Historical <sup>6/</sup> Standard <sup>6/</sup>		Projections						2011-2016			2017-2031	
	2008	2009	2010	Average	Deviation	2011	2012	2013	2014	2015	2016	Average	2021	2031	Average	
<b>External debt (nominal) 1/</b>	<b>30.2</b>	<b>33.3</b>	<b>41.7</b>			<b>41.7</b>	<b>40.5</b>	<b>39.5</b>	<b>38.2</b>	<b>36.9</b>	<b>35.7</b>		<b>28.2</b>	<b>19.2</b>		
o/w public and publicly guaranteed (PPG)	30.2	33.3	41.7			41.7	40.5	39.5	38.2	36.9	35.7		28.2	19.2		
Change in external debt	0.6	3.1	8.5			0.0	-1.3	-1.0	-1.3	-1.2	-1.2		-1.3	-0.5		
Identified net debt-creating flows	9.6	16.1	15.5			14.5	11.6	10.7	9.1	6.4	4.7		5.0	5.3		
<b>Non-interest current account deficit</b>	<b>31.5</b>	<b>27.8</b>	<b>29.7</b>	<b>19.9</b>	<b>8.7</b>	<b>25.9</b>	<b>23.5</b>	<b>22.5</b>	<b>20.7</b>	<b>18.0</b>	<b>16.2</b>		<b>16.5</b>	<b>16.8</b>	16.6	
Deficit in balance of goods and services	31.6	29.1	30.0			26.4	24.4	23.0	21.2	18.3	16.6		-28.0	-27.9		
Exports	30.1	28.6	26.8			26.8	27.1	27.8	28.4	29.3	29.8		29.8	29.8		
Imports	61.6	57.7	56.9			53.2	51.5	50.8	49.5	47.6	46.4		1.8	1.9		
Net current transfers (negative = inflow)	-1.9	-1.7	-1.5	-2.5	0.6	-1.9	-2.1	-2.1	-2.1	-2.0	-2.0		-0.5	-0.5	-0.6	
o/w official	-0.6	-0.5	-0.7			-0.7	-0.7	-0.6	-0.6	-0.6	-0.6		0.0	0.0		
Other current account flows (negative = net inflow)	1.8	0.4	1.2			1.3	1.3	1.5	1.6	1.7	1.7		45.1	45.1		
<b>Net FDI (negative = inflow)</b>	<b>-22.8</b>	<b>-14.4</b>	<b>-15.0</b>	<b>-13.3</b>	<b>5.7</b>	<b>-13.1</b>	<b>-12.7</b>	<b>-12.4</b>	<b>-12.0</b>	<b>-11.6</b>	<b>-11.5</b>		<b>-11.5</b>	<b>-11.5</b>	-11.5	
<b>Endogenous debt dynamics 2/</b>	<b>0.8</b>	<b>2.8</b>	<b>0.8</b>			<b>1.7</b>	<b>0.9</b>	<b>0.7</b>	<b>0.4</b>	<b>0.0</b>	<b>0.0</b>		<b>0.0</b>	<b>0.0</b>		
Contribution from nominal interest rate	1.4	1.6	1.4			1.6	1.7	1.4	1.4	1.3	1.2		1.0	0.7		
Contribution from real GDP growth	0.2	0.7	0.6			0.2	-0.8	-0.8	-0.9	-1.3	-1.2		-1.0	-0.7		
Contribution from price and exchange rate changes	-0.8	0.5	-1.2			...	...	...	...	...	...		...	...		
<b>Residual (3-4) 3/</b>	<b>-9.0</b>	<b>-13.0</b>	<b>-7.0</b>			<b>-14.5</b>	<b>-12.9</b>	<b>-11.7</b>	<b>-10.4</b>	<b>-7.6</b>	<b>-5.9</b>		<b>-6.3</b>	<b>-5.8</b>		
o/w exceptional financing	0.0	-0.8	0.0			-0.7	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
PV of external debt 4/	...	...	41.2			40.7	38.9	37.5	36.1	34.7	33.4		25.9	17.0		
In percent of exports	...	...	153.4			152.0	143.5	135.0	127.2	118.6	112.2		86.9	57.2		
<b>PV of PPG external debt</b>	<b>...</b>	<b>...</b>	<b>41.2</b>			<b>40.7</b>	<b>38.9</b>	<b>37.5</b>	<b>36.1</b>	<b>34.7</b>	<b>33.4</b>		<b>25.9</b>	<b>17.0</b>		
In percent of exports	...	...	153.4			152.0	143.5	135.0	127.2	118.6	112.2		86.9	57.2		
In percent of government revenues	...	...	157.3			149.9	124.3	120.3	127.4	120.8	115.4		89.3	58.9		
<b>Debt service-to-exports ratio (in percent)</b>	<b>13.0</b>	<b>15.8</b>	<b>17.0</b>			<b>18.3</b>	<b>18.1</b>	<b>16.2</b>	<b>14.9</b>	<b>13.5</b>	<b>13.5</b>		<b>10.5</b>	<b>8.0</b>		
<b>PPG debt service-to-exports ratio (in percent)</b>	<b>13.0</b>	<b>15.8</b>	<b>17.0</b>			<b>18.3</b>	<b>18.1</b>	<b>16.2</b>	<b>14.9</b>	<b>13.5</b>	<b>13.5</b>		<b>10.5</b>	<b>8.0</b>		
<b>PPG debt service-to-revenue ratio (in percent)</b>	<b>13.0</b>	<b>16.5</b>	<b>17.4</b>			<b>18.0</b>	<b>15.7</b>	<b>14.4</b>	<b>15.0</b>	<b>13.7</b>	<b>13.9</b>		<b>10.8</b>	<b>8.3</b>		
Total gross financing need (Millions of U.S. dollars)	88.5	120.0	131.7			122.5	113.2	109.2	102.3	86.6	77.6		95.5	157.7		
Non-interest current account deficit that stabilizes debt ratio	30.9	24.7	21.3			25.9	24.8	23.5	22.0	19.2	17.4		17.8	17.3		
<b>Key macroeconomic assumptions</b>																
Real GDP growth (in percent)	-0.6	-2.3	-1.8	2.7	3.4	-0.4	2.0	2.0	2.5	3.5	3.5	2.2	3.5	3.5	3.5	
GDP deflator in US dollar terms (change in percent)	2.7	-1.6	3.7	2.9	3.5	1.5	2.2	2.1	2.9	2.5	2.2	2.2	2.2	2.2	2.2	
Effective interest rate (percent) 5/	4.9	5.0	4.3	4.0	0.8	3.8	4.2	3.7	3.6	3.6	3.6	3.7	3.5	3.6	3.5	
Growth of exports of G&S (US dollar terms, in percent)	-1.0	-8.5	-4.5	0.4	5.4	1.0	5.5	6.8	7.5	9.5	7.6	6.3	5.7	5.7	5.7	
Growth of imports of G&S (US dollar terms, in percent)	7.1	-9.9	0.3	7.2	8.9	-5.3	0.8	2.9	2.7	2.0	3.0	1.0	6.8	6.8	-0.2	
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	14.2	13.4	12.7	7.9	7.4	7.0	10.4	5.3	5.0	5.3	
Government revenues (excluding grants, in percent of GDP)	30.1	27.3	26.2			27.2	31.3	31.2	28.3	28.7	29.0		29.0	28.9	29.0	
Aid flows (in Millions of US dollars) 7/	41.2	46.9	33.4			47.2	44.3	24.8	21.1	20.3	20.1		21.8	23.5		
o/w Grants	41.2	46.9	33.4			47.2	42.2	22.7	19.1	18.2	18.1		20.5	21.4		
o/w Concessional loans	0.0	0.0	0.0			0.0	2.1	2.1	2.1	2.1	2.0		1.3	2.1		
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			7.4	6.3	3.5	2.7	2.4	2.3		1.9	1.2	1.7	
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			69.2	66.6	52.2	44.7	42.2	40.7		44.7	34.6	40.9	
<b>Memorandum items:</b>																
Nominal GDP (Millions of US dollars)	699.1	672.3	684.2			691.9	721.2	751.1	792.2	840.7	888.9		1175.0	2052.8		
Nominal dollar GDP growth	2.1	-3.8	1.8			1.1	4.2	4.1	5.5	6.1	5.7	4.5	5.7	5.7	5.7	
PV of PPG external debt (in Millions of US dollars)	...	...	281.6			281.9	280.7	281.9	285.8	291.8	297.1		304.2	349.7		
(Pvt-Pvt-1)/GDPT-1 (in percent)	...	...	...			0.0	-0.2	0.2	0.5	0.8	0.6	0.3	0.2	0.5	0.2	
Gross workers' remittances (Millions of US dollars)	23.5	22.4	23.2			23.2	25.3	25.8	26.3	27.0	27.6		5.9	8.5		
PV of PPG external debt (in percent of GDP + remittances)	...	...	39.8			39.4	37.6	36.3	34.9	33.6	32.4		25.8	17.0		
PV of PPG external debt (in percent of exports + remittances)	...	...	136.2			135.0	127.0	120.1	113.9	106.9	101.6		85.5	56.4		
Debt service of PPG external debt (in percent of exports + remittances)	...	...	15.1			16.2	16.0	14.4	13.4	12.1	12.2		10.4	7.9		

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and publicly guaranteed external debt.

2/ Derived as  $(r - g - \rho(1+g))/(1+g+p+gp)$  times previous period debt ratio, with  $r$  = nominal interest rate;  $g$  = real GDP growth rate, and  $\rho$  = growth rate of GDP deflator in U.S. dollar terms.

3/ 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. The relatively large residual reflects the significant role of capital grants in financing the current account.

4/ Assumes that PV of private sector debt is equivalent to its face value.

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

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

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 PV of new debt).

Table 2b. St. Vincent & the Grenadines: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2011-2031  
(In percent)

	Projections							
	2011	2012	2013	2014	2015	2016	2021	2031
<b>PV of debt-to-GDP ratio</b>								
<b>Baseline</b>	41	39	38	36	35	33	<b>26</b>	17
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2011-2031 1/	41	32	25	20	17	16	<b>12</b>	10
A2. New public sector loans on less favorable terms in 2011-2031 2	41	40	39	38	38	37	<b>32</b>	29
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	41	40	39	38	36	35	<b>27</b>	18
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	41	42	45	44	42	41	<b>31</b>	18
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	41	40	40	38	37	35	<b>27</b>	18
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	41	45	49	47	46	44	<b>33</b>	18
B5. Combination of B1-B4 using one-half standard deviation shocks	41	44	51	49	47	46	<b>34</b>	19
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	41	55	53	51	49	47	<b>37</b>	24
<b>PV of debt-to-exports ratio</b>								
<b>Baseline</b>	152	143	135	127	119	112	<b>87</b>	57
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2011-2031 1/	152	119	90	69	58	53	<b>42</b>	33
A2. New public sector loans on less favorable terms in 2011-2031 2	152	146	141	135	129	125	<b>108</b>	97
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	152	143	135	127	119	112	<b>87</b>	57
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	152	169	202	191	179	170	<b>129</b>	74
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	152	143	135	127	119	112	<b>87</b>	57
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	152	165	175	166	156	148	<b>111</b>	61
B5. Combination of B1-B4 using one-half standard deviation shocks	152	172	205	194	182	173	<b>130</b>	72
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	152	143	135	127	119	112	<b>87</b>	57
<b>PV of debt-to-revenue ratio</b>								
<b>Baseline</b>	150	124	120	127	121	115	<b>89</b>	59
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2011-2031 1/	150	103	80	69	59	55	<b>43</b>	34
A2. New public sector loans on less favorable terms in 2011-2031 2	150	126	125	135	131	128	<b>111</b>	99
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	150	127	126	134	127	121	<b>94</b>	62
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	150	133	146	155	147	141	<b>107</b>	62
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	150	128	128	135	128	122	<b>95</b>	62
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	150	143	156	166	158	152	<b>114</b>	63
B5. Combination of B1-B4 using one-half standard deviation shocks	150	142	162	173	165	158	<b>119</b>	66
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	150	176	170	180	171	163	<b>126</b>	83

Table 2b.St. Vincent & the Grenadines: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2011-2031 (continued)  
(In percent)

<b>Debt service-to-exports ratio</b>								
<b>Baseline</b>	18	18	16	15	13	13	<b>11</b>	8
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2011-2031 1/	18	18	15	13	11	11	<b>5</b>	5
A2. New public sector loans on less favorable terms in 2011-2031 2	18	18	16	14	13	12	<b>11</b>	11
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	18	18	16	15	14	14	<b>11</b>	8
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	18	20	20	20	18	18	<b>16</b>	11
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	18	18	16	15	14	14	<b>11</b>	8
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	18	18	17	17	15	15	<b>14</b>	9
B5. Combination of B1-B4 using one-half standard deviation shocks	18	19	20	19	18	18	<b>17</b>	10
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	18	18	16	15	14	14	<b>11</b>	8
<b>Debt service-to-revenue ratio</b>								
<b>Baseline</b>	18	16	14	15	14	14	<b>11</b>	8
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2011-2031 1/	18	15	13	13	11	11	<b>5</b>	6
A2. New public sector loans on less favorable terms in 2011-2031 2	18	16	14	14	13	12	<b>12</b>	11
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	18	16	15	16	14	15	<b>11</b>	9
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	18	16	15	16	15	15	<b>14</b>	9
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	18	16	15	16	15	15	<b>12</b>	9
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	18	16	15	17	15	15	<b>15</b>	9
B5. Combination of B1-B4 using one-half standard deviation shocks	18	16	16	17	16	16	<b>15</b>	9
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	18	22	20	21	20	20	<b>15</b>	12
<i>Memorandum item:</i>								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	-1	-1	-1	-1	-1	-1	<b>-1</b>	-1

Sources: Country authorities; and staff estimates and projections.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt 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.