INTERNATIONAL MONETARY FUND

NICARAGUA

STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS[1]

November 14, 2013

Approved By
Saul Lizondo and Dhaneshwar Ghura (IMF) and J. Humberto Lopez and Jeffrey D. Lewis (IDA)

The Debt Sustainability Analysis (DSA) has been prepared jointly by IMF and World Bank staff, in consultation with the authorities.

The IMF and the World Bank 2013 Debt Sustainability Analysis (DSA) indicates that Nicaragua's risk of external public debt distress remains moderate. All present value debt ratios have declined following the recent reform of the discount rate; however, an alternative scenario points to vulnerabilities arising from contingent liabilities (e.g., if private debt is taken over by the public sector). The DSA of public debt suggests that debt levels are high, but that debt dynamics are sustainable although subject to, contingent liability risks. The DSA underscores the need to: (i) continue borrowing mostly on concessional terms; (ii) build up fiscal buffers over the next decade to lower debt ratios and strengthen the capacity to respond to shocks; (iii) reduce oil dependency; (iv) continue to make efforts to conclude ongoing debt relief negotiations; and (v) remain alert to contingent liability risks.

[1] This appendix was prepared in the context of the Article IV consultation mission held in September 2013. It updates the last comprehensive DSA conducted in June 2010 (SM/10/156, Supplement 1) and a DSA update in the Staff Report for the 7th Review of the ECF (Country Report No. 11/322).

BACKGROUND

1. This is the third DSA for Nicaragua prepared under the joint Bank-Fund Low-Income Country (LIC) Debt Sustainability Framework since 2007. As in 2010, the 2013 DSA includes an assessment of the external indebtedness of the financial and non-financial private sector. The 2010 external DSA concluded that Nicaragua was at moderate risk of debt distress, with vulnerabilities arising from a depreciation shock, lower growth, and lack of external adjustment; in addition, less favorable financing terms temporarily deteriorated debt and debt-service ratios. The 2010 DSA of public debt concluded that debt levels were high, but that debt dynamics were sustainable.

2. Four changes have been included in this comprehensive DSA relative to the one in 2010. First, nominal GDP has been revised upwards (about 30 percent) on account of the publication of new national accounts data.[2] Second, Nicaragua was reclassified in 2011 as a medium performer (instead of a strong performer) based on its 3–year average CPIA rating (this was also reported to the Board in 2011 during the 7th review of Nicaragua's ECF). Nicaragua has since recorded some improvement in its CPIA rating, but this is not yet sufficient for it to be re-classified again as a strong performer.[3] Third, as per a recent Board decision, the discount rate has been revised upward from 4 percent (in the 2010 DSA) to 5 percent (3 percent in the 2011 DSA).[4] And fourth, this DSA includes remittances in the baseline scenario.[5]

[2] The authorities launched on September 20, 2012 a new set of national accounts with 2006 as the base year. Nominal GDP has been revised upwards by about 30 percent. The revision, supported by technical assistance from CAPTAC-DR, uses improved source surveys an statistical procedures and a new base year (2006) to calculate GDP. The revision in nominal GDP has a large impact on debt-to-GDP ratios.

[3] The IMF-World Bank debt sustainability framework (DSF) uses policy dependent external debt thresholds based on the principle that the debt levels LICs can sustain are influenced by the quality of a country's policies and institutions. Such policies and institutions are assessed by the Country Policy and Institutional Assessment (CPIA) index compiled by the World Bank. The DSF divides countries into three performance categories: strong (CPIA >= 3.75), medium (3.75 > CPIA > 3.25), and poor (CPIA <= 3.25). Nicaragua's current rating (3–year average of 2010-12, as defined in the LIC DSA guidelines) is 3.68.

[4] The Executive Boards of the IMF and World Bank approved on October a reform of the discount rate (SM/13/271). The reform unifies the discount rate used for DSF and grant element calculations at 5 percent.

[5] The joint World Bank-IMF interim guidance on the use of remittances in DSF recommends that countries with large remittances conduct the DSA with remittances in the base case. Nicaragua is considered a large remittances country (i.e., the ratios of remittances-to-GDP and remittances-to-exports of goods and services are 10.3 and 26.6 percent, respectively, during the period 2003-12; these ratios are above the established thresholds of 10 and 20 percent).

DEBT PORTFOLIO

3. Nicaragua's public and publicly-guaranteed external debt ratios have declined, but external debt relief negotiations have progressed slowly. After reaching its completion point in 2004, Nicaragua received debt relief from bilateral (mostly Paris Club members) and multilateral official creditors. Progress was also made in restructuring public debt with private creditors.[6] The government is making efforts to conclude negotiations with non-Paris Club members, but progress with some of these countries has been slower.

Text table 1. Nicaragua: Stock Structure, 2007–12

	Million of US dollars			Percent of total debt			Percent of GDP		
	2007	2010	2012	2007	2010	2012	2007	2010	2012
Total	5,316	7,251	8,799	100.0	100.0	100.0	71.4	85.7	84.8
Public	3,659	4,198	4,429	68.8	57.9	50.3	49.1	50.1	43.2
External[1/]	2,402	2,934	3,307	45.2	40.5	37.6	32.3	35.0	32.2
Domestic	1,257	1,264	1,123	23.6	17.4	12.8	16.9	15.1	10.9
Of Which : BPIs	898	668	545	16.9	9.2	6.2	12.1	7.8	5.2
Private	1,658	3,053	4,370	31.2	42.1	49.7	22.3	35.6	41.6
Of which: ALBA	n.a.	1,084	2,186	n.a.	14.9	24.8	n.a.	12.6	20.8

Sources: Central Bank of Nicaragua; Ministry of Finance; and Fund staff estimates and projections.
[1/]Excluding non-Paris Club outstanding debt relief.

4. At end-2012, debt to non-Paris Club bilateral creditors still subject to relief stood at US$1.5 billion (equivalent to 14½ percent of GDP and 35 percent of total outstanding external debt). This amount excludes Taiwan that is in the process of being resolved. Of the ten countries holding claims on Nicaragua still subject to debt relief, only Taiwan receives debt-service payments as this debt was incurred after the cutoff date and an agreement has recently been reached.[7] In addition, bilateral and multilateral debt relief from Spain, Slovak Republic, FIDA, and Nordic Funds for US$32 million has been granted since the 2010 DSA.[8] It is also worth noting that Nicaragua's public and publicly-guaranteed (PPG) external debt (including debt still subject to relief) is almost equally divided between the central government and the central bank. Most of this PPG external debt is owed to multilateral institutions or to non-Paris Club official creditors.

[6] In 2007-08, a commercial debt buy-back operation (with support from the World Bank's Debt Reduction Facility) resolved outstanding debt to private creditors (both domestic and external) for US$1.4 billion or 19 percent of 2007 GDP; the participation rate exceeded 95 percent and it provided relief for 95 percent of the outstanding principal.

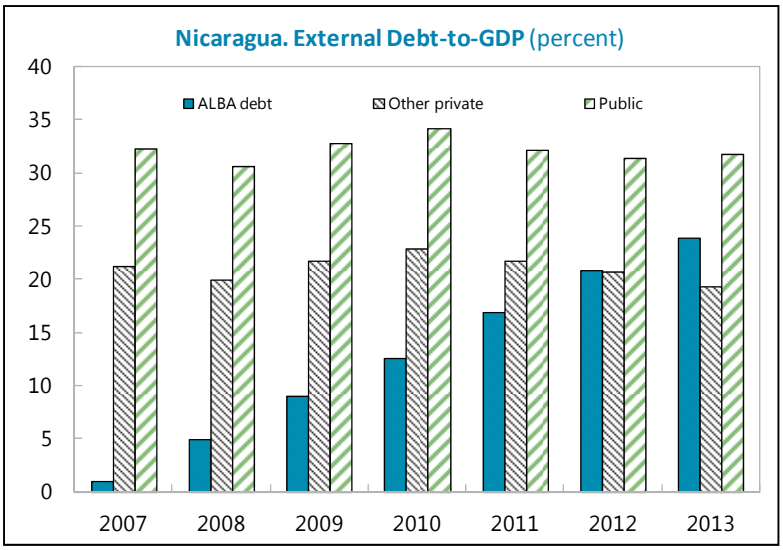
[7] In 2011, an agreement with Libya was reached but is yet to be finalized. In 2012, an agreement with Iran was signed but the final approval by the Iran authorities is pending. In 2013, a consolidated loan agreement was signed with Taiwan and legislative approval is pending.

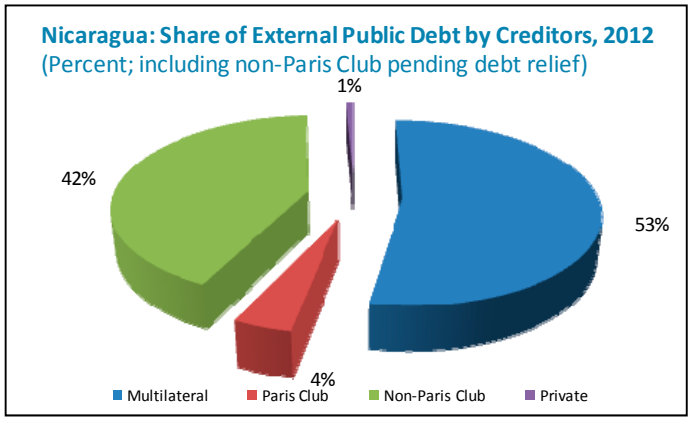
[8] Negotiations on a US$23.6 million claim by Honduras' electricity company are being settled in the context of official bilateral debt relief negotiations with non-Paris Club member countries.

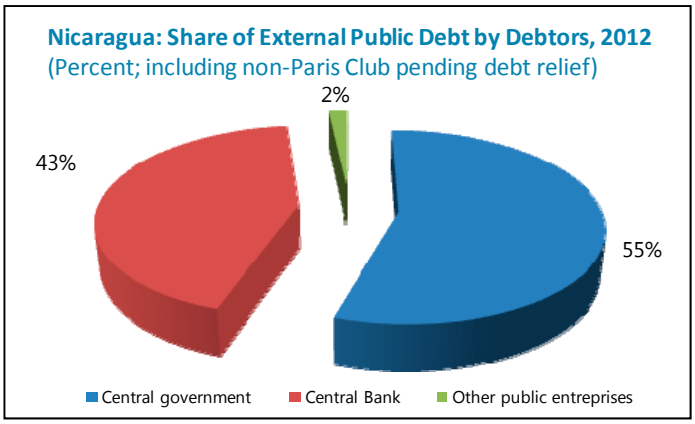
Text table 2. Nicaragua: External Debt Restructurings Pending with Non-Paris Club Creditors
(Million of US dollars)

	2007	2012
Outstanding debt[1/]	**1,450.8**	**1,507.1**
Costa Rica	650.4	662.8
Libya	306.7	326.2
Honduras	256.1	274.1
Iran	168.9	171.8
Peru	45.4	48.2
China	18.1	18.9
Uruguay	2.4	2.4
Ecuador	1.6	1.6
India	1.2	1.1

Source: Country authorities.
[1/] Excluding the outstanding debt of Taiwan (Rep. of China)–US$93.6 million (post cut off date).







5. Public and publicly-guaranteed debt has also declined as a result of the reduction in domestic public debt. The ratio of domestic debt fell from 29 percent of GDP in 2002–03 to about 11 percent in 2012 reflecting debt buyback (see footnote 6). Most of it is indexed to the U.S. dollar but serviced in córdobas. Property settlement bonds (BPIs) is the largest component of domestic debt. These bonds are issued as part of court settlements on property expropriations that occurred in the 1980s. New issues of BPIs have steadily declined—they averaged US$75 million in 2003–06 and were down to US$21 million in 2012. BPIs represent 49 percent of total domestic debt and their stock fell from 15 to 5 percent of GDP between 2005 and 2012.

6. Private external debt is rising sharply on account of the ALBA oil collaboration.[9] Specifically, private external debt rose from 22 percent of GDP in 2007 to 42 percent of GDP in 2012. A large share of this rise is as a result of the ALBA oil collaboration.[10]

MACROECONOMIC ASSUMPTIONS

7. The 2013 DSA incorporates Nicaragua's revised national accounts and is built on conservative macroeconomic assumptions. The DSA of external and public debt assumes that growth slows down from 5.2 percent in 2012 to its potential rate (4 percent) by 2014. This is the same medium-term growth as assumed in the 2010 DSA. The staff projection assumes the continuation of (i) prudent macroeconomic management policies, and (ii) reforms that support the change in the electricity generation matrix. The non-interest external current account is programmed to improve in the first 10 years of the projection period (2013–22) broadly in line with a relative decline in the oil bill.

8. On the external side, the baseline scenario assumes:

- A relative decline in Nicaragua's dependence on oil imports and, consequently, a lower (non-interest) external current account deficit. The assumed decline reflects programmed non-fossil electricity generation projects. Thus, no significant changes in external imbalances would occur after 2023. This is a more conservative assumption than in the 2010 DSA, which had a similar external imbalance in the first 10 years of the projection period (2013–22), but that also assumed this adjustment continued during the following 10 years.[11]

- Export-to-GDP ratios remain broadly stable at about 50–53 percent of GDP and import-to-GDP ratios will decline mildly from 73 percent to 68 percent in 2013–33, largely reflecting a declining relative dependence on oil imports and lower FDI.

- Completion of negotiations with non-Paris Club bilateral creditors on HIPC-equivalent terms are assumed throughout the projection.[12] This in effect generates debt relief of 9.4 percent of GDP (in stock terms as of end-2012 or US$983 million). HIPC terms were also assumed in the 2010 DSA; most of this debt is currently not serviced.

[9] The Bolivarian Alliance for the Peoples of Our Americas (*Alianza Bolivariana para los Pueblos de Nuestra América*, or ALBA) is an international cooperation organization founded originally by Cuba and Venezuela in 2004. The member countries are Antigua and Barbuda, Bolivia, Cuba, Dominica, Ecuador, Nicaragua, Saint Vincent and the Grenadines, Venezuela, Saint Lucia, and Suriname.

[10] The financial terms assumed on new private borrowing (excluding ALBA) are, for the financial sector, an 8-year maturity with a 3-year grace period and an interest rate of 4 percent and, for the non-financial sector, a 7-year maturity with a 1-year grace period and an interest rate of 7 percent.

[11] This is after adjusting the 2010 DSA for the mentioned changes in nominal GDP.

[12] It is assumed that debt relief amounting to US$982.8 million at end-2012 (excluding Taiwan Republic of China) is obtained (out of US$1,507 million outstanding pending non-Paris Club debt).

- Net official external assistance (official public loans and grants) is expected to decline from 10 percent of GDP, on average, for the period 2007–12 to about 3 percent for 2027–33. Exposure to multilateral development banks is projected to grow. This is similar to the assumptions in the 2010 DSA.

- FDI is assumed to remain about 1¼ percent of GDP below the level recorded in 2010–12, as recent foreign investment in the energy sector is expected to decline. The projected levels are also below those assumed in the 2010 DSA (by about 1½-2 percent of GDP).

- ALBA-related flows are assumed to decline smoothly through 2033. It is also assumed that the ALBA oil collaboration continues to be channeled through the private sector.

9. On the fiscal side, the baseline scenario assumes that:

- In line with the achievements since 2010, fiscal management remains prudent. Primary deficits (after grants) are expected to average less than ½ percent of GDP in the first 10 years of the projection period (this is broadly similar to the level observed in 2010–12) and about ¼ percent of GDP in the following 10 years.

- The baseline assumes a pension reform is implemented in 2013, which is key to keeping debt sustainable. In the absence of such a reform, the social security system would begin incurring deficits by 2015 that would reach about 1-1.5 percent of GDP by 2023 and could rise to nearly 3.5 percent of GDP by 2033.

- Capital expenditures are programmed to increase over the medium-term by about 1½ percent of GDP relative to their 2012 level reflecting increased investment in infrastructure.

- Issuance of BPIs is expected to remain at the level observed in 2012 through 2018, in line with the annual projection in the 2010 DSA (US$21 million).

EXTERNAL PUBLIC DEBT SUSTAINABILITY

Baseline Scenario

10. Under the baseline scenario (with remittances), Nicaragua's external public debt indicators remain below their policy dependent indicative thresholds. The thresholds used are those that apply to medium performers in terms of policies and institutional quality, as measured by a 3–year moving average of the World Bank's CPIA. All present value (PV) external debt stock indicators, which measure the future debt-service burden of debt stocks (repayment risks), are below the policy indicative thresholds and expected to decline over the 20–year projection period. For instance, the PV of the PPG external public debt-to-GDP (plus remittances) ratio declines from 22½ percent in 2013 to 12 percent by 2033 (Table 2 and Text table 3); this is well below the 36 percent threshold (Figure 1 and Text table3). (Table 1 shows the underlying assumptions of the baseline projections presented in Table 2). Likewise, reflecting the relative

openness of Nicaragua's economy, the PV of external public debt as a share of exports (plus remittances) remains below indicative thresholds throughout the projection period.

11. Similarly, the projected external public debt service is expected to remain manageable through 2033. This path reflects strong fiscal performance and relatively high concessionality of existing and new public external debt. In fact, the PPG external debt service ratios, which are a measure of the immediate burden posed by debt (liquidity risks), are projected to average 2 percent of exports plus remittances (or about 5 percent of revenues) during 2013–17 (Text table 3). This is despite the assumed small erosion in the concessionality terms of new borrowing.

Text table 3. Nicaragua: Baseline Debt Ratios, 2013–33
(Percent)

	Thresholds[1/]	2013	2013–17 (Average)	2018–33 (Average)
External				
PV of debt-to-GDP[2/]	36.0	22.5	22.3	17.5
PV of debt-to-exports[2/]	120.0	41.1	40.4	31.2
PV of debt-to-revenue	250.0	97.0	94.1	72.2
Debt service-to-exports[2/]	16.0	1.8	2.0	1.1
Debt service-to-revenue	20.0	4.3	4.7	2.5
Fiscal				
PV of debt-to-GDP		34.4	31.7	24.8
PV of debt-to-revenue		125.8	115.1	89.3
Debt service-to-revenue		13.0	11.6	7.2

[1/] Remittances-based thresholds.
[2/] Denominator plus remittances.

Alternative Scenarios and Stress Tests

12. Under the current discount rate policy (set at 5 percent), none of the standard alternative scenarios and stress tests would breach the policy dependent indicative thresholds (Table 2 and 3, and Figure 1 and 3).[13]

- **Historical scenario**. In an "historical" scenario (i.e., where key variables remain at their historical averages), the PV of the PPG external-debt-to-GDP ratio is projected to grow, but would remain by 2033 below the policy dependent threshold.

- **Non concessional financing**. In the scenario where new borrowing occurs on less favorable terms, which assumes that the interest through 2033 is 2 percentage points higher than in the baseline, all debt ratios deteriorate but stay below the threshold.

- **Exchange rate depreciation**. Similarly, under the standardized stress test of a one-time 30 percent nominal depreciation in 2014, all debt ratios deteriorate but stay below the indicative thresholds.

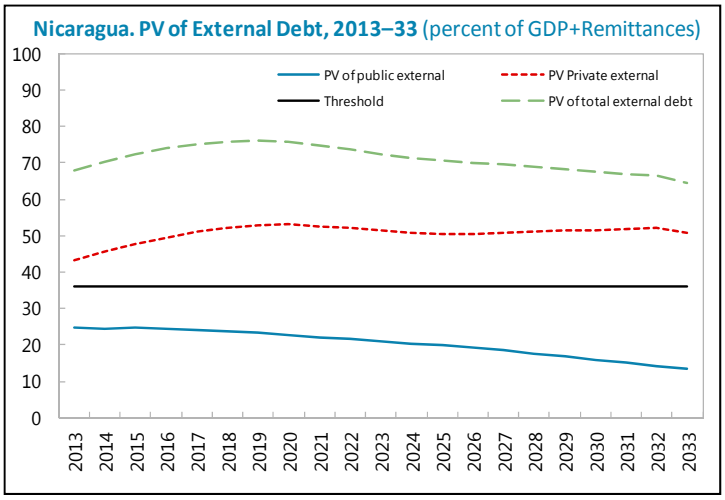
- **Scenario without remittances**. Remittances to Nicaragua are relatively large. Average remittances during 2008–12 were the equivalent of 10 percent GDP and 23 percent exports of

[13] The change in the discount rate has significantly improved all PV of public debt ratios. For example, the PV of public debt to GDP in 2013 is now reduced to 34.4 percent from 41.4 percent.

goods and services. As recommended in the DSF (interim guidance), a scenario without remittances is also conducted. The results in Figure 3 and Table 3 are presented as an alternative scenario and point to conclusions that are similar to those reached in the analysis with remittances (the base case in this DSA).

PRIVATE EXTERNAL DEBT AND EXTERNAL DEBT SUSTAINABILITY

13. The PV of private external debt is well above the indicative thresholds that are used for public external debt.[14] The DSA projections assume that: (i) the ALBA oil collaboration continues through 2033; (ii) these resources will continue to be channeled to the private sector with financial terms similar to those currently under application;[15] and (iii) Venezuela-related oil bills will decline in relative terms as savings from renewable energy sources materialize.[16] Under these assumptions, the pace of accumulation of private external debt eventually decelerates; i.e., it is projected to peak in 2020 (at about 56 percent of GDP, in PV terms) and decline steadily thereafter.

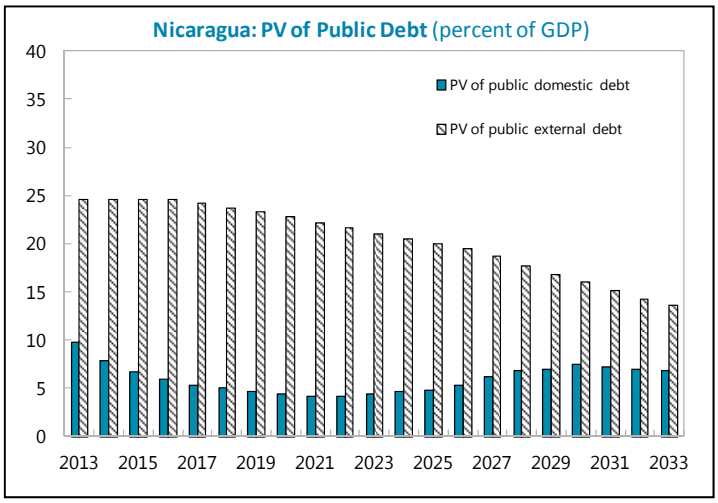


[14] The use of the public DSF threshold to discuss the private sector debt dynamics is for illustrative purpose only as there are no good guidelines on what is a sustainable level of private debt.

[15] Venezuela represents 94 percent of Nicaragua's FOB oil imports; 50 percent of this oil bill is financed with a loan that has a maturity of 25 years, a grace period of 2 years, and an interest rate of 2 percent; this implies the equivalent of a grant element of 37 percent when using a discount rate of 5 percent.

[16] Several non-thermal generation projects are assumed to come into operation to reduce Nicaragua's oil bill; namely, several hydroelectric (Bokobé, Larreynaga, and, in particular, Tumarin in 2018) and a new eolic project (ALBA vientos). It is worth noting that non-thermal energy sources accounted for only 17 of total gross generation in 2007 and this is expected to rise to over 40 percent by end-2013.

PUBLIC DEBT SUSTAINABILITY



14. Nicaragua's total public debt ratios are high, but continue to decline. The baseline scenario (with remittances) assumes the continuation of the prudent fiscal management observed over the past few years. A social security reform is assumed in the baseline scenario as the authorities have publicly announced their intention to introduce such reforms by late 2013—this reform is in fact crucial to strengthen public debt dynamics. Even with some fiscal loosening relative to recent path, it is expected that Nicaragua will continue to experience a gradually declining debt path. As a result, the PV of total public debt-to-GDP is projected to decline to 20.4 percent of GDP by 2033 (from 34.4 percent in 2013 (see Table 5; Figure 2 and Table 4 provide background on the underlying assumptions). Excluding remittances from these debt scenarios has only a marginal impact (Figure 4).

15. Debt service ratios are also expected to improve. Total public debt-service-to-revenue ratios are expected to decline from 13.0 to 4.8 percent between 2013 and 2033. Also, the availability of concessional external financing limits the need to rely on domestic debt, which in Nicaragua's highly dollarized economy involves higher yields and exchange rate risks; the projection assumes the level of dollarization does not change.

Alternative Scenarios and Stress Tests

16. Nicaragua's large share of foreign-currency denominated debt makes it vulnerable to exchange rate shocks. The stress tests for total public debt (Table 5) indicate that a 30 percent depreciation would increase the PV of public debt-to-GDP ratio from 34 percent in 2013 to 47 percent in 2014 and decline only gradually thereafter. In sum, public debt service ratios deteriorate but remain manageable. For instance, total public debt ratios-to-revenues would increase from 126 percent (in PV terms) to 175 percent. Finally, contingent liabilities, such as those that could arise from property confiscations and social security deficits, all add to Nicaragua's public debt vulnerabilities.

17. Should the government be required to assume private debt, this would severely impair debt sustainability. This risks applies to any private debt and, given the rapidly increasing levels of private debt and the potential risks to external current account financing, an alternative scenario is carried out that

assumes some private debt being absorbed into the public sector's balance sheet.[17] Specifically, it is assumed that nearly two thirds of private external debt are assumed by the public sector in 2014.[18] This scenario also assumes that no additional debt will be generated from future oil imports. If such a contingent liability risk were to materialize, then this would drive up the PV of public external debt ratio to GDP in 2014 to 41.7 percent (compared to 24.6 percent under the baseline) and the public debt ratio to GDP would rise to 67.8 percent in 2014 (compared to 40.6 percent under the baseline). In both cases the indicative thresholds for the PV of debt-to-GDP ratios would be breached.

18. Other stress tests suggest, with few exceptions, only a temporary deterioration in debt and debt-service ratios. This includes: (i) a 10 percent of GDP increase in other debt-creating flows in 2013; (ii) a GDP growth at its historical average minus one standard deviation in 2013–14; and (iii) a scenario that combines the latter with a primary balance at its historical average minus one standard deviation in 2013–14 (Table 5). The most concerning stress test is the one that results from a depreciation shock; it takes about a decade to recover from such a shock. In all cases, however, PV ratios remain below their thresholds.

DEBT DISTRESS CLASSIFICATION AND CONCLUSIONS

19. In the staff's view Nicaragua should be considered at moderate risk of external debt distress; also, the DSA on public debt suggests that Nicaragua's public debt is high, but that debt dynamics are sustainable. The above assessment is consistent with the 2010 DSA[19] and assumes a continuation of Nicaragua's prudent macroeconomic management of the past few years and its so far successful transformation of the electricity generation matrix. Finally, the rapid increase in private external debt, which includes the debt arising as a result of the oil collaboration with Venezuela, requires continuous monitoring and the government's continued commitment not to extend public guarantees on this debt.

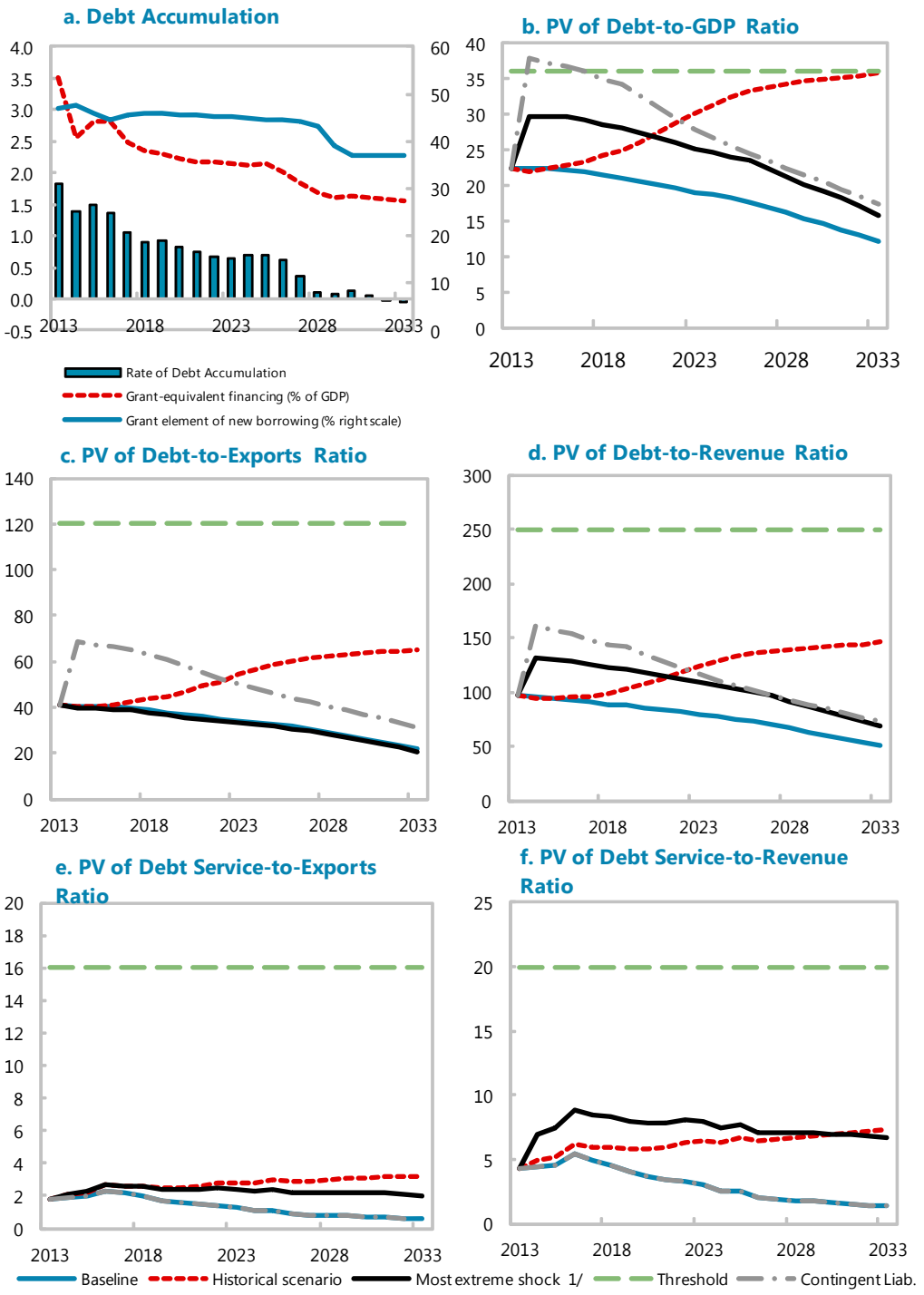
20. The authorities concurred with the thrust of the analysis, findings, and key conclusions. They agreed on the need to keep pace of key reforms, including the social security reform. They also recognized that it is imperative to continue making efforts to conclude ongoing negotiations with non-Paris Club creditors under the HIPC Initiative. The authorities requested the support of the IMF and the World Bank in encouraging the creditors who had not yet reached agreement on debt relief for Nicaragua to participate in the Initiative. Finally, while the authorities noted they had obtained similar results in their own DSA, they have requested that staff shares the final detailed DSA output.

[17] This private debt includes the obligations of CARUNA, a privately-owned Nicaraguan financial cooperative that holds the debt obligations arising from the oil collaboration with Venezuela; according to the authorities, the repayment risks of this debt are borne by PDVSA.

[18] It is further assumed that concessional terms would apply to this new public debt (specifically, 1.8 percent interest rate, 5 years grace period, 30 years maturity; at 5 percent discount rate, this would yield 36 percent grant element).

[19] Adjusting debt and debt service ratios in the 2010 DSA by the level impact of the new national accounts data, the conclusions of the 2013 DSA are similar to those presented in the 2010 DSA; the 2013 DSA also benefits from the recent change in the discount rate.

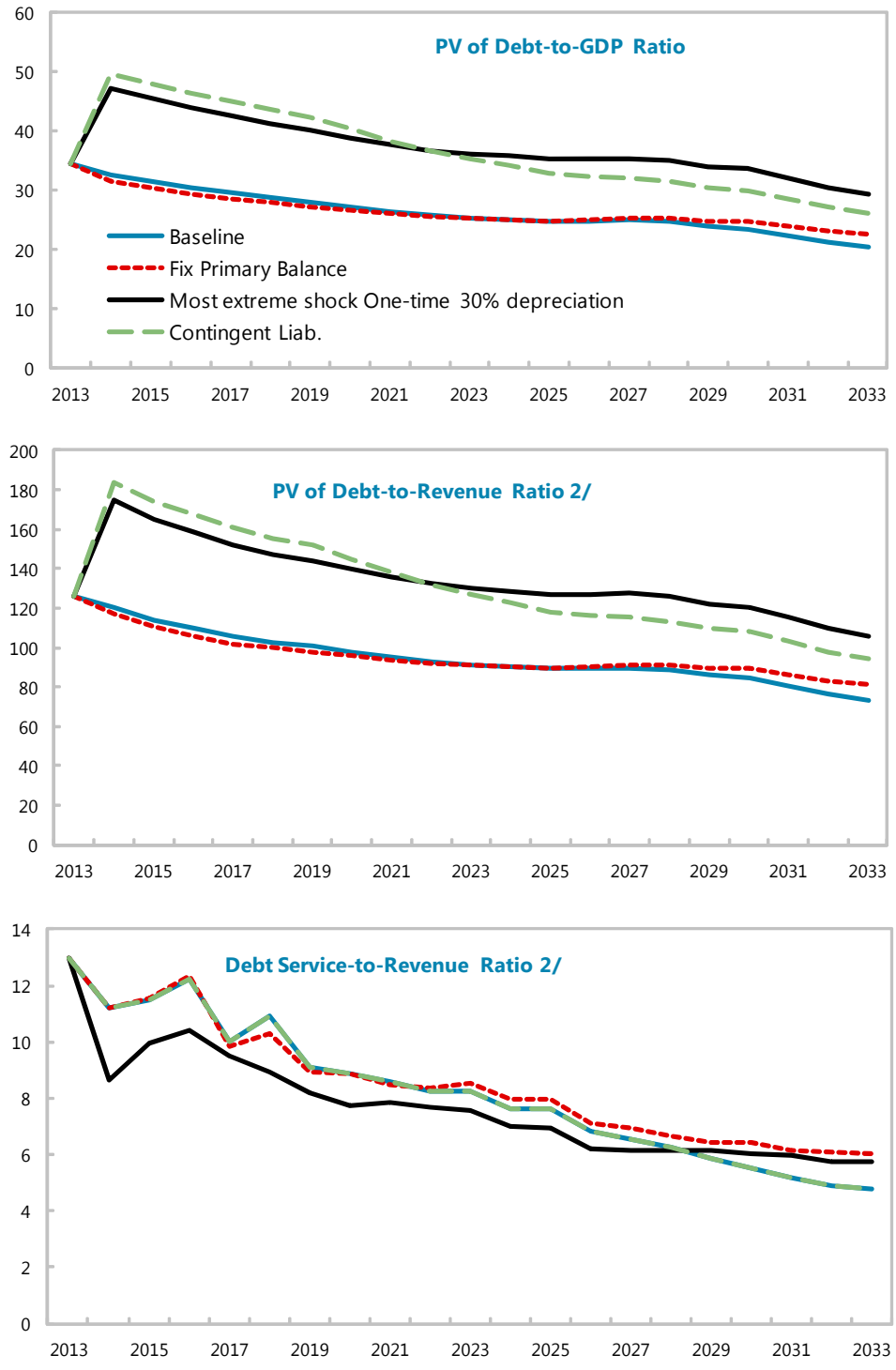
Figure 1. Nicaragua: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios with Remittances, 2013-2033 1/



Sources: Country authorities; and staff estimates and projections.

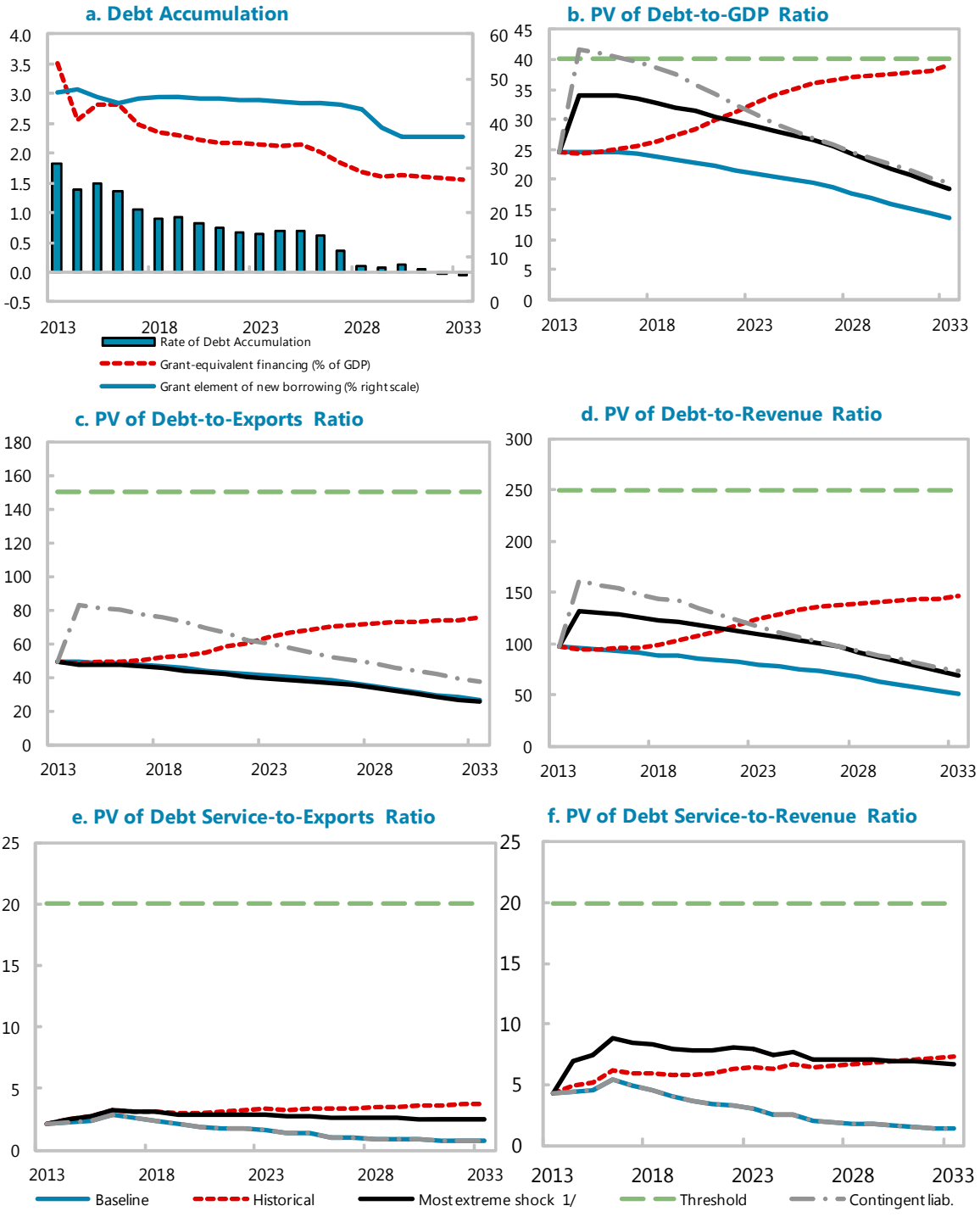
1/ The most extreme stress test is the test that yields the highest ratio in 2023. In figure b. it corresponds to a One-time depreciation shock; in c. to a Terms shock; in d. to a One-time depreciation shock; in e. to a Terms shock and in figure f. to a One-time depreciation shock

Figure 2.Nicaragua: Indicators of Public Debt Under Alternative Scenarios with Remittances, 2013-2033 1/



Sources: Country authorities; and staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio in 2023.
2/ Revenues are defined inclusive of grants.

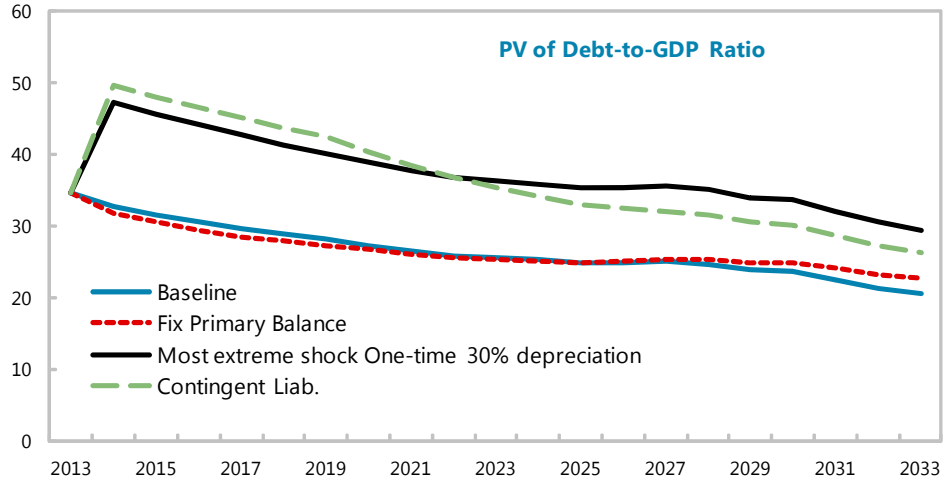
Figure 3. Nicaragua: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2013-2033[1/]

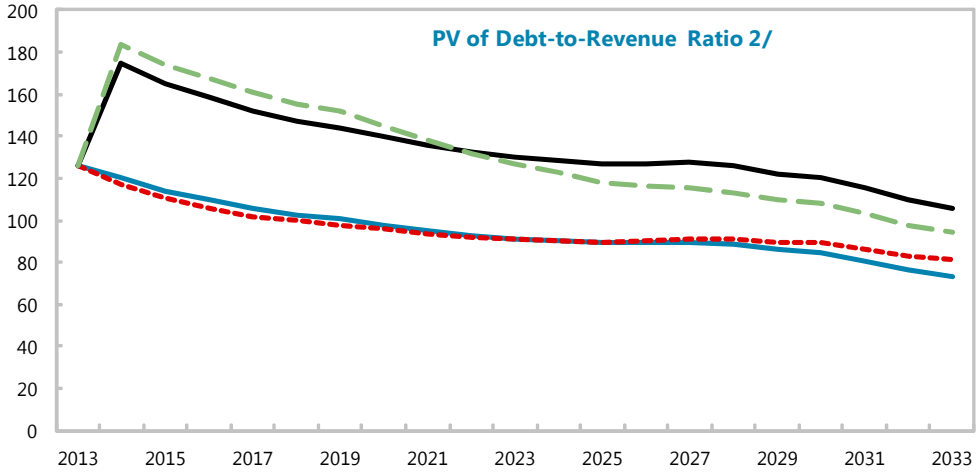


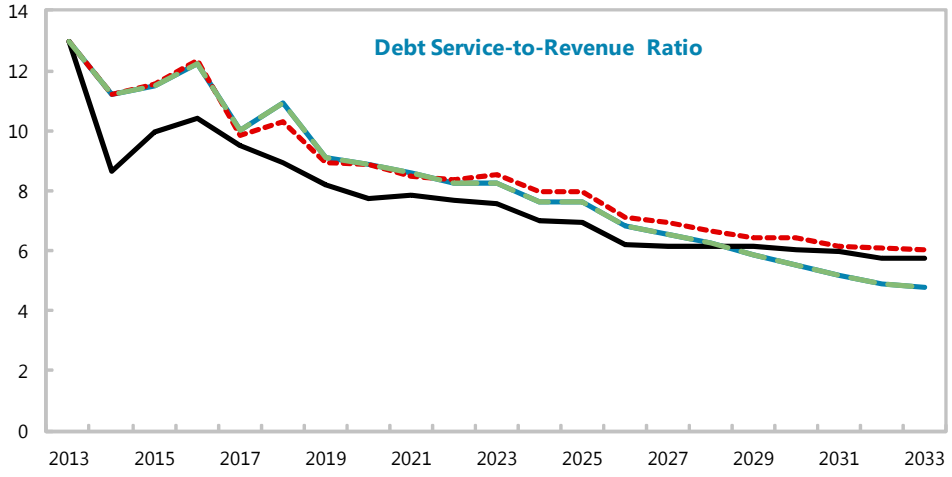
Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2023. In figure b. it corresponds to a One-time depreciation shock; in c. to a Terms shock; in d. to a One-time depreciation shock; in e. to a Terms shock and in figure f. to a One-time depreciation shock

Figure 4. Nicaragua: Indicators of Public Debt Under Alternative Scenarios, 2013-2033[1/]







Sources: Country authorities; and staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio in 2023.
2/ Revenues are defined inclusive of grants.

Table 1: Nicaragua: External Debt Sustainability Framework, Baseline Scenario, 2010–33[1/]
(In percent of GDP, unless otherwise indicated)

	Actual			Historical[6/] Average	Standard[6/] Deviation	Projections									
	2010	2011	2012			2013	2014	2015	2016	2017	2018	2013-2018 Average	2023	2033	2019-2033 Average
External debt (nominal) 1/	**70.6**	**71.6**	**73.8**			**75.8**	**78.4**	**80.7**	**82.8**	**84.3**	**85.1**		**81.9**	**72.4**	
o/w public and publicly guaranteed (PPG)	35.0	33.0	32.2			32.6	32.7	32.9	33.4	33.3	32.9		30.5	21.6	
Change in external debt (a)	6.1	1.1	2.2			2.0	2.5	2.4	2.1	1.5	0.8		-1.3	-2.2	
Identified net debt-creating flows (b)	1.3	-1.3	-0.7			4.1	3.9	3.4	3.3	2.7	2.0		-0.1	-1.1	
Non-interest current account deficit	**8.6**	**11.1**	**10.5**	**10.2**	**2.9**	**10.3**	**9.5**	**9.2**	**9.1**	**8.6**	**8.0**		**6.1**	**6.1**	7.1
Deficit in balance of goods and services	20.7	23.3	22.5			22.2	21.6	20.8	20.3	19.6	19.0		16.5	16.5	
Exports	43.5	49.0	50.8			50.3	50.5	50.7	50.9	51.0	51.1		51.5	51.5	
Imports	64.2	72.3	73.4			72.5	72.1	71.5	71.2	70.6	70.1		68.0	68.0	
Net current transfers (negative = inflow)	-16.5	-15.2	-14.5	-17.6	1.8	-13.1	-13.3	-13.3	-12.9	-12.4	-12.2		-11.5	-12.1	-11.0
o/w official	-2.7	-2.4	-2.0			-1.4	-1.4	-1.5	-1.4	-1.3	-1.2		-1.2	-1.1	
Other current account flows (negative = net inflow)	4.4	3.0	2.4			1.2	1.2	1.7	1.8	1.4	1.2		1.1	1.7	
Net FDI (negative = inflow)	**-5.9**	**-10.0**	**-7.7**	**-5.8**	**2.0**	**-6.2**	**-5.9**	**-5.8**	**-6.0**	**-6.0**	**-6.0**		**-6.0**	**-6.0**	-6.0
Endogenous debt dynamics 2/	**-1.3**	**-2.4**	**-3.5**			**0.1**	**0.3**	**0.0**	**0.2**	**0.1**	**0.1**		**-0.3**	**-1.2**	
Contribution from nominal interest rate	1.4	2.1	2.4			2.9	3.2	3.0	3.2	3.2	3.3		2.9	1.6	
Contribution from real GDP growth	-2.2	-3.4	-3.4			-2.9	-2.9	-3.0	-3.0	-3.1	-3.2		-3.1	-2.8	
Contribution from price and exchange rate changes	-0.6	-1.0	-2.5			...	...	...	...	...	...		...	...	
Residual (a-b) 3/	**4.8**	**2.4**	**2.9**			**-2.1**	**-1.4**	**-1.1**	**-1.2**	**-1.2**	**-1.2**		**-1.2**	**-1.1**	
o/w exceptional financing	-0.4	-0.3	-0.4			0.0	-0.1	-0.1	-0.1	-0.1	-0.1		0.0	0.0	
PV of external debt 4/	...	...	66.2			67.9	70.3	72.4	74.0	75.2	75.9		72.5	64.4	
In percent of exports	...	...	130.2			135.1	139.1	142.9	145.5	147.6	148.6		140.6	125.0	
PV of PPG external debt	**...**	**...**	**24.6**			**24.7**	**24.6**	**24.7**	**24.6**	**24.2**	**23.7**		**21.0**	**13.6**	
In percent of exports	**...**	**...**	**48.3**			**49.0**	**48.7**	**48.6**	**48.3**	**47.5**	**46.5**		**40.8**	**26.4**	
In percent of government revenues	**...**	**...**	**97.4**			**97.0**	**95.4**	**94.2**	**93.1**	**90.8**	**88.5**		**79.1**	**51.1**	
Debt service-to-exports ratio (in percent)	**17.3**	**16.1**	**12.4**			**13.2**	**14.2**	**14.9**	**15.2**	**16.4**	**14.6**		**14.8**	**11.9**	
PPG debt service-to-exports ratio (in percent)	**4.1**	**2.6**	**2.3**			**2.2**	**2.3**	**2.4**	**2.8**	**2.6**	**2.4**		**1.6**	**0.7**	
PPG debt service-to-revenue ratio (in percent)	**7.7**	**4.9**	**4.6**			**4.3**	**4.5**	**4.6**	**5.4**	**4.9**	**4.5**		**3.1**	**1.4**	
Total gross financing need (Millions of U.S. dollars)	1,147	1,231	1,392			1,756	2,153	2,225	2,285	2,317	2,052		2,123	4,315	
Non-interest current account deficit that stabilizes debt ratio	2.5	10.1	8.2			8.3	7.0	6.9	7.0	7.1	7.1		7.5	8.3	
Key macroeconomic assumptions															
Real GDP growth (in percent)	3.6	5.4	5.2	3.7	2.3	4.2	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
GDP deflator in US dollar terms (change in percent)	1.6	6.4	3.6	3.4	2.3	3.0	1.9	1.9	1.9	1.9	1.9	2.1	1.9	1.5	1.9
Effective interest rate (percent) 5/	2.3	3.3	3.7	3.0	0.4	4.3	4.5	4.0	4.2	4.1	4.1	4.2	3.7	2.3	3.2
Growth of exports of G&S (US dollar terms, in percent)	26.4	26.4	13.1	17.0	8.7	6.1	6.5	6.3	6.4	6.2	6.2	6.3	4.7	5.5	6.0
Growth of imports of G&S (US dollar terms, in percent)	20.0	26.3	10.7	13.9	11.5	6.0	5.5	5.1	5.5	5.0	5.3	5.4	5.6	5.6	5.7
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	47.1	47.7	46.0	44.7	45.7	46.1	46.2	45.1	36.9	42.4
Government revenues (excluding grants, in percent of GDP)	23.1	25.4	25.2			25.4	25.8	26.2	26.4	26.7	26.8		26.6	26.6	26.6
Aid flows (in Millions of US dollars) 7/	438.4	455.5	461.1			501.5	389.3	472.9	530.2	474.9	466.2		567.5	588.8	
o/w Grants	172.9	229.5	216.1			222.8	148.1	178.0	182.1	176.4	185.6		248.1	441.9	
o/w Concessional loans	265.5	226.0	245.0			278.7	241.1	294.9	348.2	298.5	280.6		319.4	146.9	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			3.5	2.6	2.8	2.8	2.5	2.4		2.1	1.6	1.9
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			67.1	63.9	63.0	60.9	62.7	64.2		66.0	73.4	68.8
Memorandum items:															
Nominal GDP (Millions of US dollars)	8,587	9,636	10,506			11,272	11,946	12,660	13,418	14,220	15,071		20,150	35,884	
Nominal dollar GDP growth	5.3	12.2	9.0			7.3	6.0	6.0	6.0	6.0	6.0	6.2	6.0	5.6	6.0
PV of PPG external debt (in Millions of US dollars)			2,520			2,713	2,869	3,046	3,220	3,362	3,492		4,133	4,731	
(PVt-PVt-1)/GDPt-1 (in percent)						1.8	1.4	1.5	1.4	1.1	0.9	1.3	0.6	0.0	0.4
Gross workers' remittances (Millions of US dollars)	823	912	1,014			1,095	1,197	1,312	1,378	1,425	1,529		2,074	3,931	
PV of PPG external debt (in percent of GDP + remittances)	...	...	22.6			22.6	22.5	22.5	22.4	22.1	21.7		19.2	12.5	
PV of PPG external debt (in percent of exports + remittances)	...	...	41.3			41.6	41.2	41.0	40.5	39.9	39.2		34.5	22.5	
Debt service of PPG external debt (in percent of exports + remi	...	...	1.9			1.8	1.9	2.0	2.4	2.2	2.0		1.3	0.6	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt. Historical estimates of debt have been revised (upwards) by the Central Bank of Nicaragua. The projections assume that outstanding debt to non-Paris Club bilateral creditors is settled on HIPC-equivalent terms by end-2012.

2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = 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 2.Nicaragua: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2013-2033
(In percent)

	Projections							
	2013	2014	2015	2016	2017	2018	2023	2033
PV of debt-to-GDP+remittances ratio								
Baseline	22	22	22	22	22	22	19	12
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	22	22	22	23	23	24	30	36
A2. New public sector loans on less favorable terms in 2013-2033 2/	22	23	24	24	25	25	26	22
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	22	22	23	23	22	22	19	12
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	22	21	20	20	20	20	17	11
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	22	22	22	22	22	21	19	12
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	22	21	21	21	21	20	18	11
B5. Combination of B1-B4 using one-half standard deviation shocks	22	19	14	15	15	14	12	8
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	22	30	30	30	29	29	25	16
PV of debt-to-exports+remittances ratio								
Baseline	41	41	40	40	40	39	34	22
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	41	40	41	41	42	44	54	65
A2. New public sector loans on less favorable terms in 2013-2033 2/	41	41	43	44	45	45	46	39
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	41	40	39	39	39	38	33	21
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	41	38	36	35	35	34	30	19
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	41	40	39	39	39	38	33	21
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	41	38	37	38	38	37	32	20
B5. Combination of B1-B4 using one-half standard deviation shocks	41	32	23	24	23	23	20	12
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	41	40	39	39	39	38	33	21
PV of debt-to-revenue ratio								
Baseline	97	95	94	93	91	89	79	51
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	97	94	94	95	96	99	124	147
A2. New public sector loans on less favorable terms in 2013-2033 2/	97	97	99	102	103	103	106	91
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	97	95	96	95	93	90	80	51
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	97	91	85	85	82	80	71	45
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	97	94	93	92	90	87	78	50
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	97	92	90	89	86	84	75	48
B5. Combination of B1-B4 using one-half standard deviation shocks	97	82	62	62	60	59	52	33
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	97	132	130	128	125	122	109	69

Table 2.Nicaragua: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2013-2033 (continued)
(In percent)

	Projections							
	2013	2014	2015	2016	2017	2018	2023	2033
Debt service-to-exports+remittances ratio								
Baseline	2	2	2	2	2	2	1	1
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	2	2	2	3	3	3	3	3
A2. New public sector loans on less favorable terms in 2013-2033 2/	2	2	2	3	3	3	3	3
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	2	2	2	3	3	3	2	2
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	2	2	2	3	2	2	2	2
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	2	2	2	3	3	3	2	2
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	2	2	2	3	3	3	2	2
B5. Combination of B1-B4 using one-half standard deviation shocks	2	2	2	2	2	2	2	1
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	2	2	2	3	3	3	2	2
Debt service-to-revenue ratio								
Baseline	4	4	5	5	5	5	3	1
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	4	5	5	6	6	6	6	7
A2. New public sector loans on less favorable terms in 2013-2033 2/	4	5	5	6	6	6	6	6
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	4	5	6	7	6	6	6	5
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	4	5	5	6	6	6	5	4
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	4	5	5	6	6	6	6	5
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	4	5	5	6	6	6	6	5
B5. Combination of B1-B4 using one-half standard deviation shocks	4	5	5	5	5	5	5	3
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	4	7	7	9	9	8	8	7
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	38	37	36	35	34	32	26	15

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.

Table 3.Nicaragua: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2013–33
(In percent)

	Projections							
	2013	2014	2015	2016	2017	2018	2023	2033
PV of debt-to GDP ratio								
Baseline	25	25	25	25	24	24	21	14
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	25	24	25	25	26	26	33	39
A2. New public sector loans on less favorable terms in 2013-2033 2/	25	25	26	27	27	28	28	24
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	25	25	25	25	25	24	21	14
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	25	23	22	22	22	22	19	12
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	25	24	24	24	24	23	21	13
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	25	24	23	23	23	23	20	13
B5. Combination of B1-B4 using one-half standard deviation shocks	25	21	16	16	16	16	14	9
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	25	34	34	34	33	33	29	18
PV of debt-to-exports ratio								
Baseline	49	49	49	48	48	46	41	26
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	49	48	49	49	50	52	64	76
A2. New public sector loans on less favorable terms in 2013-2033 2/	49	49	51	53	54	54	55	47
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	49	47	47	47	46	45	39	25
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	49	46	43	42	42	41	36	23
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	49	47	47	47	46	45	39	25
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	49	47	46	46	45	44	39	25
B5. Combination of B1-B4 using one-half standard deviation shocks	49	39	28	28	28	27	23	15
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	49	47	47	47	46	45	39	25
PV of debt-to-revenue ratio								
Baseline	97	95	94	93	91	89	79	51
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	97	94	94	95	96	99	124	147
A2. New public sector loans on less favorable terms in 2013-2033 2/	97	97	99	102	103	103	106	91
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	97	95	96	95	93	90	80	51
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	97	91	85	85	82	80	71	45
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	97	94	93	92	90	87	78	50
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	97	92	90	89	86	84	75	48
B5. Combination of B1-B4 using one-half standard deviation shocks	97	82	62	62	60	59	52	33
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	97	132	130	128	125	122	109	69

Table 3.Nicaragua: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2013–33 (continued)
(In percent)

	Projections							
	2013	2014	2015	2016	2017	2018	2023	2033
Debt service-to-exports ratio								
Baseline	2	2	2	3	3	2	2	1
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	2	2	3	3	3	3	3	4
A2. New public sector loans on less favorable terms in 2013-2033 2/	2	3	3	3	3	3	3	3
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	2	3	3	3	3	3	3	2
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	2	2	3	3	3	3	3	2
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	2	3	3	3	3	3	3	2
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	2	3	3	3	3	3	3	2
B5. Combination of B1-B4 using one-half standard deviation shocks	2	2	2	2	2	2	2	2
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	2	3	3	3	3	3	3	2
Debt service-to-revenue ratio								
Baseline	4	4	5	5	5	5	3	1
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	4	5	5	6	6	6	6	7
A2. New public sector loans on less favorable terms in 2013-2033 2/	4	5	5	6	6	6	6	6
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	4	5	6	7	6	6	6	5
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	4	5	5	6	6	6	5	4
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	4	5	5	6	6	6	6	5
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	4	5	5	6	6	6	6	5
B5. Combination of B1-B4 using one-half standard deviation shocks	4	5	5	5	5	5	5	3
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	4	7	7	9	9	8	8	7
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	38	38	38	38	38	38	38	38

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.

Table 4.Nicaragua: Public Sector Debt Sustainability Framework, Baseline Scenario, 2010–33
(In percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections								
	2010	2011	2012	Average 5/	Standard Deviation 5/	2013	2014	2015	2016	2017	2018	2013-18 Average	2023	2033	2019-33 Average
Public sector debt 1/	50.1	45.4	43.2			42.4	40.6	39.7	39.3	38.6	38.0		34.9	28.4	
o/w foreign-currency denominated	50.1	45.4	43.2			42.4	40.6	39.7	39.3	38.6	38.0		34.9	28.4	
Change in public sector debt	-0.1	-4.7	-2.2			-0.8	-1.8	-0.9	-0.4	-0.7	-0.6		-0.4	-1.0	
Identified debt-creating flows	-1.3	-5.2	-3.0			-1.4	-0.4	-1.1	-0.4	-0.9	-1.2		-1.0	-0.9	
Primary deficit	0.1	-1.1	-0.4	2.3	2.0	0.2	0.1	0.3	0.7	0.3	0.0	0.3	0.0	-0.3	-0.1
Revenue and grants	25.1	27.8	27.3			27.4	27.0	27.6	27.8	27.9	28.0		27.8	27.8	
of which: grants	2.0	2.4	2.1			2.0	1.2	1.4	1.4	1.2	1.2		1.2	1.2	
Primary (noninterest) expenditure	25.2	26.7	26.9			27.6	27.1	27.8	28.4	28.2	28.1		27.8	27.5	
Automatic debt dynamics	-1.5	-4.2	-2.6			-1.9	-0.4	-1.3	-1.0	-1.2	-1.2		-1.1	-0.7	
Contribution from interest rate/growth differential	-1.3	-2.3	-1.8			-1.2	-0.2	-1.2	-1.0	-1.1	-1.1		-1.0	-0.9	
of which: contribution from average real interest rate	0.5	0.3	0.4			0.5	1.4	0.4	0.5	0.4	0.3		0.3	0.2	
of which: contribution from real GDP growth	-1.8	-2.6	-2.2			-1.7	-1.6	-1.6	-1.5	-1.5	-1.5		-1.4	-1.1	
Contribution from real exchange rate depreciation	-0.2	-1.9	-0.8			-0.6	-0.2	-0.1	0.0	0.0	0.0		...	...	
Other identified debt-creating flows	0.1	0.1	0.0			0.3	-0.1	-0.1	-0.1	-0.1	-0.1		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	0.5	0.4	0.4			0.4	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)	-0.4	-0.3	-0.4			0.0	-0.1	-0.1	-0.1	-0.1	-0.1		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	1.1	0.5	0.8			0.5	-1.4	0.2	0.0	0.2	0.6		0.6	-0.1	
Other Sustainability Indicators															
PV of public sector debt	...	...	35.5			34.4	32.5	31.4	30.5	29.5	28.8		25.4	20.4	
o/w foreign-currency denominated	...	...	35.5			34.4	32.5	31.4	30.5	29.5	28.8		25.4	20.4	
o/w external	...	...	...			24.7	24.6	24.7	24.6	24.2	23.7		21.0	13.6	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	17.1	16.5	15.9	15.3	14.8		9.9	5.8	
Gross financing need 2/	7.6	5.6	5.7			6.1	5.1	5.0	5.4	4.0	3.4		2.5	1.3	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	130.2			125.8	120.2	113.9	109.9	105.8	102.7		91.4	73.3	
PV of public sector debt-to-revenue ratio (in percent)	...	...	140.8			135.5	126.0	120.0	115.5	110.8	107.4		95.6	76.7	
o/w external 3/	...	...	...			97.0	95.4	94.2	93.1	90.8	88.5		79.1	51.1	
Debt service-to-revenue and grants ratio (in percent) 4/	16.6	16.0	14.2			13.0	11.2	11.5	12.2	10.0	10.9		8.2	4.9	
Debt service-to-revenue ratio (in percent) 4/	14.6	13.9	14.2			14.0	11.7	12.1	12.9	10.5	11.4		8.6	5.1	
Primary deficit that stabilizes the debt-to-GDP ratio	0.2	3.6	1.8			1.0	1.9	1.2	1.1	1.0	0.6		0.4	0.7	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	3.6	5.4	5.2	4.0	1.5	4.2	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Average nominal interest rate on forex debt (in percent)	2.2	2.8	2.8	2.5	0.5	2.6	2.5	2.7	3.2	2.9	2.8	2.8	2.8	2.7	2.8
Real exchange rate depreciation (in percent, + indicates depreciation)	4.5	-4.0	-1.8	-0.2	3.1	-1.5	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	6.7	11.7	8.8	8.5	2.7	8.1	7.0	7.0	7.0	7.0	7.0	7.2	7.0	7.1	7.0
Growth of real primary spending (deflated by GDP deflator, in percent)	0.0	0.1	5.9	0.6	1.9	6.9	2.3	6.7	6.3	3.0	3.5	4.8	4.1	4.0	3.8
Grant element of new external borrowing (in percent)	...	47.3	42.0	44.7	3.7	47.1	47.7	46.0	44.7	45.7	46.1	46.2	45.1	36.9	42.4

Sources: Country authorities; and staff estimates and projections.
1/ Public debt refers to the gross debt of the Consolidated Public Sector. The projections assume that the outstanding debt to non-Paris Club bilateral creditors is settled on HIPC-equivalent terms by end-2012.
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 5.Nicaragua: Sensitivity Analysis for Key Indicators of Public Debt 2013–33

	Projections							
	2013	2014	2015	2016	2017	2018	2023	2033
PV of Debt-to-GDP Ratio								
Baseline	34	33	31	31	30	29	25	20
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	34	33	34	34	35	35	39	46
A2. Primary balance is unchanged from 2013	34	32	31	29	28	28	25	23
A3. Permanently lower GDP growth 1/	34	33	32	31	31	30	31	39
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-2015	34	34	34	33	33	34	34	35
B2. Primary balance is at historical average minus one standard deviations in 2014-2015	34	35	37	35	34	33	30	23
B3. Combination of B1-B2 using one half standard deviation shocks	35	35	37	36	35	35	33	31
B4. One-time 30 percent real depreciation in 2014	34	47	45	44	43	41	36	29
B5. 10 percent of GDP increase in other debt-creating flows in 2014	35	40	39	37	36	35	31	25
PV of Debt-to-Revenue Ratio 2/								
Baseline	126	120	114	110	106	103	91	73
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	126	123	122	123	124	126	139	166
A2. Primary balance is unchanged from 2013	126	117	111	106	102	100	91	81
A3. Permanently lower GDP growth 1/	126	121	115	112	110	108	110	138
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-2015	126	124	122	120	119	119	122	126
B2. Primary balance is at historical average minus one standard deviations in 2014-2015	126	128	133	128	122	118	106	84
B3. Combination of B1-B2 using one half standard deviation shocks	129	130	133	130	126	123	118	111
B4. One-time 30 percent real depreciation in 2014	126	175	165	158	152	147	130	106
B5. 10 percent of GDP increase in other debt-creating flows in 2014	129	144	141	133	128	124	112	92
Debt Service-to-Revenue Ratio 2/								
Baseline	13	11	12	12	10	11	8	5
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	13	11	12	16	14	15	15	16
A2. Primary balance is unchanged from 2013	13	11	12	12	10	10	9	6
A3. Permanently lower GDP growth 1/	13	11	12	13	11	12	11	13
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-2015	13	11	12	14	13	14	13	11
B2. Primary balance is at historical average minus one standard deviations in 2014-2015	13	11	13	19	16	14	9	6
B3. Combination of B1-B2 using one half standard deviation shocks	13	11	12	18	15	15	12	9
B4. One-time 30 percent real depreciation in 2014	13	9	10	10	10	9	8	6
B5. 10 percent of GDP increase in other debt-creating flows in 2014	13	11	13	25	13	16	10	7

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.