INTERNATIONAL MONETARY FUND

MALAWI

THIRD AND FOURTH REVIEWS UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT, REQUESTS FOR WAIVER OF PERFORMANCE CRITERIA, EXTENSION OF THE ARRANGEMENT, REPHASING OF DISBURSEMENTS, AND MODIFICATION OF PERFORMANCE CRITERIA—DEBT SUSTAINABILITY ANALYSIS

December 27, 2013

Approved By
David Owen and Mark Flanagan (IMF) and Jeffrey Lewis and Marcelo Giugale (IDA)

Prepared by the staffs of the International Monetary Fund and the International Development Association

Malawi's debt situation remains at a moderate risk of distress, but new risks have emerged since the last debt sustainability analysis (DSA). Uncertainty has increased following a scandal involving the theft of public funds. The fraud revealed weaknesses in national fiscal systems serious enough for donors to suspend budget support disbursements. To repair and strengthen their fiscal systems, the authorities are implementing an Action Plan of remedial measures with support from the development partners. They have also tightened their fiscal program in consultation with the Fund, to reverse a loosening of policies in the first quarter of FY2013/14 (July-September 2013) and to close a substantial funding gap caused by the reduction in external financing. Assuming timely implementation of remedial measures, medium term borrowing and the overall outlook are expected to be broadly unchanged relative to the previous DSA update. The use of a higher constant discount rate for debt service payments (in line with new guidelines) lowered Malawi's debt burden indictors.

BACKGROUND

1. **This DSA was prepared by IMF and World Bank staff in collaboration with the Malawian authorities.** The analysis updates the previous Joint DSA update from September 2013 (EBS/13/127, supplement 1), and follows the IMF and World Bank Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework for Low-Income Countries (SM/13/292, November 2013). The updated methodology includes a set of modifications and improvements to evaluate the sustainability of debt and the probability of debt distress. For Malawi, the main change consists of the use of a constant discount factor of 5 percent to evaluate debt service flows. Previous DSA analyses employed discount factors related to market movements (the September update used an average discount rate of about 3 percent). Holding other factors constant, this higher discount rate results in lower present value of debt for Malawi, and thus improves its debt sustainability outlook.

2. **The uncovering of fraudulent transactions at the treasury revealed a significant loss of public funds and led to a suspension of substantial amounts of donor support.** This incident revealed serious weaknesses in the integrity of national systems, and raised governance, safeguards, and financing assurance concerns.

3. **Malawi's medium- and long-term public and publicly guaranteed (PPG) external debt is expected to reach US$1.57 billion at end-2013.** This marks a continuation of the relatively brisk expansion of debt stock from 2012, and to an expansion of concessional budget loans extended by donors, and new project loans from China and India.

UNDERLYING DSA ASSUMPTIONS

4. **The baseline scenario incorporates lower donor support in the near term, but assumes the authorities will implement sufficiently strong remedial measures to alleviate governance concerns and begin to restore donor support in the second half of FY2013/14.** In addition to government spending cuts, monetary policy is also expected to remain tight to lower inflation and maintain confidence in the kwacha. Notwithstanding tight policies, growth is expected to reach 5 percent in 2013 and 6.1 percent in 2014. These projections are based on evidence of continuing increase in capacity utilization in many sectors, and on the expectation that the suspension of aid will be short-lived. Private sector representatives cited increased availability of foreign exchange as the main factor behind the recovery in economic activity during 2013, and this is expected to continue. Securitized arrears, recent domestic borrowing, together with the fraud and resulting delay in donor support are expected to generate substantial financing needs in the budget for FY2013/14. To meet these needs, the government will undertake spending cuts and raise its target for domestic borrowing. The strong revenue performance experienced so far this year is also expected to continue. Domestic borrowing for 2013 is now estimated to push total public and publicly guaranteed debt about 7 percentage points of GDP higher than what was envisaged in the previous DSA update. However, total public and publicly guaranteed debt to GDP is expected to decline at a faster pace during 2014 than in the previous DSA update (by 4 percentage points) as it is expected that the government will unwind most of over borrowing from the third quarter of 2013.

The baseline also maintains the assumption of a gradual reduction in the external current account deficit through export diversification and reliance on grants and concessional financing in the medium term. Inflation is programmed to return to single digits by 2014. The key macroeconomic assumptions are summarized in Box 1.

Box 1. Baseline Macroeconomic Assumptions

Real GDP is still projected to grow at an annual rate of about 6 percent over the longer term, led by the agriculture, trade, manufacturing and mining sectors.

Inflation is projected to decline from 35 percent in 2012 to 20 percent by December 2013 and to reach single digits by 2014 as the emphasis of monetary policy switches from accumulation of international reserves to price stability.

The exchange rate is projected to remain constant in real terms after 2014.

Tax revenue is projected to continue increasing with ongoing reforms in tax administration and policy.

External debt will be contracted mainly from multilateral creditors on concessional terms, with borrowing from bilateral sources also on broadly similar terms. Budget support and project loans from multilateral and bilateral donors are expected to fall during FY2013/14 and increase significantly in FY2014/15 in response to proposed policies. More normal levels are expected over the medium term.

The current account balance will remain at a sustainable level, as improvements in the trade and services balances moderate a declining trend in grants.

5. **Strong economic performance is expected to be maintained over the longer term.** Real GDP growth is projected to reach 6.5 percent by 2015, supported by a more competitive exchange rate, structural reforms, fiscal consolidation, and continued donor support. Growth beyond 2017 is projected to gradually approach 6 percent. The main impetus to growth is expected from agriculture, trade, manufacturing and mining.

EVOLUTION OF DEBT INDICATORS

6. **Malawi's debt indicators are expected to remain well below established thresholds**. Short-term program adjustments are required, but the medium term outlook remains favorable due to economic growth, medium term fiscal consolidation, and a higher discount for debt service flows. In spite of increasing PPG debt to GDP ratio for 2013, resumption of debt repayments and sustained economic growth will make this ratio move below its 2012 level by 2014, with continued improvements thereafter. The interest rate used for calculating the NPV of the debt service streams increased from 3 to 5 percent since the last DSA, which lowered the present value of the debt stock and resulted in improvements in other indicators.

7. **The main risks to debt sustainability are deterioration in the terms of trade, adverse weather conditions, and loosening of policies in response to the aid shortfall and in the run up to the May 2014 general elections.** The economy remains relatively undiversified and dependent on rain-fed

agricultural exports as a source of foreign exchange. Stress tests (next section) continue to indicate some vulnerability to export-related shocks. Loosening of policies may result in further depreciation of the Kwacha, and/or erosions in donor confidence. The latter could potentially jeopardize the timely resumption of donor aid, which remains a fundamental component of Malawi's budget.

EXTERNAL DEBT SUSTAINABILITY

8. External debt indicators remain well below their policy-dependent debt-burden thresholds. Absolute levels remain sustainable and follow a long-term downward trajectory (Figure 1 and Table 1).

9. Standard stress tests indicate that a somewhat weaker debt outcome is possible under certain conditions (Figure 1). Specifically, the present value of debt to GDP ratio reaches its indicative threshold when key variables are kept at their historical levels. This happens in 2023, which coincides with the peak value for this ratio. This behavior is mostly due to the inclusion of 2012 in the historical period, which effectively allows the exchange rate depreciation in that year to continue to impact nominal GDP in U.S. dollars. The staff considers this to be an unlikely outcome given that the distortions in the foreign exchange market that gave rise to such a large depreciation have now been removed.

10. Debt burden indicators also remain below their indicative thresholds under bound tests conducted to show the impact of temporary shocks. . The strongest impact on external debt indicators requires the combination of shocks to growth, exports and non-debt creating flows (See Table 3a, case B5). As argued above, historical averages capture the devaluation period and are deemed low probability events.

PUBLIC DEBT SUSTAINABILITY

11. The baseline scenario projects a relatively slow decrease in the ratio of public debt to GDP starting in 2014. Until 2018, domestic debt as a share of GDP is set to decline with fiscal consolidation and the maintenance of a positive primary balance (up to 2019). Standard stress tests do not suggest any significant vulnerability (Figure 2 and Table 2). The strongest impact on the indicators arises from a one-time depreciation shock—again through compression of nominal GDP in U.S. dollars—and an export shock, which is illustrative of the risk inherent in the undiversified nature of Malawi's sources of foreign exchange.[1]

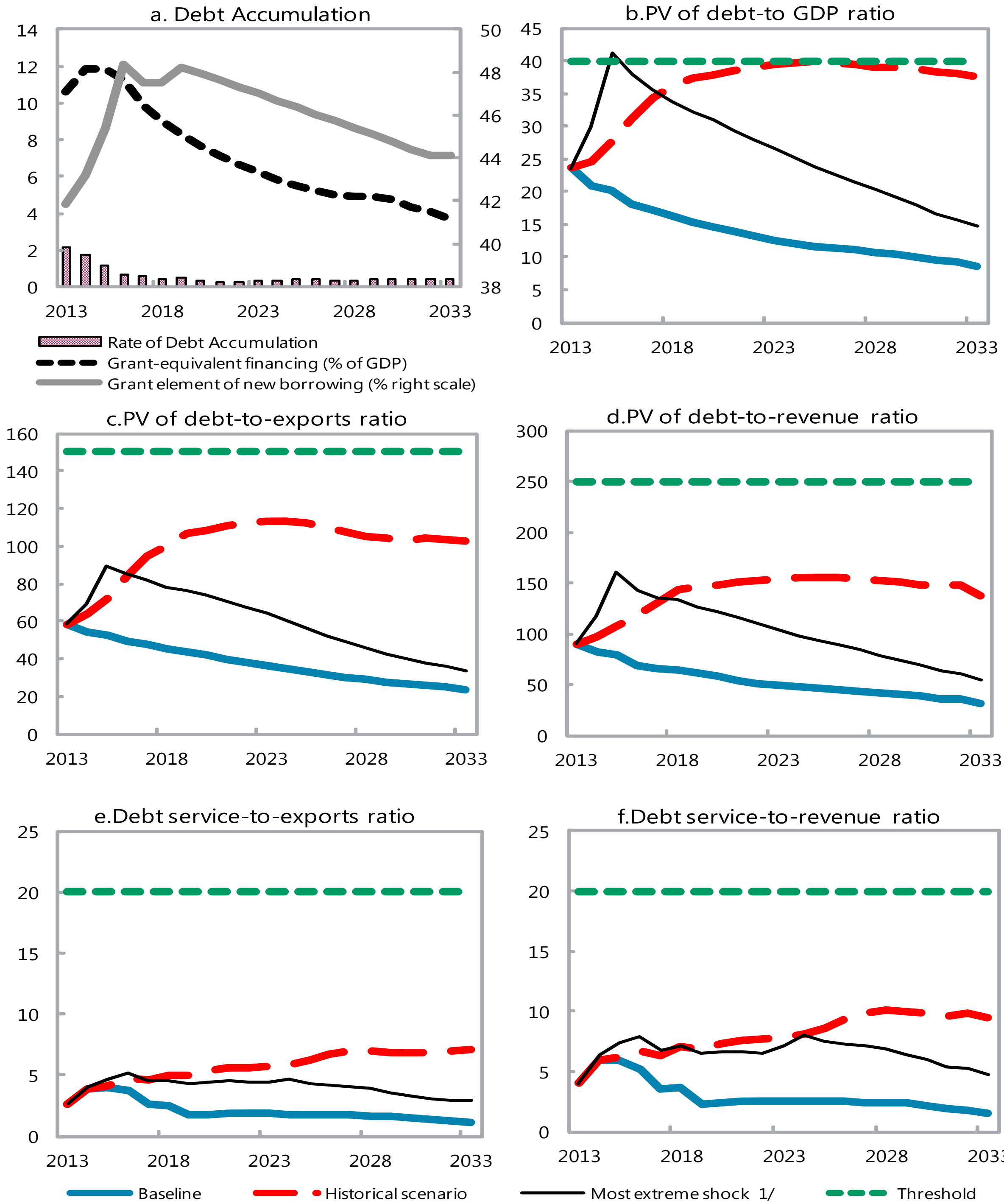
[1] In this analysis, the combination bound test of assuming a one half standard deviation decline in economic growth, export growth, U.S. GDP deflator, and non-debt creating flows was modified to exclude the non-debt creating flows component. This component was removed as Malawi lacks the access to capital markets required to replace lost grants and foreign investment with borrowing, and would instead be forced to respond with expenditure and import compression.

12. External financing risks exist, but are programmed to be addressed by additional fiscal restraint and so should not have an impact on debt sustainability. Budget financing needs already require an expansion of domestic debt for 2013. Consequently, fiscal tightening is expected to be the policy response to unexpected negative financing shocks (either from delayed or lower donor support, or lower tax revenue). Additional domestic borrowing would bring additional pressures on the exchange rate, erode perceptions of government commitment to policy reforms, ultimately damaging macroeconomic performance and should be avoided. The authorities will look for additional cuts in domestically financed development expenditure and in goods and services to meet additional shortfalls in external financing.

CONCLUSIONS

13. Malawi remains at a moderate risk of debt distress. The debt situation under the baseline scenario remains close to that reported in the previous DSA update. Risk of export related shocks remains, given Malawi's limited sources of foreign exchange and reliance on rain-fed agriculture. Additional risks include the loosening of policies as a response to the suspension of donor support, which could further erode donor confidence and jeopardize the resumption of aid. Risks of negative financing shocks in the form of delayed or lower donor support, or lower than expected tax revenue may require additional fiscal restraint, but should not compromise the medium term debt sustainability of the country. Recent events point to the need for taking steps to arrest declines in the quality of institutions (as reflected in the CPIA score), to ensure capacity to manage the debt load of the country.

Figure 1. Malawi: 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 Combination shock; in c. to a Combination shock; in d. to a Combination shock; in e. to a Exports shock and in figure f. to a Combination shock

Table 1. Malawi: Public Debt Sustainability Framework, Baseline Scenario, 2010-2033

(In percent of GDP, unless otherwise indicated)

	Actual			Average 5/	Standard Deviation 5/	Estimate	Projections								
	2010	2011	2012			2013	2014	2015	2016	2017	2018	2013-18 Average	2023	2033	2019-33 Average
Public sector debt 1/	29.7	36.1	54.8			59.8	52.0	47.9	43.7	41.2	37.8		33.3	24.6	
of which: foreign-currency denominated	16.1	16.9	37.4			40.8	36.3	35.3	32.5	31.5	30.5		26.7	18.2	
Change in public sector debt	-8.6	6.4	19.4			5.1	-7.9	-4.1	-4.2	-2.5	-3.3		-0.5	-0.8	
Identified debt-creating flows	-6.2	3.6	12.5			-1.2	-8.2	-2.3	-3.5	-1.7	-2.2		0.5	-0.7	
Primary deficit	-4.2	2.2	2.0	-0.8	3.2	1.2	-1.3	-0.4	-0.9	0.1	0.1	-0.2	1.6	1.5	1.4
Revenue and grants	36.7	28.3	34.7			35.1	35.7	36.1	36.8	35.5	33.6		31.1	30.5	
of which: grants	11.9	4.7	11.6			8.8	10.4	10.6	10.3	9.0	8.3		5.6	3.2	
Primary (noninterest) expenditure	32.5	30.6	36.6			36.3	34.4	35.8	35.9	35.5	33.7		32.7	32.0	
Automatic debt dynamics	-2.0	1.4	10.6			-2.4	-7.0	-1.9	-2.6	-1.8	-2.3		-1.1	-2.3	
Contribution from interest rate/growth differential	-1.6	0.4	-1.9			-1.6	-2.6	-1.6	-1.0	-1.7	-2.2		-1.3	-1.6	
of which: contribution from average real interest rate	0.7	1.6	-1.2			1.0	0.8	1.6	1.9	0.9	0.2		0.6	-0.1	
of which: contribution from real GDP growth	-2.4	-1.2	-0.7			-2.6	-3.4	-3.2	-2.9	-2.6	-2.4		-1.9	-1.5	
Contribution from real exchange rate depreciation	-0.4	1.0	12.4			-0.8	-4.3	-0.3	-1.6	-0.1	-0.1		...	...	
Other identified debt-creating flows	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, 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	-2.4	2.8	6.1			6.2	0.4	-1.8	-0.7	-0.8	-1.1		-0.9	-0.3	
Other Sustainability Indicators															
PV of public sector debt	...	...	40.4			42.5	36.5	32.7	29.3	26.9	23.6		19.1	15.0	
of which: foreign-currency denominated	...	...	23.0			23.6	20.9	20.1	18.1	17.2	16.2		12.5	8.6	
of which: external	...	...	23.0			23.6	20.9	20.1	18.1	17.2	16.2		12.5	8.6	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	16.8	18.9	20.9			20.9	23.2	18.2	15.0	13.4	11.0		9.1	8.3	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	116.5			121.1	102.2	90.4	79.7	75.8	70.1		61.3	49.1	
PV of public sector debt-to-revenue ratio (in percent)	...	...	174.9			161.9	144.1	127.8	110.6	101.7	93.1		74.7	54.8	
of which: external 3/	...	...	99.7			89.6	82.3	78.6	68.4	65.1	64.2		49.1	31.4	
Debt service-to-revenue and grants ratio (in percent) 4/	8.0	12.3	8.1			19.0	17.1	12.5	12.2	8.7	6.2		5.7	2.6	
Debt service-to-revenue ratio (in percent) 4/	11.8	14.7	12.2			25.4	24.2	17.6	16.9	11.7	8.3		6.9	2.9	
Primary deficit that stabilizes the debt-to-GDP ratio	4.4	-4.2	-17.4			-3.9	6.6	3.7	3.3	2.6	3.4		2.1	2.3	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	6.5	4.3	1.9	5.5	2.8	5.0	6.1	6.5	6.5	6.2	6.3	6.1	5.9	6.0	5.9
Average nominal interest rate on forex debt (in percent)	0.4	0.7	1.6	0.9	0.3	1.6	1.6	1.7	1.7	0.7	0.9	1.4	1.6	1.7	1.6
Growth of real primary spending (deflated by GDP deflator, in percer	0.1	0.0	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Grant element of new external borrowing (in percent)	...	...	...	...	...	41.9	43.2	45.4	48.4	47.5	47.5	45.6	47.0	44.1	...

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 2.Malawi: Sensitivity Analysis for Key Indicators of Public Debt 2013-2033

	Projections							
	2013	2014	2015	2016	2017	2018	2023	2033
PV of Debt-to-GDP Ratio								
Baseline	43	37	33	29	27	24	19	15
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	43	38	35	32	29	25	15	4
A2. Primary balance is unchanged from 2013	43	39	36	34	32	29	23	18
A3. Permanently lower GDP growth 1/	43	38	35	32	30	27	26	34
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-20	43	39	38	36	34	31	31	32
B2. Primary balance is at historical average minus one standard deviations in 2014-201	43	40	37	34	32	28	23	19
B3. Combination of B1-B2 using one half standard deviation shocks	43	40	37	35	33	30	27	27
B4. One-time 30 percent real depreciation in 2014	43	46	41	37	33	29	23	19
B5. 10 percent of GDP increase in other debt-creating flows in 2014	43	43	39	36	33	30	24	19
PV of Debt-to-Revenue Ratio 2/								
Baseline	121	102	90	80	76	70	61	49
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	121	107	95	86	82	75	48	12
A2. Primary balance is unchanged from 2013	121	109	100	93	91	87	75	59
A3. Permanently lower GDP growth 1/	121	106	96	87	85	81	83	109
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-20	121	109	103	95	94	92	97	105
B2. Primary balance is at historical average minus one standard deviations in 2014-201	121	111	104	93	89	84	75	61
B3. Combination of B1-B2 using one half standard deviation shocks	121	110	102	93	91	87	87	87
B4. One-time 30 percent real depreciation in 2014	121	128	113	99	94	87	73	63
B5. 10 percent of GDP increase in other debt-creating flows in 2014	121	121	108	97	94	88	79	63
Debt Service-to-Revenue Ratio 2/								
Baseline	19	17	12	12	9	6	6	3
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	19	17	13	12	9	6	6	1
A2. Primary balance is unchanged from 2013	19	17	13	12	9	6	6	3
A3. Permanently lower GDP growth 1/	19	17	13	12	9	6	6	4
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-20	19	18	13	13	9	7	7	5
B2. Primary balance is at historical average minus one standard deviations in 2014-201	19	17	13	12	9	6	6	3
B3. Combination of B1-B2 using one half standard deviation shocks	19	17	13	13	9	7	6	4
B4. One-time 30 percent real depreciation in 2014	19	18	14	14	10	7	7	3
B5. 10 percent of GDP increase in other debt-creating flows in 2014	19	17	13	12	9	6	6	3

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.Malawi: 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 ratio								
Baseline	24	21	20	18	17	16	**13**	9
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	24	24	28	31	34	36	**39**	38
A2. New public sector loans on less favorable terms in 2013-2033 2	24	21	21	20	19	18	**16**	14
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	24	21	21	19	18	17	**13**	9
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	24	22	26	24	23	21	**17**	10
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	24	25	28	25	24	22	**17**	12
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	24	25	29	27	25	24	**19**	11
B5. Combination of B1-B4 using one-half standard deviation shocks	24	30	41	38	36	34	**27**	15
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	24	28	27	25	23	22	**17**	12
PV of debt-to-exports ratio								
Baseline	59	55	52	49	47	45	**36**	23
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	59	64	72	84	95	100	**113**	103
A2. New public sector loans on less favorable terms in 2013-2033 2	59	55	55	54	53	51	**47**	39
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	59	53	51	49	47	44	**35**	24
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	59	66	86	82	78	74	**61**	35
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	59	53	51	49	47	44	**35**	24
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	59	65	76	73	70	66	**54**	30
B5. Combination of B1-B4 using one-half standard deviation shocks	59	69	89	85	82	78	**64**	34
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	59	53	51	49	47	44	**35**	24
PV of debt-to-revenue ratio								
Baseline	90	82	79	68	65	64	**49**	31
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	90	97	108	117	130	143	**154**	138
A2. New public sector loans on less favorable terms in 2013-2033 2	90	82	83	75	72	73	**64**	53
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	90	82	83	73	69	68	**51**	34
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	90	88	103	91	86	85	**66**	37
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	90	97	108	95	90	88	**67**	45
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	90	98	114	101	95	95	**74**	40
B5. Combination of B1-B4 using one-half standard deviation shocks	90	118	161	143	134	133	**104**	54
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	90	110	107	94	89	87	**66**	44

Table 3b.Malawi: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2013-2033 (continued)

(In percent)

Debt service-to-exports ratio

Baseline	3	4	4	4	3	3	**2**	1
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	3	4	4	5	5	5	**6**	7
A2. New public sector loans on less favorable terms in 2013-2033 2	3	4	4	4	4	4	**3**	3
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	3	4	4	4	3	3	**3**	2
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	3	4	5	5	5	5	**4**	3
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	3	4	4	4	3	3	**3**	2
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	3	4	4	4	4	4	**4**	3
B5. Combination of B1-B4 using one-half standard deviation shocks	3	4	4	5	4	4	**4**	3
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	3	4	4	4	3	3	**3**	2

Debt service-to-revenue ratio

Baseline	4	6	6	5	4	4	**3**	2
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	4	6	6	7	6	7	**8**	9
A2. New public sector loans on less favorable terms in 2013-2033 2	4	5	5	6	5	5	**4**	3
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	4	6	6	6	5	5	**4**	3
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	4	5	6	6	5	5	**5**	3
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	4	7	8	7	6	7	**6**	3
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	4	5	6	6	5	5	**5**	3
B5. Combination of B1-B4 using one-half standard deviation shocks	4	6	7	8	7	7	**7**	5
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	4	8	7	7	6	7	**6**	3
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	44	44	44	44	44	44	**44**	44

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.

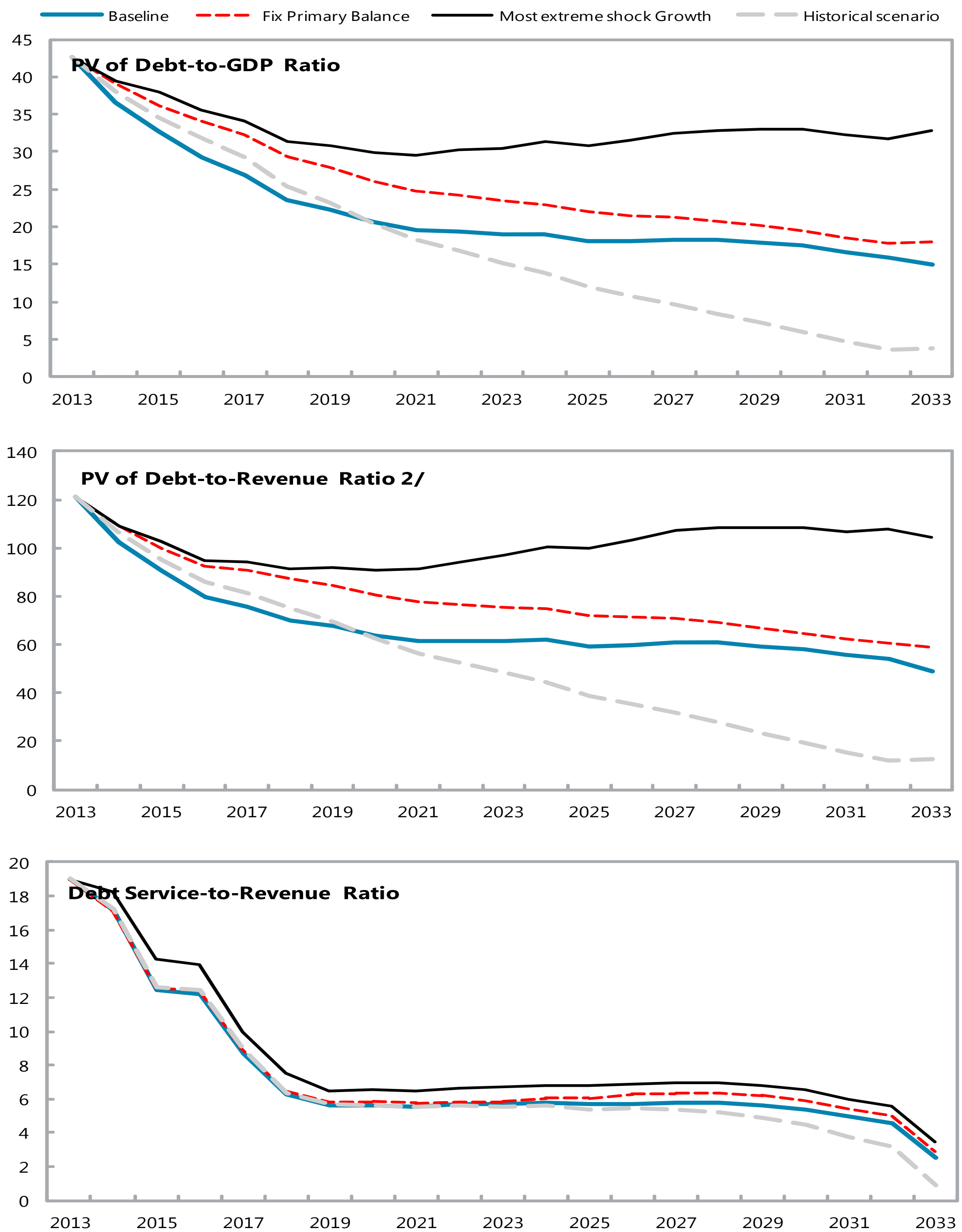
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).

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.

Figure 2.Malawi: 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.