

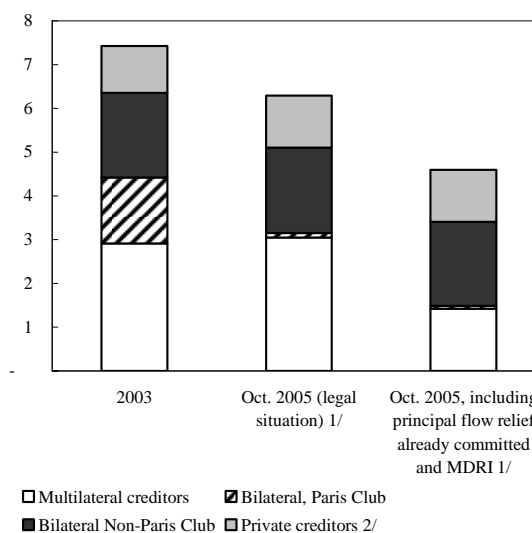
Nicaragua: Joint Bank-Fund Debt Sustainability Analysis ^{1,2}

While Nicaragua's debt burden has been substantially reduced thanks to the HIPC initiative, debt levels remain elevated and subject to a moderate risk of distress. Maintaining this risk-classification will be contingent on the continued reduction of the high level of domestic debt and the realization of the growth prospects assumed in this analysis. Long-term debt sustainability will continue to require the support of sound macroeconomic policies, including pursued fiscal consolidation. Full delivery of HIPC debt relief expected is key to reduce the risk of debt distress. The MDRI will contribute to lower debt-related vulnerability.

1. **Nicaragua has made substantial progress in reducing its external debt burden in the context of the HIPC initiative** (Table 1 and Figure 1). Since reaching completion point in January 2004, Nicaragua signed debt relief agreements with almost all its multilateral and all its Paris-Club creditors, as well as a number of non-Paris Club creditors. As of end-October 2005, total relief already committed amounted to US\$ 3.8 billion in nominal terms (76 percent of GDP).³

2. **Nevertheless, negotiations have proven to be protracted with a number of creditors.** Negotiations have stalled with several of Nicaragua's major non-Paris Club creditors, but some progress was made in recent months in the negotiations with private creditors. Nicaragua retained in January 2005 the services of financial and legal advisors, and several meetings have subsequently taken place between the creditors and Nicaragua

Figure 1. Total stock of external debt, 2003-05
(in nominal terms, billions of US\$)



Source: BCN and Fund staff estimates.

1/ Some creditors (e.g. the IMF) deliver HIPC relief as maturities fall due, as opposed to doing a stock-of-debt cancellation. The "legal situation" reflects the stock of debt as it appears on the books, including the debt whose reimbursement will be covered as maturities fall due.

2/ Including estimated accrued interest.

¹ Prepared jointly by IMF and World Bank staff.

² This analysis focuses here on public debt only as comprehensive and reliable data on private external debt is not available. An indication of the possible magnitude of private external debt can be gleaned from BIS data. As of end-June 2004, this shows reporting banks' claims on the private sector in Nicaragua amounting to US\$ 244 million (5.4 percent of GDP).

³ Including debt relief delivered under traditional mechanisms and additional debt relief beyond HIPC.

and/or its advisors, with the aim to reconcile the amounts of debt outstanding and agree on the size of debt reduction. The goal is to proceed with a buyback operation, financed by the World Bank's Debt Reduction Facility (DRF). As of October 2005, around US\$ 0.9 billion in NPV terms (18 percent of GDP) of HIPC debt relief was still uncommitted. Its delivery, assumed in this analysis, is key to reduce current vulnerabilities.

Table 1. Delivery of Expected HIPC Relief

	HIPC debt relief expected at completion point	HIPC debt relief delivered 31-Oct-05	HIPC Debt relief still expected 31-Oct-05		Other debt relief received ^{1/}	Total debt relief received	
	NPV ^{2/}	NPV ^{2/}	<i>In percent of expected relief</i>		NPV ^{2/}	NPV ^{2/}	
Total	3,308	2,433	74	876	26	730	3,162
Multilateral creditors	1,134	1,124	99	10	1	-	1,124
Bilateral, Paris Club	836	836	100	-	-	403	1,239
Bilateral Non-Paris Club and Private Creditors	1,339	473	35	866	65	327	799

Source: BCN and Fund staff estimates.

1/ Includes debt relief delivered under traditional mechanisms, and additional debt relief (beyond HIPC).

2/ NPV as of December 31, 1999.

3. **Domestic public debt increased in 2000-01 in the context of a banking crisis and the settlement of claims arising from the expropriation of property, but has since fallen with the pursuit of fiscal consolidation;** as of end-2004, it amounted to about 30 percent of GDP. As of December 2004, more than 2/3 of the domestic debt comprised property indemnization bonds (BPIs), issued by the government to resolve land disputes arising from expropriation of property under the former Sandinista regime. Most of the rest comprised central bank papers, issued on behalf of the government, to recapitalize intervened banks during the financial crisis of the early 2000's. About 4/5 of the stock of bonds at end-2004 had a remaining maturity of longer than one year. Domestic debt has fallen since 2003 in the context of shrinking fiscal deficits and substantial net external financing that has facilitated a substitution of concessional external debt with domestic market debt. This has also led to a reduction in the net present value of total debt. However, gross financing requirements on domestic debt in the next few years are expected to remain large reflecting upcoming maturities of BPIs, highlighting the need for cautious liquidity management and moving forward with the fiscal consolidation effort.

Baseline scenario

4. **The baseline scenario for the debt sustainability analysis assumes that sound policies sustain improving macroeconomic conditions over the medium-term.**⁴ In such a scenario, consistent with the authorities' PRSP, investment in human capital and infrastructure, financial sector development and governance improvements boost total factor productivity, allowing a rate of growth of about 5 percent per year. As the impact of the current oil shock is assumed to wane, inflation gradually decreases to around 3 percent annually. Fiscal consolidation is pursued: a primary surplus is achieved by 2007 and maintained thereafter. The current account improves gradually as exports benefit from continued investment in the tradable sector and rising volumes of traditional exports, while tourism activity converges to regional levels. Foreign direct investment is boosted by CAFTA-DR and the improvement in business conditions. Despite a gradual reduction in official financing to very small amounts, the coverage of net international reserves is expected to improve and reach about 4 months of imports by the end of the projection period.

5. **CAFTA-DR is expected to enhance the growth performance of the whole Central American region including Nicaragua.** The main effects are likely to be a rapid increase in trade flows with the United States, increased diversification of production by the traded sector, a pickup in FDI inflows, and reduced macroeconomic volatility. Of all the signatory countries, Nicaragua is expected to face the smallest fiscal impact, mainly owing to a favorable schedule of tariff reductions. Sustained structural reforms, including further strengthening of the business environment and regulatory framework, would help Nicaragua leverage the full benefits of the agreement.⁵

6. **The debt-burden thresholds used for the analysis are those applying to strong performers in terms of policies and institution quality,** as measured by the World Bank's Country Policy and Institutional Assessment Index (CPIA). However, Nicaragua was only recently reclassified into this stronger category, and that by a narrow margin.⁶ In this context, debt indicators close to the thresholds reflect a vulnerable situation.

⁴ The baseline scenario does not consider the implementation of the MDRI. The impact of this initiative is discussed in paragraph .

⁵ The implications of CAFTA-DR for Nicaragua are discussed in Chapter 1 of Nicaragua, Selected Issues (IMF, January 2006).

⁶ In 2003, Nicaragua was classified a medium performer.

Table 2. External Debt Burden Indicators

	Thresholds	Nicaragua's ratios		
		2005	2015	2025
<i>NPV of debt in percent of:</i>				
GDP	50	40	49	22
Exports	200	107	93	37
Revenues	300	152	182	89
<i>Debt service in percent:</i>				
Exports	25	5	8	5
Revenues	35	11	24	17

Source: BCN and staff's estimates

1/ Based on Nicaragua's 2004 classification as a strong performer.

7. **Under the favorable conditions of the baseline scenario, Nicaragua's external public debt would still be high and remain a source of vulnerability for the next decade or so, before falling well below the thresholds** (Table 3). Even assuming full delivery of HIPC relief by all creditors by end-2006, the net present value (NPV) of external public debt would increase from 40 percent of GDP in 2005 to 53 percent of GDP in 2011, reflecting continued heavy reliance on external financing of the public investment program. External debt would only decrease below the 50 percent threshold after 2014. Debt as a share of exports, however, would remain below the thresholds for the whole projection period, reflecting the relative openness of Nicaragua's economy.⁷ During the projection period, the external debt service-to-export ratio would also remain well below thresholds owing to the relative front loading of HIPC relief and the long grace periods granted by multilateral creditors.

8. **Total public debt would show a similar path** (Table 5). Under the baseline scenario, fiscal consolidation would facilitate continuing the process of substituting expensive domestic debt for external concessional debt for some time. Consequently, domestic debt would continue to decline gradually. As such, given the high proportion of external debt, the overall debt dynamics are dominated by developments of external debt.

Sensitivity analysis

9. **Even though the baseline scenario points to Nicaragua's risk of debt distress being reduced over time, the debt still remains vulnerable to shocks.** Stress tests illustrate the vulnerability of Nicaragua's debt situation. Under the standardized bound tests provided by the LIC-DSA external template, which simulate the impact on the baseline scenario of a series of shocks to real GDP growth, export growth, GDP deflator, the amount of transfers and FDI, and exchange rate, the external debt-to-GDP ratio increases rapidly above

⁷ Even measuring exports net of maquila imports (the completion point methodology), debt-to-export ratios would remain below the 200 percent threshold.

70 percent (Table 4). In the most extreme stress test, the external debt ratio would not come back below the 50 percent threshold before 2021. In that scenario, total public debt would increase dramatically to over 90 percent and remain above 70 percent of GDP until 2015, even assuming that the fiscal consolidation effort is maintained through time (Table 6).

10. **The implementation of the Multilateral Debt Relief Initiative (MDRI) would help reduce Nicaragua debt's vulnerability.** The initiative would provide debt relief to Nicaragua equivalent to about 8 percent of GDP, of which 2 percent for the Fund and 6 percent for the Bank.⁸ With the implementation of the MDRI, all indicators of external debt sustainability would remain below thresholds for the whole projection period. The savings on debt service should be used to increase poverty reducing spending without generating any new debt burden. The dynamics of the external debt are mirrored by total public debt, given that the MDRI does not have an effect on domestic debt.

Conclusion

11. **Nicaragua's debt is subject to a moderate risk of distress, but can be managed with the support of sound macroeconomic policies.** Nicaragua's risk classification will remain contingent on the materialization of the growth prospects expected in the baseline scenario and on the sustained quality of economic policies and institutions. While most ratios remain below their thresholds in the baseline scenario, the threshold is breached in the case of the external-debt-to-GDP ratio for several years. In addition, the high level of domestic debt, if not successfully reduced, could pose a significant risk of debt distress in the medium term. While full delivery of expected debt relief is essential to lowering debt stocks, and delivery of relief under the MDRI would further reduce risks, reducing the probability of debt distress in the medium and long-term will continue to require sound macroeconomic policies, among which fiscal discipline is key.

12. **The authorities broadly shared staff's assessment.** Their own DSA is in line with staff's results. They agree that careful macroeconomic management is needed to ensure long-term debt sustainability, as recognized in the PRSP. The authorities also stressed that they have one of the largest share of non-multilateral non-Paris Club debt in their total debt among all HIPCs, and that this explains why progress in achieving the reduction of their debt expected at completion point has been slower. Finally, the authorities welcomed the MDRI and looked forward to benefiting from it as early as possible.

⁸ Assuming a cancellation in January and July 2006 by the Fund and IDA respectively of all debt outstanding and disbursed as of end-2004 for the Fund and end-2003 for IDA.

Box 1. Change in the NPV of Debt-to-Exports Ratio from Completion Point

Nicaragua reached the completion point under the HIPC Initiative with a projected NPV-of-debt-to-exports ratio of 168 percent at end-2004. Using the methodology of the Low Income Countries DSA framework (DSF), this ratio as of end-2004 is now estimated at 110 percent, 58 percentage points lower. This decrease is mainly explained by the changes in methodology, but also in part by unanticipated changes in the variables used to calculate the ratio. The factors underlying the decrease in the ratio are the following:

1. **Changes in methodology.** The bulk of the decrease in the NPV-of-debt-to-exports ratio (53 percent) is explained by the change in the methodology used to calculate Nicaragua’s debt indicators, including changes in:
 - a. **The definition of exports:** The DSF methodology uses a gross definition of the maquila sector, while the completion point definition included maquila exports net of imports. In addition, the DSF uses same-year exports, as opposed to the 3-year backward average used for the completion point.
 - b. **The discount rate used to calculate the NPV of debt:** the DSF methodology uses of a fixed 5 percent rate compared to the currency-specific discount rates under the HIPC methodology.
 - c. **Exchange rates:** Debt service is projected using WEO assumptions in the DSF, as opposed to fixed (end-2002) exchanges rates used for the completion point.
2. **Unanticipated changes in the variables used for the projection,** including stronger-than-anticipated export performance and slightly higher-than-anticipated new disbursements.

Factors Underlying Changes in NPV of Debt-to-Exports Ratio After the Completion Point

	Percentage Points	Percent of Total
Projected NPV of debt-to-exports ratio (HIPC methodology) 1/	168.1	
Actual NPV of debt-to-annual exports ratio (LIC DSA Framework) 2/	110.0	
Total change	-58.1	100%
Due to change in methodology	-53.1	91%
1. From CIRR to 5% discount rate	-3.5	6%
2. From fixed exchange rate to WEO projections	6.8	-12%
3. From net to gross maquila exports	-34.2	59%
4. From three-year average to same-year exports	-22.3	38%
Due to unanticipated changes	-5.0	9%
4. Higher exports	-14.4	25%
5. New Borrowing	0.4	-1%
<i>Of which:</i> Higher-than-anticipated disbursements	0.6	
Higher-than-anticipated grant element	-0.2	
6. Other factors 3/	9.0	-15%

Source: Staff estimates.

1/ NPV of debt-to-exports ratio under assumption of full delivery of HIPC assistance.

2/ See “Operational Framework for Debt Sustainability Assessments in Low-Income Countries – Further Considerations”, April 2005, IDA/R2005-0056 and SM/05/109.

3/ Other factors capture non-delivery of HIPC assistance as estimated in the completion point or changes in the time and profile of assistance.

Table 3. Nicaragua: External Debt Sustainability Framework, Baseline Scenario, 2002-25 1/
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Estimate					Projections					
	2002	2003	2004			2005	2006	2007	2008	2009	2010	2005-10 Average	2015	2025	2011-25 Average	
External debt (nominal) 1/	176.5	179.1	63.3			61.3	63.4	65.9	68.3	70.2	71.3				62.8	27.3
Change in external debt	5.1	2.6	-115.8			-1.9	2.1	2.5	2.5	1.8	1.1				-2.7	-3.5
Identified net debt-creating flows	10.4	0.3	-12.5			3.8	3.1	1.7	0.5	-0.4	-1.3				-2.7	-4.4
Non-interest current account deficit and official transfers	12.0	10.3	8.7	12.1	2.9	9.8	9.5	9.0	8.3	7.8	7.3				5.8	3.6
Deficit in balance of goods and services	25.6	26.0	26.3			29.9	30.1	29.1	28.2	27.5	26.6				21.6	11.6
Exports	28.4	31.5	36.3			37.4	39.6	41.7	43.9	45.9	48.1				52.4	61.0
Imports	54.0	57.5	62.6			67.3	69.7	70.8	72.1	73.4	74.7				74.0	72.6
Net current and capital transfers (negative = inflow)	-17.7	-19.4	-21.2	-16.8	4.1	-21.4	-21.7	-21.4	-21.2	-20.9	-20.6				-16.5	-8.3
o/w official	-6.2	-6.9	-6.7			-6.2	-6.0	-5.8	-5.6	-5.4	-5.1				-3.6	-0.5
Other current account flows (negative = net inflow)	4.0	3.8	3.6			1.3	1.1	1.3	1.3	1.2	1.2				0.7	0.3
Net FDI (negative = inflow)	-5.8	-5.6	-5.8	-5.5	2.5	-4.6	-5.4	-5.9	-6.2	-6.4	-6.6				-6.8	-7.3
Endogenous debt dynamics 2/	4.2	-4.4	-15.5			-1.4	-0.9	-1.4	-1.6	-1.9	-2.0				-1.7	-0.8
Contribution from nominal interest rate	0.9	0.8	0.6			0.9	1.2	1.3	1.4	1.3	1.3				1.3	0.7
Contribution from real GDP growth	-1.3	-3.9	-8.4			-2.3	-2.1	-2.6	-2.9	-3.1	-3.4				-3.1	-1.4
Contribution from price and exchange rate changes	4.6	-1.3	-7.7			...	...	...	...	...	...				...	...
Residual (3-4) 3/	-5.3	2.3	-103.3			-5.7	-1.0	0.7	1.9	2.3	2.4				0.0	0.9
o/w exceptional financing	-16.6	-5.7	-36.2			-28.3	0.0	0.0	0.0	0.0	0.0				0.0	0.0
NPV of PPG external debt	...	...	40.0			40.0	42.1	44.8	47.5	49.9	51.7				48.6	22.4
In percent of exports	...	...	110.3			106.9	106.3	107.6	108.3	108.7	107.6				92.7	36.8
PPG debt service-to-exports ratio (in percent)	13.8	7.5	4.6			5.1	6.0	5.7	5.8	5.1	5.5				7.6	5.4
Total gross financing need (billions of U.S. dollars)	405.3	293.9	211.5			356.0	346.7	304.1	267.7	227.6	211.5				258.2	-57.8
Non-interest current account deficit that stabilizes debt ratio	6.9	7.7	124.5			11.7	7.4	6.5	5.8	6.0	6.2				8.6	7.2
Key macroeconomic assumptions																
Real GDP growth (in percent)	0.8	2.3	5.1	4.2	1.9	4.0	3.7	4.3	4.6	4.8	5.0	4.4	5.0	5.0	5.0	5.0
GDP deflator in US dollar terms (change in percent)	-2.6	0.8	4.5	0.2	2.3	5.6	3.1	0.0	-0.9	-0.5	-0.5	1.1	1.5	1.5	1.4	1.4
Effective interest rate (percent) 5/	0.5	0.5	0.4	0.9	0.5	1.6	2.1	2.1	2.1	1.9	2.0	2.0	2.2	2.3	2.2	2.2
Growth of exports of G&S (US dollar terms, in percent)	2.1	14.4	26.4	13.5	11.9	13.3	13.4	9.6	9.1	9.1	9.5	10.7	8.3	8.1	8.2	8.2
Growth of imports of G&S (US dollar terms, in percent)	0.7	9.8	19.6	11.7	9.9	18.2	10.8	5.9	5.6	6.1	6.4	8.8	6.4	6.4	6.3	6.3
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	25.8	27.5	22.9	22.4	22.4	22.6	23.9	21.9	14.3	19.1	19.1
<i>Memorandum item:</i>																
Nominal GDP (billions of US dollars)	4025	4147	4556			5008	5358	5587	5789	6037	6308				8541	16123

Source: Staff simulations.

1/ Includes only public sector external debt.

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

Table 4. Nicaragua: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2005-25
(In percent)

	Estimate		Projections					
	2005	2006	2007	2008	2009	2010	2015	2025
NPV of debt-to-GDP ratio								
Baseline	40	42	45	47	50	52	49	22
A. Alternative Scenarios								
A1. New public sector loans on less favorable terms in 2006-25 1/	40	44	47	51	55	57	58	34
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2006-07	40	43	46	49	52	53	50	23
B2. Export value growth at historical average minus one standard deviation in 2006-07 2/	40	45	54	57	59	61	54	23
B3. US dollar GDP deflator at historical average minus one standard deviation in 2006-07	40	44	48	51	54	56	52	24
B4. Net non-debt creating flows at historical average minus one standard deviation in 2006-073/	40	51	62	65	68	69	59	24
B5. Combination of B1-B4 using one-half standard deviation shocks	40	52	65	68	70	72	62	25
B6. One-time 30 percent nominal depreciation relative to the baseline in 2006 4/	40	59	63	67	70	73	68	32
NPV of debt-to-exports ratio								
Baseline	107	106	108	108	109	108	93	37
A. Alternative Scenarios								
A1. New public sector loans on less favorable terms in 2006-25 1/	107	110	114	117	119	119	111	56
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2006-07	107	106	108	108	109	108	93	37
B2. Export value growth at historical average minus one standard deviation in 2006-07 2/	107	128	155	155	155	152	125	45
B3. US dollar GDP deflator at historical average minus one standard deviation in 2006-07	107	106	108	108	109	108	93	37
B4. Net non-debt creating flows at historical average minus one standard deviation in 2006-073/	107	128	150	149	147	144	113	39
B5. Combination of B1-B4 using one-half standard deviation shocks	107	132	157	156	154	151	120	41
B6. One-time 30 percent nominal depreciation relative to the baseline in 2006 4/	107	106	108	108	109	108	93	37
Debt service ratio								
Baseline	5	6	6	6	5	6	8	5
A. Alternative Scenarios								
A1. New public sector loans on less favorable terms in 2006-25 1/	5	6	6	6	6	6	8	8
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2006-07	5	6	6	6	5	6	8	5
B2. Export value growth at historical average minus one standard deviation in 2006-07 2/	5	7	7	8	7	7	11	7
B3. US dollar GDP deflator at historical average minus one standard deviation in 2006-07	5	6	6	6	5	6	8	5
B4. Net non-debt creating flows at historical average minus one standard deviation in 2006-073/	5	6	6	7	6	7	11	6
B5. Combination of B1-B4 using one-half standard deviation shocks	5	6	7	7	7	7	11	6
B6. One-time 30 percent nominal depreciation relative to the baseline in 2006 4/	5	6	6	6	5	6	8	5
<i>Memorandum item:</i>								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	19	19	19	19	19	19	19	19

Source: Staff projections and simulations.

1/ 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.

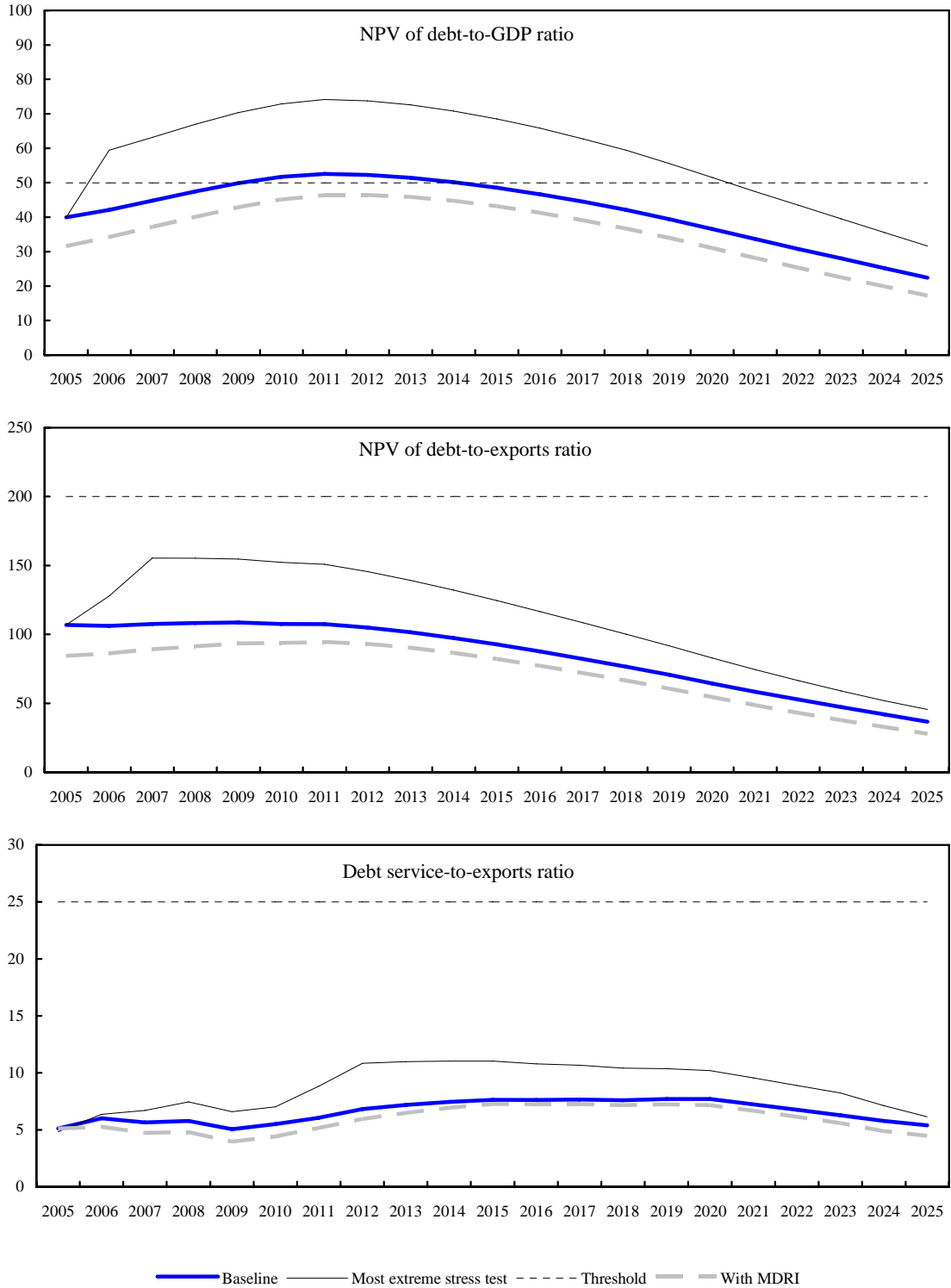
2/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).

3/ Includes official and private transfers and FDI.

4/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.

5/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 1.

Figure 2. Nicaragua: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2005-25
(In percent)



Source: Staff projections and simulations.

Table 5. Nicaragua: Public Sector Debt Sustainability Framework, Baseline Scenario, 2002-25
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 5/	Standard Deviation 5/	Estimate					Projections			2011-25 Average	
	2002	2003	2004			2005	2006	2007	2008	2009	2010	2005-10 Average	2015		2025
Public sector debt 1/	197.7	213.4	92.7			87.6	82.7	80.9	80.3	79.2	78.1		62.7	27.5	
o/w foreign-currency denominated	197.7	213.4	92.7			87.6	82.7	80.9	80.3	79.2	78.1		61.8	27.3	
Change in public sector debt	4.2	15.7	-120.7			-5.0	-5.0	-1.8	-0.5	-1.1	-1.2		-2.9	-3.5	
Identified debt-creating flows	12.5	-1.1	-18.5			-6.3	-3.6	-2.0	-1.8	-1.9	-2.3		-4.6	-3.2	
Primary deficit	2.5	1.8	0.7	1.2	1.4	0.2	0.2	-0.7	-0.9	-1.0	-1.0	-0.5	-1.9	-2.0	-2.0
Revenue and grants	22.4	24.2	26.4			26.8	27.0	27.1	27.1	27.0	27.0		26.7	25.4	
of which : grants	2.9	3.4	3.6			3.8	3.8	3.8	3.7	3.6	3.5		2.7	0.5	
Primary (noninterest) expenditure	25.0	26.0	27.0			27.0	27.2	26.4	26.2	26.1	26.0		24.8	23.4	
Automatic debt dynamics	10.4	-2.6	-17.8			-6.2	-3.7	-1.3	-1.0	-0.9	-1.3		-2.7	-1.2	
Contribution from interest rate/growth differential	1.0	-5.6	-10.5			-2.7	-2.1	-2.7	-2.6	-2.9	-3.3		-3.0	-1.4	
of which : contribution from average real interest rate	2.5	-1.3	0.0			0.9	1.1	0.7	1.0	0.8	0.5		0.1	0.1	
of which : contribution from real GDP growth	-1.4	-4.4	-10.4			-3.6	-3.2	-3.4	-3.6	-3.7	-3.8		-3.1	-1.5	
Contribution from real exchange rate depreciation	9.4	3.0	-7.3			-3.6	-1.6	1.4	1.6	2.0	2.0		...	...
Other identified debt-creating flows	-0.4	-0.3	-1.4			-0.2	-0.2	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	-0.4	-0.3	-1.4			-0.2	-0.2	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	-8.3	16.7	-102.2			1.3	-1.4	0.2	1.3	0.7	1.1		1.7	-0.3	
NPV of public sector debt	160.6	173.5	69.4			65.9	61.2	59.6	59.3	58.8	58.3		48.4	22.5	
o/w foreign-currency denominated	160.6	173.5	69.4			65.9	61.2	59.6	59.3	58.8	58.3		47.5	22.3	
o/w external	139.3	139.2	40.0			40.3	41.8	44.5	47.1	49.5	51.3		48.4	22.5	
NPV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...
Gross financing need 2/	11.9	10.3	14.7			3.2	6.8	4.9	4.7	4.5	4.0		3.1	1.3	
NPV of public sector debt-to-revenue ratio (in percent) 3/	715.5	717.2	263.3			245.8	227.0	220.0	219.3	217.5	215.9		180.9	88.9	
o/w external	620.5	575.3	151.8			150.3	155.0	164.0	174.1	183.1	189.9		180.9	88.9	
Debt service-to-revenue ratio (in percent) 3/ 4/	41.7	35.1	53.2			11.2	24.3	20.8	20.5	20.3	18.4		19.0	13.0	
Primary deficit that stabilizes the debt-to-GDP ratio	-1.7	-13.8	121.4			5.2	5.2	1.1	-0.3	0.1	0.2		1.0	1.5	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	0.8	2.3	5.1	4.2	1.9	4.0	3.7	4.3	4.6	4.8	5.0	4.4	5.0	5.0	5.0
Average nominal interest rate on forex debt (in percent)	0.0	0.0	1.1	0.1	0.4	2.5	2.5	2.6	3.4	3.1	2.8	2.8	2.2	2.4	2.4
Real exchange rate depreciation (in percent, + indicates depreciation)	4.8	1.6	-3.6	1.6	2.6	-4.0	-1.9	1.7	2.1	2.6	2.6	0.5	0.5	0.5	0.5
Inflation rate (GDP deflator, in percent)	3.2	6.8	10.2	9.2	3.1	10.9	8.3	5.0	3.0	2.5	2.5	5.4	2.5	2.5	2.5
Growth of real primary spending (deflated by GDP deflator, in percent)	-3.6	6.7	9.2	6.4	10.8	3.7	4.7	1.1	3.9	4.2	4.9	3.8	4.2	4.5	4.2
Grant element of new external borrowing (in percent)	...	...	29.8	29.8	0.0	29.8	27.4	23.1	22.6	22.6	22.9	24.7	22.2	14.6	...

Sources: Country authorities; and Fund staff estimates and projections.

1/ Combined public sector.

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 including 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 6. Nicaragua: Sensitivity Analysis for Key Indicators of Public Debt 2005-2025

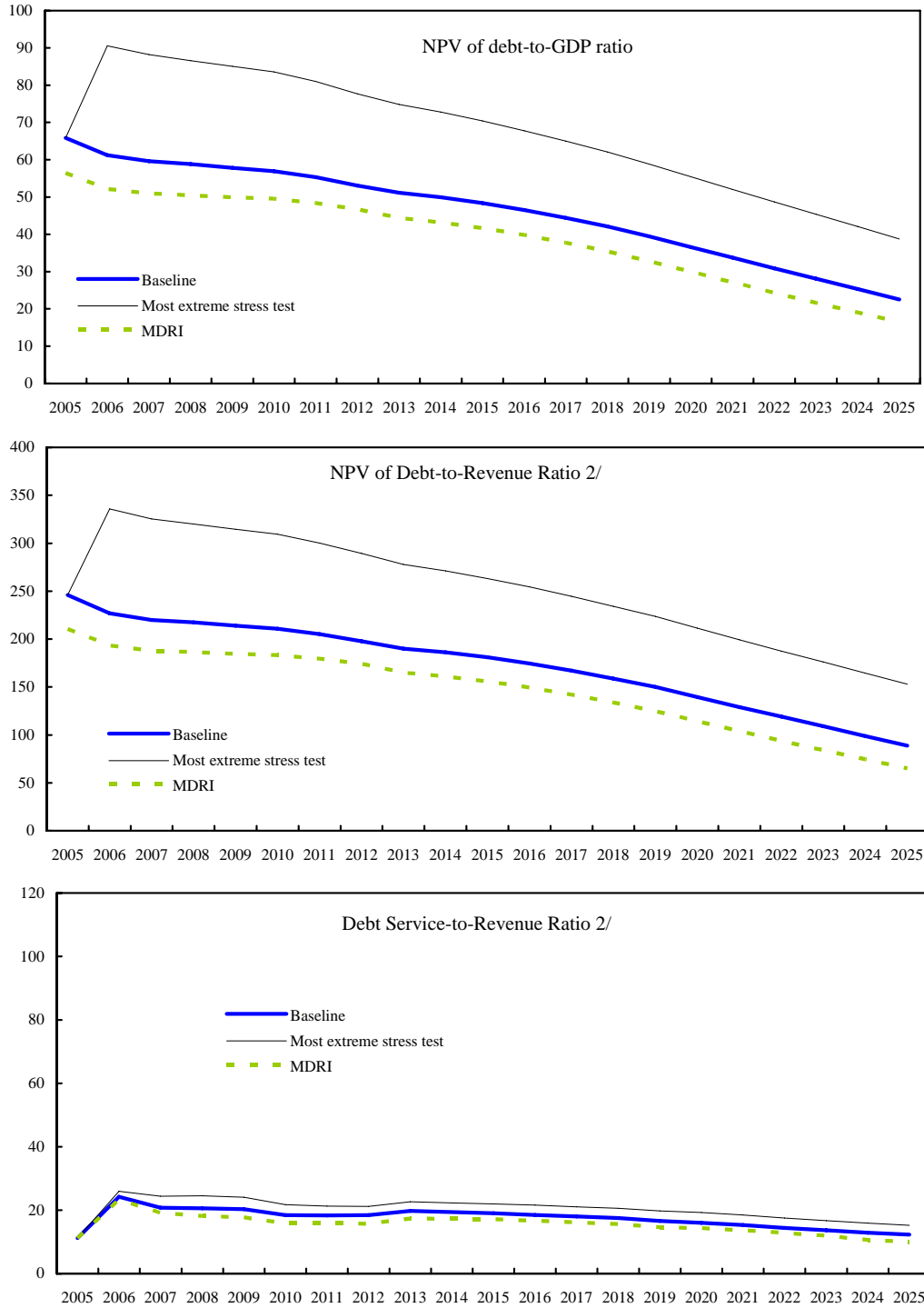
	Estimate		Projections					
	2005	2006	2007	2008	2009	2010	2015	2025
NPV of Debt-to-GDP Ratio								
Baseline	66	61	60	59	59	58	48	23
A. Alternative scenarios								
A1. Primary balance is unchanged from 2004	66	62	61	62	63	64	61	51
A2. Permanently lower GDP growth 1/	66	62	60	61	61	61	54	39
B. Bound tests								
B1. Primary balance is at historical average minus one standard deviations in 2006-2007	66	63	64	64	63	62	52	25
B2. Combination of B1-B2 using one half standard deviation shocks	66	63	64	63	63	62	52	24
B3. One-time 30 percent real depreciation in 2006	66	91	88	87	86	86	72	40
B4. 10 percent of GDP increase in other debt-creating flows in 2006	66	69	67	67	66	66	55	27
NPV of Debt-to-Revenue Ratio 2/								
Baseline	246	227	220	219	218	216	181	89
A. Alternative scenarios								
A1. Primary balance is unchanged from 2004	247	230	227	230	233	236	230	200
A2. Permanently lower GDP growth 1/	246	228	222	223	223	224	203	152
B. Bound tests								
B1. Primary balance is at historical average minus one standard deviations in 2006-2007	246	234	236	235	233	231	194	98
B2. Combination of B1-B2 using one half standard deviation shocks	246	233	235	234	232	230	193	96
B3. One-time 30 percent real depreciation in 2006	246	336	325	322	320	317	268	158
B4. 10 percent of GDP increase in other debt-creating flows in 2006	246	256	248	247	245	243	205	105
Debt Service-to-Revenue Ratio 2/								
Baseline	11	24	21	21	20	18	19	13
A. Alternative scenarios								
A1. Primary balance is unchanged from 2004	11	25	21	21	21	20	22	22
A2. Permanently lower GDP growth 1/	11	24	21	21	21	19	21	18
B. Bound tests								
B1. Primary balance is at historical average minus one standard deviations in 2006-2007	11	24	22	22	21	19	20	14
B2. Combination of B1-B2 using one half standard deviation shocks	11	24	22	22	21	19	20	14
B3. One-time 30 percent real depreciation in 2006	11	26	24	25	25	23	23	17
B4. 10 percent of GDP increase in other debt-creating flows in 2006	11	24	25	22	21	19	21	15

Sources: Country authorities; and Fund staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of 20 (i.e., the length of the projection period).

2/ Revenues are defined inclusive of grants.

Figure 3. Nicaragua: Indicators of Public Debt Under Alternative Scenarios, 2005-25 1/



Source: Staff projections and simulations.

1/ Most extreme stress test is test that yields highest ratio in 2015.

2/ Revenue including grants.