

INTERNATIONAL MONETARY FUND

ST. VINCENT AND THE GRENADINES

**External and Public Debt Sustainability Analysis**

Prepared by the Staff of the International Monetary Fund

February 16, 2011

*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 is moderate, compared to a high risk in the previous DSA. The public debt is also projected to resume to a sustainable trajectory over the medium term. The lower than projected fiscal deficit last year, commitment for fiscal consolidation in line with the active scenario of the previous DSA, and an upward revision in the GDP series have contributed to the improved external debt dynamics.<sup>1</sup>*

**I. INTRODUCTION**

1. **The 2008–09 global economic crisis has significantly affected St. Vincent and the Grenadines' economy through lowering tourism and FDI flows.** Economic activity contracted by about 0.5 percent per annum, on average, during 2008–09. The impact of the external economic factors was exacerbated by Hurricane Tomas in 2010, shrinking real GDP further by 2.3 percent. Government efforts to counter these impacts have turned the primary balance from a surplus of 1.1 percent of GDP in 2008 to a deficit of 2½ percent of GDP in 2010. At the same time, the public sector debt-to-GDP ratio increased by 11.3 percentage points over the two year period to 68 percent in 2010. That said, the fiscal stance in 2010 was much tighter than projected at the time of the last Article IV, reflecting external financing constraints and significant cuts in expenditure. External debt constitutes about 60 percent of the public sector debt at end-2010, of which about 60 percent represents claims by multilateral creditors. The central government owed about 90 percent of the total public sector debt at end-2010.

2. **Hurricane-related reconstruction efforts will further increase the public sector debt in 2011; however, the authorities' commitment to undertake fiscal consolidation measures will ensure debt sustainability over the medium term.** The authorities plan to make further improvements in tax administration, including by improving compliance and enhancing audits, and establishing a Large Taxpayer Unit. They will continue to improve

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<sup>1</sup> The baseline scenario in this DSA corresponds to the “active” scenario in the previous DSA.

public finance management with CARTAC assistance. A task force has also been set up to study the scope for pension reforms in line with CARTAC recommendations.

## II. UNDERLYING DSA ASSUMPTIONS

3. **The DSA analysis is based on the following macroeconomic framework, assuming that the authorities will implement the near-term policies agreed with staff.**

- **Growth and Inflation:** After three consecutive years of decline, the economy is projected to rebound to 2½ percent in 2011. Over the medium term, growth is projected to reach its potential level of 4 percent, equivalent to the active scenario assumption in the previous DSA. On the other hand, end-period inflation is projected to hover around 3 percent in 2010, reflecting the uptick in international food and fuel prices. Over the medium term inflation is projected to revert to its long-term path of 2–2½ percent.

### Box 1. Macroeconomic assumptions under the Baseline Scenario (2011–2030)

- Growth is projected to rebound to around 2½ percent in 2011, supported by hurricane related reconstruction activities and modest recovery in tourism and FDI flows. Over the medium term, growth is assumed to return to its potential rate of 4 percent, reflecting improved employment and consumption conditions in tourism and FDI source countries. On the other hand, medium term inflation is assumed to remain low in the range of 2–2½ percent, anchored by the currency board arrangement.
- The primary balance of the central government is projected to improve to about 1½–2 percent of GDP, reflecting the authorities' commitment to fiscal consolidation. Revenue is projected to increase over the medium term, reflecting the authorities' plan to implement a number of revenue enhancing measures such as revaluation of property and broadening the coverage of the property tax, improving compliance and enhancing audits, and establishing a Large Taxpayer Unit. On the other hand, expenditure in percent of GDP is assumed to gradually fall to the pre-crisis level, reflecting the phasing out of one-off spending items.<sup>1/</sup>
- The overall deficit is assumed to be financed increasingly from external sources, reflecting the authorities' strategy of avoiding domestic borrowing to the extent possible. However, the grant element of new external borrowing is projected to fall over the medium to long term, reflecting difficulty of accessing concessional resources as the country's income increases.
- External grants, which peaked in 2009, is projected to return to the pre-crisis level of around 2½ percent of GDP over the medium term and further fall to 1½ percent of GDP in the long term.
- The current account deficit is projected to widen in 2011, primarily due to the increase in imports for the reconstruction, before converging to around 20 percent of GDP over the medium term. As economic conditions in source countries continue to improve, tourism and FDI inflows are assumed to rebound.

<sup>1/</sup> These include, (i) hurricane related spending (1 percent of GDP), (ii) transfers to the airport authority (1.1 percent of GDP), (iii) provision for addressing the cost of resolving BAICO (½ percent of GDP), and (iv) purchase of coastguard vessels (0.3 percent of GDP). The last two items are carry overs from the previous year, although the magnitudes are smaller.

- **Fiscal Balance:** The current baseline scenario reflects the fiscal structural measures proposed under the active scenario of the previous DSA as the authorities have committed to undertake them. The 2011 budget, approved in January, already incorporates most of the proposed measures, such as broadening the property tax base, streamlining exemptions, and modernizing customs. The authorities are continuing to implement measures to improve public finance management. While the central government's primary balance is projected to register a further deficit of 1.3 percent of GDP in 2011, reflecting hurricane related and other one-off spending items, over the medium-term it is assumed that the primary surplus will be in the range of 1½-2percent of GDP, in line with the authorities are commitment in the context of the program discussions.<sup>2</sup>
- **External Sector:** The current account deficit is projected to widen in 2011 primarily due to the increase in imports for the reconstruction, before converging to around 20 percent of GDP over the medium term. Tourism and FDI are assumed to rebound as economic recovery strengthens in source countries (mainly North America and Europe), over the medium term.

### III. EVALUATION OF PUBLIC SECTOR DEBT SUSTAINABILITY

4. **Though lower than projected in the last DSA, the debt-to-GDP ratio rose by 6 percentage points to 68 percent in 2010.** The ratio is projected to increase further by another 4 percentage points to 72 percent in 2011, due to additional borrowing (concessional) for hurricane related and other one-off spending items. Fiscal consolidation measures being undertaken by the authorities are, however, expected to return the public debt to a declining path over the medium term. The public debt-to-GDP ratio is projected to fall to 46 percent of GDP by 2020 (about the same as the Eastern Caribbean Central Bank (ECCB) recommended benchmark of 60 percent with the old GDP series).<sup>3</sup> This is comparable to the level projected under the active scenario of the previous DSA.

5. **Sensitivity analysis shows that higher primary deficit is a key vulnerability for St. Vincent and the Grenadine's debt dynamics.** Under the scenario that primary balance is unchanged at the 2010 level, which is a historically high deficit, the present value of

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<sup>2</sup> The primary balance 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 disbursements to the electricity company and the airport authority. However, the difference becomes very small after 2012.

<sup>3</sup> The authorities have officially launched the much anticipated new GDP series, which shows an upward revision in nominal GDP by about 23 percent, on average, during 2000–09.

debt-to-GDP ratio will reach 87 percent in 2020 and 118 percent in 2030, compared to the base line levels of 37 percent and 20 percent in 2020 and 2030, respectively (Table 2a, Scenario A2). The scenario of permanently lower GDP growth also poses a significant risk, increasing the present value of debt-to-GDP ratio to 50 percent in 2020 and 56 percent in 2030.

#### IV. EVALUATION OF EXTERNAL DEBT SUSTAINABILITY

6. **St. Vincent and the Grenadines' risk of external debt distress is moderate, compared to high in the previous DSA.** The authorities' commitment to undertake fiscal measures proposed under the active scenario of the previous DSA, lower than projected external disbursements<sup>4</sup> and significant expenditure cuts in 2010, and an upward revision in the GDP series have contributed to the improved external debt dynamics. That said, the PV of external debt-to-GDP ratio is projected to increase by 2 percentage points to 44 percent of GDP in 2011, reflecting the widening fiscal deficit due to hurricane related and other one-off spending items. Nevertheless, projected fiscal tightening over the medium term will reduce the ratio to 26 percent of GDP by 2020, well below the prudential threshold of 50 percent<sup>5</sup> (Table 3a).

7. **Sensitivity analysis shows that St. Vincent and the Grenadines' external debt dynamics is vulnerable to changes in the nominal exchange rate and non-debt creating flows.** The stress test assuming a one-time 30 percent nominal depreciation relative to the baseline in 2011 indicates that the PV of external debt-to-GDP ratio would jump to 62 percent, breaching the country-specific threshold of 50 percent (Table 3b, Scenario B6). Similarly, the PV of external debt-to-GDP ratio would jump to 57 percent in 2011 and further to 74 percent in 2012, if the net non-debt creating flows (mainly FDI) were at the historical average minus one standard deviation in 2011–2012<sup>6</sup> (Table 3b, Scenario B4).

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<sup>4</sup> For instance, the authorities only received US\$20 million of the total US\$50 million expected from ALBA, and the planned supplier credit for the purchase of coastguard vessels did not materialize due to financial problems with the supplier.

<sup>5</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.

<sup>6</sup> FDI flows have been at historically low levels in the last few years due to the global economic recession.

## V. ALTERNATIVE SCENARIO: ADDITIONAL BORROWING FOR THE AIRPORT PROJECT

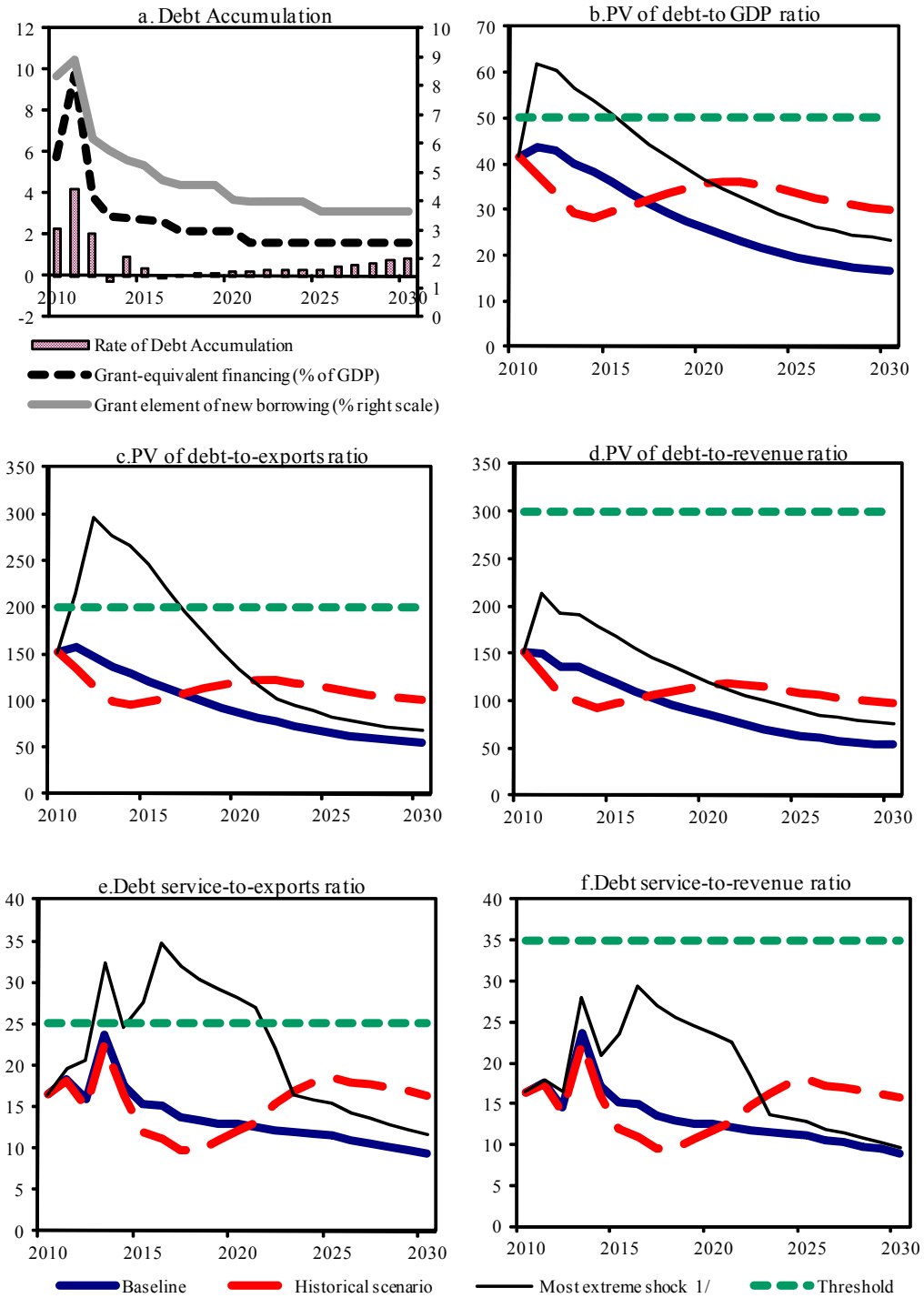
8. **Additional borrowing in commercial terms to finance the airport project, in the rare event that all expected grants, concessional borrowing, and revenues from land sales are not available in 2011 and 2012, would put St. Vincent and the Grenadines in high risk of debt distress.** Under this scenario, the public sector debt-to-GDP ratio would jump to 88 percent in 2012, compared to 71 percent in the baseline scenario, and would reach 52 percent by 2020 (above the ECCB's target of 60 percent using the old GDP series). Furthermore, all of the external debt distress indicators; the PV of external debt-to-GDP ratio, the PV of external debt to export ratio, and the PV of external debt to revenue ratio, lie above the corresponding country-specific thresholds indicating the risk of external debt distress is high.

## VI. CONCLUSION

9. **St Vincent and the Grenadines' public debt is projected to revert to a sustainable trajectory over the medium term, achieving the ECCB's debt-to-GDP ratio target of 60 percent by 2020.** 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 46 percent by 2020.

10. **St Vincent and the Grenadines' external debt risk is upgraded to moderate.** Lower than projected external disbursements in 2010 the authorities' commitment to generate primary surpluses in the range of 1½–2 percent of GDP over the medium term, and the upward revision in GDP have contributed to the improved external debt profile.

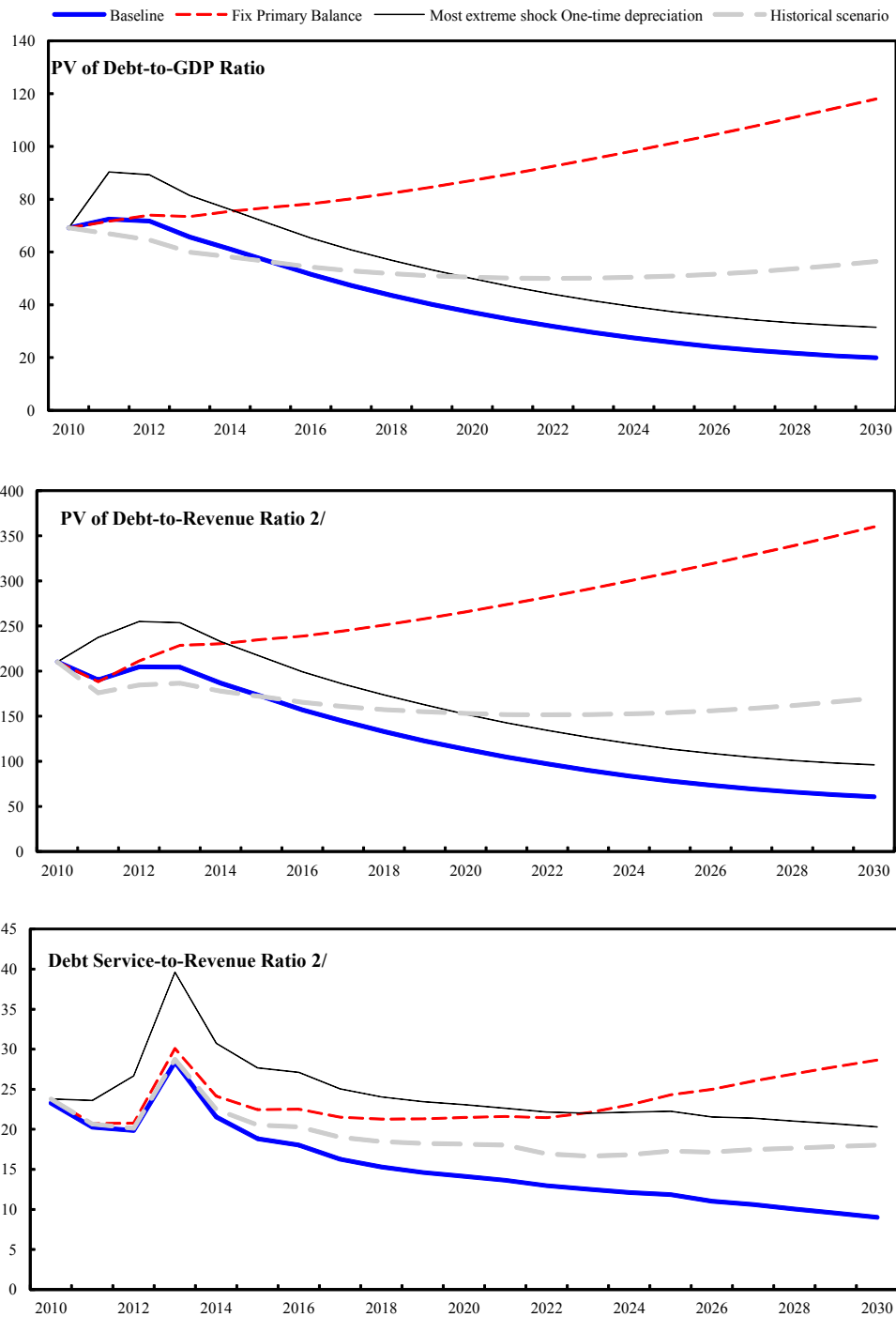
Figure 1. St. Vincent and the Grenadines: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2010-2030 1/



Sources: Country authorities; and staff estimates and projections.

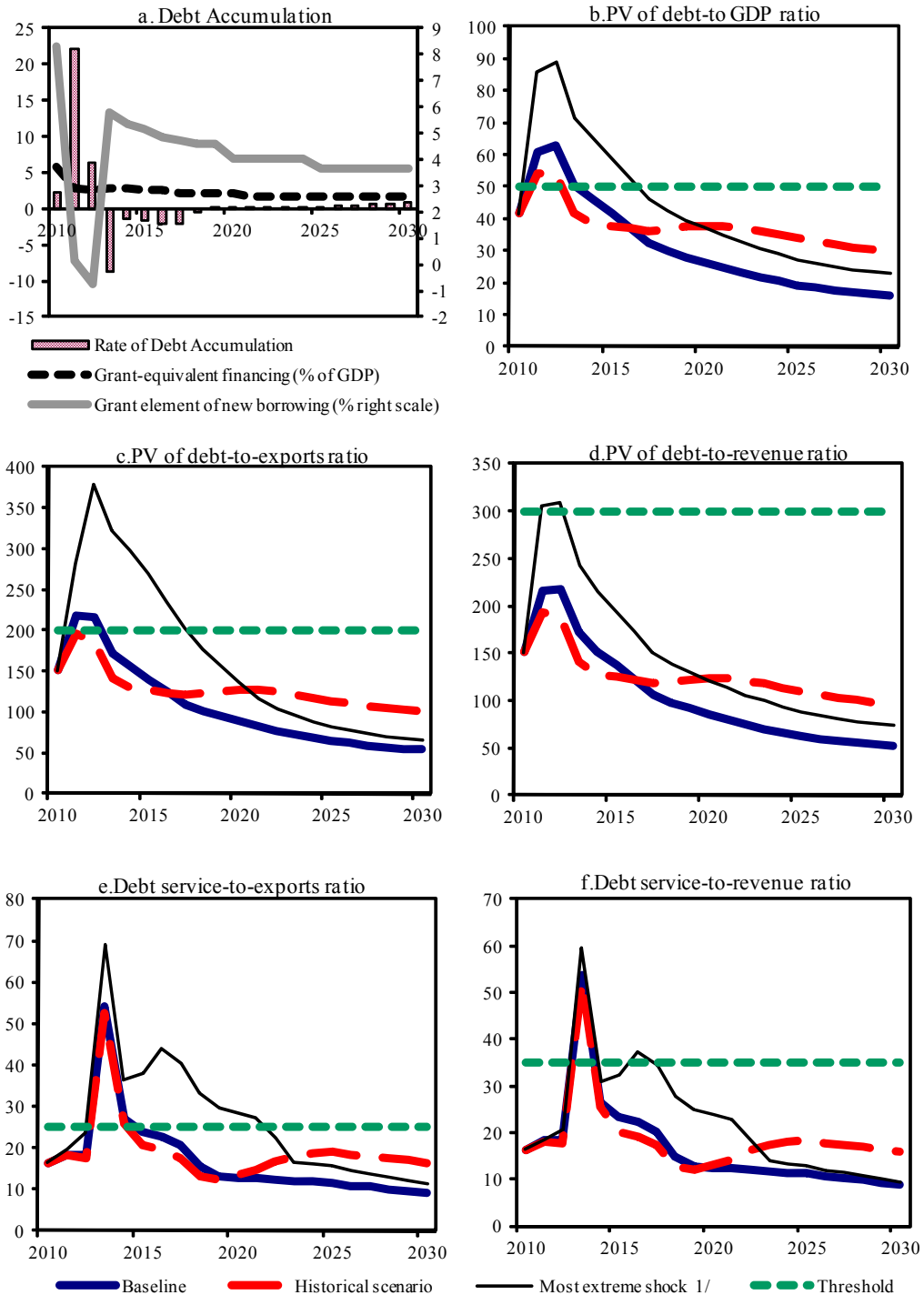
1/ The most extreme stress test is the test that yields the highest ratio in 2020. In figure b. it corresponds to a One-time depreciation shock; in c. to a Combination shock; in d. to a One-time depreciation shock; in e. to a Combination shock and in figure f. to a Combination shock

Figure 2. St. Vincent and the Grenadines: Indicators of Public Debt Under Alternative Scenarios, 2010-2030 1/



Sources: Country authorities; and staff estimates and projections.  
 1/ The most extreme stress test is the test that yields the highest ratio in 2020.  
 2/ Revenues are defined inclusive of grants.

Figure 3. St. Vincent and the Grenadines: Indicators of Public and Publicly Guaranteed External Debt under Borrowing for the Airport Scenario, 2010-2030



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2020. In figure b. it corresponds to a One-time depreciation shock; in c. to a Combination shock; in d. to a One-time depreciation shock; in e. to a Combination shock and in figure f. to a Combination shock



Table 1a.St. Vincent and the Grenadines: Public Sector Debt Sustainability Framework, Baseline Scenario, 2007-2030  
(In percent of GDP, unless otherwise indicated)

	Actual			Average	Standard Deviation	Estimate					Projections				
	2007	2008	2009			2010	2011	2012	2013	2014	2015	2010-15 Average	2020	2030	2016-30 Average
<b>Public sector debt 1/</b>	54.1	56.7	62.3			68.1	72.1	71.4	69.0	65.7	62.0		46.0	35.3	
o/w foreign-currency denominated	29.6	30.0	31.8			40.5	43.4	42.5	43.2	42.7	41.7		34.8	31.9	
Change in public sector debt	-11.2	2.6	5.6			5.7	4.1	-0.7	-2.5	-3.3	-3.7		-2.3	-0.4	
Identified debt-creating flows	-0.8	-2.1	5.6			6.9	4.8	0.7	-1.9	-3.2	-3.3		-2.9	-2.8	
Primary deficit	3.4	-3.7	1.8	0.8	2.4	5.3	6.1	2.3	-0.2	-1.4	-1.4	1.8	-1.4	-1.4	
Revenue and grants	28.7	35.8	32.9			32.9	38.1	35.0	32.1	32.7	32.7		32.8	32.8	
of which: grants	3.2	5.9	6.7			5.3	9.0	3.5	2.6	2.5	2.5		2.5	2.5	
Primary (noninterest) expenditure	32.1	32.1	34.7			38.2	44.1	37.3	31.9	31.4	31.4		31.4	31.4	
Automatic debt dynamics	-4.2	1.6	3.8			3.9	0.0	-1.6	-1.7	-1.9	-2.0		-1.5	-1.4	
Contribution from interest rate/growth differential	-2.0	1.8	3.4			4.0	0.4	-0.4	-1.0	-1.3	-1.5		-1.1	-1.1	
of which: contribution from average real interest rate	-0.1	1.7	3.2			2.5	2.1	1.3	1.3	1.1	1.0		0.7	0.3	
of which: contribution from real GDP growth	-1.9	0.1	0.3			1.5	-1.7	-1.8	-2.2	-2.5	-2.5		-1.9	-1.4	
Contribution from real exchange rate depreciation	-2.2	-0.2	0.4			-0.1	-0.5	-1.2	-0.7	-0.5	-0.5		...	...	
Other identified debt-creating flows	0.0	0.0	0.0			-2.3	-1.2	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	0.0	0.0	0.0			-2.3	-1.2	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	-10.4	4.7	0.0			-1.2	-0.7	-1.4	-0.5	-0.1	-0.3		0.7	2.5	
<b>Other Sustainability Indicators</b>															
<b>PV of public sector debt</b>	...	...	69.5			69.2	72.4	71.7	65.7	61.1	56.3		37.1	19.9	
o/w foreign-currency denominated	...	...	39.0			41.6	43.6	42.8	39.9	38.2	36.0		25.9	16.5	
o/w external	...	...	39.0			41.6	43.6	42.8	39.9	38.2	36.0		25.9	16.5	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	9.7	3.3	9.3			13.0	13.8	9.2	8.9	5.7	4.8		3.2	1.5	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	211.2			210.3	190.3	204.8	204.4	186.8	172.1		113.2	60.8	
PV of public sector debt-to-revenue ratio (in percent)	...	...	265.4			250.7	249.4	227.9	222.5	202.2	186.4		122.6	65.8	
o/w external 3/	...	...	148.8			150.9	150.3	135.9	135.1	126.3	119.0		85.6	54.6	
Debt service-to-revenue and grants ratio (in percent) 4/	21.9	19.6	23.0			23.3	20.3	19.9	28.4	21.5	18.8		14.2	9.0	
Debt service-to-revenue ratio (in percent) 4/	24.7	23.4	28.9			27.8	26.6	22.1	30.9	23.3	20.4		15.3	9.8	
Primary deficit that stabilizes the debt-to-GDP ratio	14.6	-6.3	-3.8			-0.4	2.0	3.0	2.3	2.0	2.3		0.8	-1.1	
<b>Key macroeconomic and fiscal assumptions</b>															
Real GDP growth (in percent)	2.9	-0.2	-0.5	3.0	2.4	-2.3	2.5	2.5	3.2	3.7	4.0	2.3	4.0	4.0	
Average nominal interest rate on forex debt (in percent)	4.0	4.6	5.1	4.0	0.8	4.6	4.6	4.0	3.8	3.4	3.3	3.9	2.7	1.9	
Average real interest rate on domestic debt (in percent)	-2.1	4.1	7.2	3.9	3.7	4.3	3.0	0.8	1.1	1.7	2.0	2.2	3.4	7.6	
Real exchange rate depreciation (in percent, + indicates depreciation)	-5.5	-0.6	1.2	-1.0	2.9	-0.4	...	...	...	...	...	...	...	...	
Inflation rate (GDP deflator, in percent)	8.9	2.8	-0.3	3.5	3.4	1.3	2.4	4.2	3.3	3.0	3.0	2.9	3.0	3.0	
Growth of real primary spending (deflated by GDP deflator, in percent)	0.1	0.0	0.1	0.1	0.1	0.1	0.2	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	
Grant element of new external borrowing (in percent)	...	...	...	...	...	8.3	8.9	6.1	5.8	5.4	5.3	6.6	4.1	3.6	

Sources: Country authorities; and staff estimates and projections.

1/ [Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.]

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 2a.St. Vincent and the Grenadines: Sensitivity Analysis for Key Indicators of Public Debt 2010-2030

	Projections							
	2010	2011	2012	2013	2014	2015	2020	2030
<b>PV of Debt-to-GDP Ratio</b>								
<b>Baseline</b>	69	72	72	66	61	56	37	20
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	69	67	65	60	58	56	50	56
A2. Primary balance is unchanged from 2010	69	72	74	73	75	77	87	118
A3. Permanently lower GDP growth 1/	69	73	73	68	64	60	48	53
A4. Alternative Scenario :[Costumize, enter title]	69	75	73	66	62	58	44	30
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	69	74	76	71	67	64	49	40
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	69	70	70	64	59	55	36	21
B3. Combination of B1-B2 using one half standard deviation shocks	69	69	68	63	59	55	38	26
B4. One-time 30 percent real depreciation in 2011	69	90	89	81	76	71	50	32
B5. 10 percent of GDP increase in other debt-creating flows in 2011	69	82	81	75	70	65	45	28
<b>PV of Debt-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	210	190	205	204	187	172	113	61
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	210	176	185	187	178	172	153	170
A2. Primary balance is unchanged from 2010	210	188	211	229	230	235	266	360
A3. Permanently lower GDP growth 1/	210	191	208	210	195	183	145	160
A4. Alternative Scenario :[Costumize, enter title]	210	425	313	272	255	241	185	124
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	210	195	217	221	206	194	149	123
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	210	183	200	199	182	167	111	64
B3. Combination of B1-B2 using one half standard deviation shocks	210	181	195	196	180	167	116	78
B4. One-time 30 percent real depreciation in 2011	210	237	255	254	233	216	152	96
B5. 10 percent of GDP increase in other debt-creating flows in 2011	210	217	233	234	215	200	139	85
<b>Debt Service-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	23	20	20	28	22	19	14	9
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	24	21	20	29	22	21	18	18
A2. Primary balance is unchanged from 2010	24	21	21	30	24	22	21	29
A3. Permanently lower GDP growth 1/	24	21	21	30	24	21	18	17
A4. Alternative Scenario :[Costumize, enter title]	24	40	27	33	25	22	16	9
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	24	21	22	31	24	22	18	15
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	24	21	21	30	23	20	16	11
B3. Combination of B1-B2 using one half standard deviation shocks	24	21	21	30	23	21	16	12
B4. One-time 30 percent real depreciation in 2011	24	24	27	40	31	28	23	20
B5. 10 percent of GDP increase in other debt-creating flows in 2011	24	21	22	31	24	22	17	13

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 3a.: External Debt Sustainability Framework, Baseline Scenario, 2007-2030 1/  
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average	Standard Deviation	Projections						2016-2030		
	2007	2008	2009			2010	2011	2012	2013	2014	2015	Average	2020	2030
<b>External debt (nominal) 1/</b>	<b>29.6</b>	<b>30.0</b>	<b>31.8</b>			<b>40.5</b>	<b>43.4</b>	<b>42.5</b>	<b>43.2</b>	<b>42.7</b>	<b>41.7</b>		<b>34.8</b>	<b>31.9</b>
o/w public and publicly guaranteed (PPG)	29.6	30.0	31.8			40.5	43.4	42.5	43.2	42.7	41.7		34.8	31.9
Change in external debt	-11.5	0.5	1.8			8.7	2.8	-0.9	0.7	-0.5	-1.1		-0.8	0.1
Identified net debt-creating flows	6.5	10.8	13.2			13.4	11.8	8.9	7.1	4.8	2.2		2.4	2.6
<b>Non-interest current account deficit</b>	<b>26.6</b>	<b>27.4</b>	<b>26.9</b>	<b>15.7</b>	<b>10.2</b>	<b>25.8</b>	<b>27.3</b>	<b>25.7</b>	<b>24.6</b>	<b>23.1</b>	<b>21.0</b>		<b>21.4</b>	<b>21.8</b>
Deficit in balance of goods and services	27.7	28.7	28.7			29.7	30.5	28.5	27.4	25.8	23.8		23.8	23.8
Exports	31.1	28.6	28.7			27.5	27.8	29.1	29.4	29.6	29.7		29.7	29.7
Imports	58.7	57.3	57.4			57.2	58.4	57.6	56.8	55.4	53.5		53.5	53.5
Net current transfers (negative = inflow)	-2.9	-2.9	-3.4	-2.4	1.3	-4.8	-3.7	-3.6	-3.8	-4.0	-4.1		-4.1	-4.1
o/w official	-4.7	-4.7	-6.1			-8.3	-6.6	-5.5	-5.4	-5.3	-5.1		-5.1	-5.1
Other current account flows (negative = net inflow)	1.9	1.6	1.5			0.9	0.5	0.8	1.0	1.3	1.3		1.7	2.0
<b>Net FDI (negative = inflow)</b>	<b>-17.1</b>	<b>-17.2</b>	<b>-15.5</b>	<b>-10.7</b>	<b>6.8</b>	<b>-14.6</b>	<b>-16.3</b>	<b>-17.4</b>	<b>-17.8</b>	<b>-18.1</b>	<b>-18.5</b>		<b>-18.5</b>	<b>-18.5</b>
<b>Endogenous debt dynamics 2/</b>	<b>-3.0</b>	<b>0.6</b>	<b>1.8</b>			<b>2.2</b>	<b>0.8</b>	<b>0.6</b>	<b>0.2</b>	<b>-0.1</b>	<b>-0.3</b>		<b>-0.4</b>	<b>-0.6</b>
Contribution from nominal interest rate	1.4	1.3	1.5			1.5	1.8	1.6	1.5	1.4	1.3		0.9	0.6
Contribution from real GDP growth	-1.1	0.1	0.1			0.7	-1.0	-1.0	-1.3	-1.5	-1.6		-1.3	-1.2
Contribution from price and exchange rate changes	-3.4	-0.8	0.1			...	...	...	...	...	...		...	...
<b>Residual (3-4) 3/</b>	<b>-17.9</b>	<b>-10.3</b>	<b>-11.4</b>			<b>-4.7</b>	<b>-8.9</b>	<b>-9.8</b>	<b>-6.4</b>	<b>-5.3</b>	<b>-3.3</b>		<b>-3.3</b>	<b>-2.5</b>
o/w exceptional financing	0.0	0.0	-2.1			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
PV of external debt 4/	...	...	39.0			41.6	43.6	42.8	39.9	38.2	36.0		25.9	16.5
In percent of exports	...	...	135.6			151.1	156.8	147.1	135.6	129.0	121.0		87.2	55.6
<b>PV of PPG external debt</b>	<b>...</b>	<b>...</b>	<b>39.0</b>			<b>41.6</b>	<b>43.6</b>	<b>42.8</b>	<b>39.9</b>	<b>38.2</b>	<b>36.0</b>		<b>25.9</b>	<b>16.5</b>
In percent of exports	...	...	135.6			151.1	156.8	147.1	135.6	129.0	121.0		87.2	55.6
In percent of government revenues	...	...	148.8			150.9	150.3	135.9	135.1	126.3	119.0		85.6	54.6
<b>Debt service-to-exports ratio (in percent)</b>	<b>12.8</b>	<b>13.5</b>	<b>15.2</b>			<b>16.5</b>	<b>18.4</b>	<b>15.8</b>	<b>23.8</b>	<b>17.5</b>	<b>15.3</b>		<b>12.8</b>	<b>9.3</b>
<b>PPG debt service-to-exports ratio (in percent)</b>	<b>12.8</b>	<b>13.5</b>	<b>15.2</b>			<b>16.5</b>	<b>18.4</b>	<b>15.8</b>	<b>23.8</b>	<b>17.5</b>	<b>15.3</b>		<b>12.8</b>	<b>9.3</b>
<b>PPG debt service-to-revenue ratio (in percent)</b>	<b>15.7</b>	<b>12.9</b>	<b>16.7</b>			<b>16.4</b>	<b>17.6</b>	<b>14.6</b>	<b>23.7</b>	<b>17.2</b>	<b>15.1</b>		<b>12.6</b>	<b>9.2</b>
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	0.1		0.1	0.2
Non-interest current account deficit that stabilizes debt ratio	38.1	27.0	25.1			17.1	24.4	26.6	23.9	23.5	22.1		22.2	21.7
<b>Key macroeconomic assumptions</b>														
Real GDP growth (in percent)	2.9	-0.2	-0.5	3.0	2.4	-2.3	2.5	2.5	3.2	3.7	4.0	2.3	4.0	4.0
GDP deflator in US dollar terms (change in percent)	8.9	2.8	-0.3	3.5	3.4	1.3	2.4	4.2	3.3	3.0	3.0	2.9	3.0	3.0
Effective interest rate (percent) 5/	4.0	4.6	5.1	4.0	0.8	4.6	4.6	4.0	3.8	3.4	3.3	3.9	2.7	1.9
Growth of exports of G&S (US dollar terms, in percent)	0.3	-5.7	-0.2	1.8	5.4	-5.1	6.1	11.5	7.9	7.5	7.5	5.9	7.1	7.1
Growth of imports of G&S (US dollar terms, in percent)	23.4	0.0	-0.4	9.6	8.3	-1.4	7.1	5.4	5.2	4.0	3.5	4.0	7.1	7.1
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	8.3	8.9	6.1	5.8	5.4	5.3	6.6	4.1	3.6
Government revenues (excluding grants, in percent of GDP)	25.5	29.9	26.2			27.6	29.0	31.5	29.5	30.2	30.2		30.3	30.3
Aid flows (in Billions of US dollars) 7/	0.3	0.2	0.3			0.0	0.1	0.0	0.0	0.0	0.0		0.0	0.1
o/w Grants	0.0	0.0	0.0			0.0	0.1	0.0	0.0	0.0	0.0		0.0	0.1
o/w Concessional loans	0.3	0.2	0.2			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			5.8	9.8	3.9	2.9	2.8	2.7		2.6	2.6
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			53.9	56.4	44.3	36.1	37.9	43.8		47.0	46.9
<b>Memorandum items:</b>														
Nominal GDP (Billions of US dollars)	0.7	0.7	0.7			0.7	0.7	0.8	0.8	0.9	0.9		1.3	2.6
Nominal dollar GDP growth	12.1	2.6	-0.7			-1.0	5.0	6.8	6.6	6.8	7.1	5.2	7.1	7.1
PV of PPG external debt (in Billions of US dollars)	...	...	0.3			0.3	0.3	0.3	0.3	0.3	0.3		0.3	0.4
(PVt-PVt-1)/GDPt-1 (in percent)	...	...	...			2.2	4.2	2.0	-0.2	0.9	0.4	1.6	0.2	0.9
Gross remittances (Billions of US dollars)	0.1	0.1	0.1			0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.3
PV of PPG external debt (in percent of GDP + remittances)	...	...	35.8			37.8	39.8	39.0	36.3	34.7	32.6		23.5	15.0
PV of PPG external debt (in percent of exports + remittances)	...	...	104.2			110.9	116.9	110.4	101.4	96.1	89.8		64.7	41.3
Debt service of PPG external debt (in percent of exports + remittances)	...	...	11.7			12.1	13.7	11.9	17.8	13.1	11.4		9.5	6.9

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as  $[r - g - \rho(1+g)] / (1+g+\rho+gp)$  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.

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 3b.St. Vincent and the Grenadines: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2010-2030  
(In percent)

	Projections							2020	2030
	2010	2011	2012	2013	2014	2015			
<b>PV of debt-to GDP ratio</b>									
<b>Baseline</b>	42	44	43	40	38	36	<b>26</b>	17	
<b>A. Alternative Scenarios</b>									
A1. Key variables at their historical averages in 2010-2030 1/	42	37	34	29	28	29	<b>36</b>	30	
A2. New public sector loans on less favorable terms in 2010-2030 2	42	45	45	42	41	39	<b>30</b>	23	
<b>B. Bound Tests</b>									
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	42	44	44	41	40	37	<b>27</b>	17	
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	42	46	51	48	46	43	<b>28</b>	17	
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	42	45	46	42	41	38	<b>28</b>	18	
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	42	58	72	68	66	61	<b>33</b>	17	
B5. Combination of B1-B4 using one-half standard deviation shocks	42	57	74	71	68	63	<b>34</b>	17	
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	42	62	60	56	54	51	<b>37</b>	23	
<b>PV of debt-to-exports ratio</b>									
<b>Baseline</b>	151	157	147	136	129	121	<b>87</b>	56	
<b>A. Alternative Scenarios</b>									
A1. Key variables at their historical averages in 2010-2030 1/	151	134	116	100	95	99	<b>120</b>	101	
A2. New public sector loans on less favorable terms in 2010-2030 2	151	162	153	143	137	130	<b>101</b>	77	
<b>B. Bound Tests</b>									
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	151	157	147	136	129	121	<b>87</b>	56	
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	151	182	223	207	198	185	<b>120</b>	71	
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	151	157	147	136	129	121	<b>87</b>	56	
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	151	208	248	233	223	206	<b>111</b>	56	
B5. Combination of B1-B4 using one-half standard deviation shocks	151	215	295	277	265	246	<b>133</b>	68	
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	151	157	147	136	129	121	<b>87</b>	56	
<b>PV of debt-to-revenue ratio</b>									
<b>Baseline</b>	151	150	136	135	126	119	<b>86</b>	55	
<b>A. Alternative Scenarios</b>									
A1. Key variables at their historical averages in 2010-2030 1/	151	129	107	99	93	98	<b>118</b>	99	
A2. New public sector loans on less favorable terms in 2010-2030 2	151	155	142	142	135	128	<b>99</b>	76	
<b>B. Bound Tests</b>									
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	151	153	141	140	131	124	<b>89</b>	57	
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	151	159	162	162	152	143	<b>93</b>	55	
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	151	154	145	144	134	127	<b>91</b>	58	
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	151	200	229	232	218	202	<b>109</b>	55	
B5. Combination of B1-B4 using one-half standard deviation shocks	151	195	236	239	225	210	<b>114</b>	58	
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	151	213	192	191	179	168	<b>121</b>	77	

Table 3b. St. Vincent and the Grenadines: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2010-2030 (continued)  
(In percent)

<b>Debt service-to-exports ratio</b>								
<b>Baseline</b>	16	18	16	24	18	15	<b>13</b>	9
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2010-2030 1/	16	18	15	23	16	12	<b>12</b>	16
A2. New public sector loans on less favorable terms in 2010-2030 2	16	18	16	14	13	13	<b>15</b>	14
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	16	18	16	24	18	15	<b>13</b>	9
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	16	20	20	31	23	22	<b>20</b>	12
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	16	18	16	24	18	15	<b>13</b>	9
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	16	18	17	27	21	24	<b>24</b>	10
B5. Combination of B1-B4 using one-half standard deviation shocks	16	20	21	32	25	28	<b>28</b>	12
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	16	18	16	24	18	15	<b>13</b>	9
<b>Debt service-to-revenue ratio</b>								
<b>Baseline</b>	16	18	15	24	17	15	<b>13</b>	9
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2010-2030 1/	16	17	14	22	16	12	<b>12</b>	16
A2. New public sector loans on less favorable terms in 2010-2030 2	16	18	15	14	12	12	<b>14</b>	13
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	16	18	15	25	18	16	<b>13</b>	10
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	16	18	15	25	18	17	<b>16</b>	9
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	16	18	16	25	18	16	<b>13</b>	10
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	16	18	16	27	20	23	<b>23</b>	9
B5. Combination of B1-B4 using one-half standard deviation shocks	16	18	17	28	21	24	<b>24</b>	10
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	16	25	21	33	24	21	<b>18</b>	13
<i>Memorandum item:</i>								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	5	5	5	5	5	5	<b>5</b>	5

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.