

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL MONETARY FUND

**MALAWI**

**Joint World Bank-IMF Debt Sustainability Analysis<sup>1</sup>**

September 2020

Prepared jointly by the staffs of the International Development Association (IDA)  
and the International Monetary Fund (IMF)

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<sup>1</sup> The analysis presented in this document is based on the debt sustainability framework for low-income countries approved by the Boards of both the International Monetary Fund and the International Development Association. It has been prepared in the context of the 2020 request for emergency financing under the IMF's Rapid Credit Facility. The macroeconomic framework underlying this DSA update is the same as that included in the staff report of the 2020 RCF request which reflects currently available information, including recent global and domestic developments. However, updates with respect to the economic impact and policy response to the COVID-19 pandemic are rapidly evolving and risks are heavily tilted to the downside.

<b>Malawi: Joint Bank-Fund Debt Sustainability Analysis</b>	
<b>Risk of external debt distress</b>	Moderate <sup>2</sup>
<b>Overall risk of debt distress</b>	High
<b>Granularity in the risk rating</b>	Limited space to absorb shocks
<b>Application of judgement</b>	No
<b>Macroeconomic projections</b>	Growth is expected to fall to 0.6 percent in 2020 and to 2.2 percent in 2021 (0.4 and 0.3 percentage points below projections in IMF Country Report 20/168)—due to a considerably worsened global and regional economic outlook amid the COVID-19 pandemic and resultant slowdown in domestic activity exacerbated by continued social distancing measures. Economic recovery is expected during 2022-25 with growth averaging 6.4 percent. Over the long-term, growth is expected to stabilize around 5.5 percent.
<b>Financing strategy</b>	External financing in the form of concessional project loans is expected to gradually increase. There is a risk that the pace of this increase may accelerate if the economy’s absorption capacity increases faster than expected. The grant element of project loans will remain relatively high over the forecast period, with no access to market financing.  Given increased risk to public debt sustainability mainly driven by higher domestic primary deficits, fiscal consolidation efforts should be accompanied by strengthening domestic debt management, including the gradual lengthening of the maturity of debt portfolio as market conditions allow.
<b>Mechanical risk rating under the external DSA</b>	Moderate
<b>Mechanical risk rating under the public DSA</b>	High
<sup>2</sup> Malawi’s debt carrying capacity is classified as “medium” according to the composite indicator (CI) score. Malawi’s CI score based on the current vintage (2019 CPIA and 2020 April WEO) is 2.72 and remains unchanged from the previous DSA (April 2020)—both above the threshold value of 2.69 for weak debt carrying capacity.	

Malawi is at moderate risk of external debt distress with limited space to absorb shocks and high risk of overall debt distress. Under the baseline scenario reflecting the negative macroeconomic impact and rise in fiscal borrowing in 2020 related to the COVID-19 pandemic and a gradual increase in project loans over the medium term, a moderate rating is maintained for external debt distress. However, the present value of external debt-to-exports ratio is projected to deteriorate, reflecting a slower export recovery—as a result, the country’s capacity to absorb shocks is expected to narrow.

While debt remains sustainable, Malawi is at high overall risk of debt distress. The present value of total public debt-to-GDP is projected to remain above the benchmark over the projected period under the

baseline scenario. This mainly reflects materially larger domestic primary deficits financed through domestic debt contracted at high interest rates, especially during FY 2020/21—FY 2021/22. The larger primary deficits during the projected period are mainly due to revenue shortfalls and higher health and social spending as a result of the intensification of COVID-19 across Malawi; and the doubling of the PIT threshold, a substantial increase in the public sector wage bill, and introduction of the Agricultural Input Program (replacing the Farm Input Subsidy Program)—all introduced in the FY 2020/21 draft budget that is currently under discussion in the Parliament—which increase risks to debt sustainability compared to the April 2020 DSA. While domestic liquidity is expected to be mainly channeled towards financing the government given waning private sector credit demand (resulting from the pandemic), recent increases in domestic debt yields, particularly on shorter maturities, warrant further strengthening of debt management such as gradually lengthening the maturity of the domestic debt portfolio (as market conditions allow) as well as fiscal consolidation efforts.

This DSA incorporates current projections of the impact from the COVID-19 pandemic: (i) GDP growth is expected to fall to 0.6 percent in 2020 and to 2.2 percent in 2021 as a considerably worsened global and regional economic situation, compared to the outlook under the April 2020 DSA, are intensifying already hefty pressures on exports, remittances, and foreign direct investment (FDI) and continued social distancing measures against a backdrop of rapidly accelerating cases since June substantially slows down domestic activity, especially in domestic manufacturing and wholesale and retail trade, and; (ii) the domestic primary balance is expected to deteriorate (relative to pre-pandemic projections) to -2.5 percent of GDP in FY 2019/20, -4.4 percent of GDP in FY 2020/21 and -3.5 percent of GDP in FY 2021/22; (iii) the current account deficit, excluding official transfers, is expected to widen to 20.5 percent of GDP in 2020 and 20.3 percent of GDP in 2021. However, the outlook remains highly uncertain as the impact of the COVID-19 pandemic and policy responses are rapidly evolving and subject to considerable downside risks, which could lead to a faster-than-expected deterioration in external and public debt indicators. The Malawian government continues implementing measures to mitigate the impact of the pandemic and preserve macroeconomic stability and are actively seeking support from development partners including the World Bank, AfDB and EU<sup>2</sup>. To strengthen medium-term public debt sustainability and ensure sufficient fiscal space for critical resilience building and social and development spending, the Malawian government plans to implement a comprehensive revenue mobilization strategy (including VAT reforms) in FY 2021/22 and continue to progress in reforms in tax administration, procurement, public financial management (including implementation of a new IFMIS), public investment management, oversight of state-owned enterprises, and debt management.

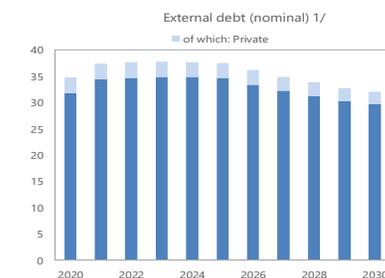
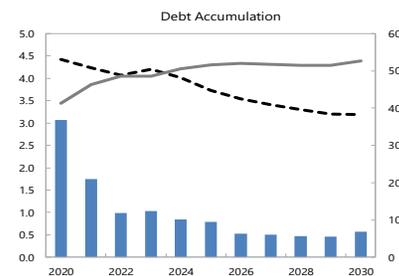
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<sup>2</sup> The authorities welcome and are participating in the DSSI. They have requested assistance from bilateral creditors, and discussions are ongoing. This DSA assumes the full amount of the DSSI is received from all creditors in line with agreed term sheets. This assessment assumes debt relief from the IMF under the Catastrophe Containment window of the CCRT through April 2022.

**Table 1. Malawi: External Debt Sustainability Framework, Baseline Scenario, 2017–2040**  
(in percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
External debt (nominal) 1/	36.5	34.6	32.7	34.8	37.4	37.6	37.8	37.7	37.5	32.0	31.1	30.5	35.7
of which: public and publicly guaranteed (PPG)	32.8	31.2	29.5	31.8	34.4	34.7	34.9	34.9	34.7	29.7	29.5	26.9	32.9
Change in external debt	0.7	-1.9	-1.9	2.1	2.6	0.3	0.1	-0.1	-0.2	-0.7	0.1		
Identified net debt-creating flows	16.5	15.4	12.3	18.6	18.2	15.0	14.4	13.7	12.8	11.5	9.1	11.4	13.9
Non-interest current account deficit	22.0	20.2	16.8	19.7	20.0	18.6	18.0	17.3	16.6	15.3	12.8	13.6	17.2
Deficit in balance of goods and services	27.3	26.3	23.0	24.7	24.8	23.6	23.2	22.6	22.0	20.6	18.3	22.4	22.4
Exports	16.9	16.1	16.3	13.5	14.3	14.8	15.4	16.1	16.7	17.7	20.1		
Imports	44.2	42.4	39.3	38.1	39.1	38.4	38.6	38.7	38.7	38.3	38.4		
Net current transfers (negative = inflow)	-7.5	-8.1	-8.3	-6.9	-6.6	-6.9	-7.2	-7.4	-7.5	-7.3	-7.2	-6.5	-7.2
of which: official	-0.2	0.0	-0.5	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other current account flows (negative = net inflow)	2.2	2.1	2.1	1.9	1.9	1.9	2.0	2.0	2.1	2.0	1.7	-2.2	2.0
Net FDI (negative = inflow)	-1.5	-1.6	-1.4	-1.1	-1.4	-1.5	-1.5	-1.6	-1.8	-2.3	-2.4	-1.8	-1.8
Endogenous debt dynamics 2/	-4.0	-3.3	-3.1	0.0	-0.5	-2.1	-2.1	-2.0	-2.0	-1.4	-1.3		
Contribution from nominal interest rate	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
Contribution from real GDP growth	-1.3	-1.0	-1.4	-0.2	-0.7	-2.3	-2.4	-2.3	-2.3	-1.7	-1.6		
Contribution from price and exchange rate changes	-3.0	-2.6	-2.0	...	...	...	...	...	...	...	...		
Residual 3/	-15.8	-17.3	-14.3	-16.5	-15.6	-14.8	-14.3	-13.7	-13.0	-12.3	-9.0	-9.7	-14.0
of which: exceptional financing	0.0	0.0	0.0	-0.4	-0.3	-0.1	0.0	0.0	0.0	0.0	0.0		
CCRT Debt Relief				-0.2	-0.3	-0.1							
G20 DSSI				-0.2									
<b>Sustainability indicators</b>													
PV of PPG external debt-to-GDP ratio	...	...	19.2	20.3	21.3	21.5	21.7	21.7	21.5	17.7	17.5		
PV of PPG external debt-to-exports ratio	...	...	117.4	150.5	148.6	145.5	141.2	134.9	129.0	100.2	87.4		
PPG debt service-to-exports ratio	9.3	12.1	6.5	6.7	8.8	10.4	9.8	9.6	8.8	8.6	4.9		
PPG debt service-to-revenue ratio	8.0	9.7	5.7	5.3	6.6	7.9	7.3	7.0	6.5	6.5	5.7		
Gross external financing need (Billion of U.S. dollars)	1.4	1.4	1.3	1.7	1.8	1.7	1.7	1.7	1.7	2.1	3.1		
<b>Key macroeconomic assumptions</b>													
Real GDP growth (in percent)	4.0	3.2	4.5	0.6	2.2	6.5	6.5	6.3	6.2	5.5	5.5	4.1	5.1
GDP deflator in US dollar terms (change in percent)	9.1	7.5	6.1	9.0	1.2	-2.7	-2.8	-2.0	-1.8	1.1	1.7	-1.1	0.5
Effective interest rate (percent) 4/	0.9	0.9	0.9	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8
Growth of exports of G&S (US dollar terms, in percent)	-10.7	5.6	12.4	-9.5	10.0	6.9	8.0	8.7	8.4	7.8	8.7	5.8	6.5
Growth of imports of G&S (US dollar terms, in percent)	13.0	6.2	3.0	6.3	6.2	1.7	4.2	4.2	4.3	6.5	7.5	4.7	5.3
Grant element of new public sector borrowing (in percent)	...	...	...	41.3	46.3	48.5	48.5	50.5	51.6	52.7	49.3	...	49.7
Government revenues (excluding grants, in percent of GDP)	19.5	20.2	18.8	17.0	19.1	19.3	20.7	22.1	22.8	23.3	17.0	18.4	21.6
Aid flows (in Billion of US dollars) 5/	0.4	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.8		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	4.4	4.2	4.1	4.2	4.0	3.7	3.2	2.1	...	3.8
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	61.0	68.2	73.6	74.2	75.4	75.8	72.8	60.0	...	72.5
Nominal GDP (Billion of US dollars)	6.2	6.9	7.7	8.4	8.7	9.0	9.3	9.7	10.1	14.0	27.0		
Nominal dollar GDP growth	13.4	10.9	10.9	9.7	3.5	3.7	3.5	4.2	4.3	6.7	7.2	3.1	5.6
<b>Memorandum items:</b>													
PV of external debt 7/	...	...	22.3	23.2	24.2	24.4	24.6	24.6	24.4	20.1	19.1		
In percent of exports	...	...	136.9	172.6	169.2	165.4	160.0	152.7	145.9	113.5	95.4		
Total external debt service-to-exports ratio	9.3	12.1	8.6	9.0	10.9	12.4	11.6	11.2	10.4	9.7	5.3		
PV of PPG external debt (in Billion of US dollars)	...	...	1.5	1.7	1.9	1.9	2.0	2.1	2.2	2.5	4.7		
(Pvt-Pvt-1)/GDPT-1 (in percent)	...	...	...	3.1	1.8	1.0	1.0	0.9	0.8	0.6	1.4		
Non-interest current account deficit that stabilizes debt ratio	21.3	22.1	18.8	17.6	17.5	18.4	17.9	17.3	16.8	16.0	12.7		

Definition of external/domestic debt	Currency-based
Is there a material difference between the two criteria?	Yes



Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as  $[r - g - p(1+g)] / (1+g+p+pg)$  times previous period debt ratio, with  $r$  = nominal interest rate;  $g$  = real GDP growth rate, and  $p$  = 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/ Current-year interest payments divided by previous period debt stock.

5/ Defined as grants, concessional loans, and debt relief.

6/ 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).

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

8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

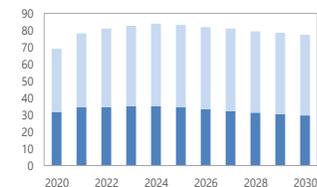
**Table 2. Malawi: Public Sector Debt Sustainability Framework, Baseline Scenario, 2017–2040**  
(in percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
<b>Public sector debt 1/</b>	57.1	59.7	59.5	69.1	78.2	81.3	83.0	83.8	83.0	77.5	69.3	48.0	79.7
of which: external debt	32.8	31.2	29.5	31.8	34.4	34.7	34.9	34.9	34.7	29.7	29.5	26.9	32.9
Change in public sector debt	2.0	2.6	-0.2	9.6	9.1	3.0	1.7	0.8	-0.8	-1.1	-0.3		
<b>Identified debt-creating flows</b>	0.3	0.3	-0.4	7.5	8.6	3.0	1.6	1.0	-0.4	-0.6	-0.3	0.4	1.7
Primary deficit	3.5	2.1	2.0	7.1	7.2	5.4	4.1	3.1	1.9	0.0	0.7	1.5	2.9
Revenue and grants	22.7	21.5	21.3	19.5	21.6	22.0	23.5	24.8	25.3	25.2	17.7	22.6	23.9
of which: grants	3.3	1.3	2.4	2.4	2.5	2.7	2.8	2.7	2.5	1.9	0.8		
Primary (noninterest) expenditure	26.3	23.6	23.3	26.6	28.9	27.4	27.6	27.9	27.1	25.2	18.5	24.1	26.8
<b>Automatic debt dynamics</b>	-3.2	-1.8	-2.4	0.3	1.3	-2.4	-2.4	-2.1	-2.3	-0.6	-1.0		
Contribution from interest rate/growth differential	-0.8	-0.2	-1.2	1.4	0.2	-3.8	-3.7	-3.3	-3.5	-0.9	-1.1		
of which: contribution from average real interest rate	1.3	1.5	1.4	1.8	1.7	1.0	1.3	1.6	1.4	3.2	2.5		
of which: contribution from real GDP growth	-2.1	-1.8	-2.6	-0.4	-1.5	-4.8	-5.0	-4.9	-4.9	-4.1	-3.6		
Contribution from real exchange rate depreciation	-2.4	-1.6	-1.3	...	...	...	...	...	...	...	...		
<b>Other identified debt-creating flows</b>	0.0	0.0	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 contingent liabilities (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		
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 debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Residual</b>	1.7	2.3	0.2	1.0	1.7	1.4	1.3	1.1	0.9	-0.3	0.1	2.2	0.5
<b>Sustainability indicators</b>													
<b>PV of public debt-to-GDP ratio 2/</b>	...	...	49.0	57.9	66.1	69.0	70.5	71.3	70.5	65.8	57.6		
<b>PV of public debt-to-revenue and grants ratio</b>	...	...	230.6	297.7	305.9	313.0	299.6	287.8	278.9	261.3	324.8		
<b>Debt service-to-revenue and grants ratio 3/</b>	35.6	25.3	27.0	33.2	63.9	89.7	101.7	109.7	115.1	140.9	180.7		
Gross financing need 4/	7.6	3.6	7.7	13.6	21.0	25.1	28.0	30.2	30.9	35.5	32.8		
<b>Key macroeconomic and fiscal assumptions</b>													
Real GDP growth (in percent)	4.0	3.2	4.5	0.6	2.2	6.5	6.5	6.3	6.2	5.5	5.5	4.1	5.1
Average nominal interest rate on external debt (in percent)	1.0	1.1	1.0	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	0.9
Average real interest rate on domestic debt (in percent)	6.6	8.2	6.6	7.4	5.6	3.3	3.7	4.2	3.9	7.8	7.3	2.6	5.9
Real exchange rate depreciation (in percent, + indicates depreciation)	-8.0	-4.9	-4.3	...	...	...	...	...	...	...	...	5.4	...
Inflation rate (GDP deflator, in percent)	10.9	7.8	8.0	8.8	8.5	6.8	5.0	4.5	4.4	4.4	4.8	16.0	5.5
Growth of real primary spending (deflated by GDP deflator, in percent)	16.2	-7.2	2.9	15.0	10.9	1.2	7.3	7.3	3.5	2.9	-4.1	3.5	6.0
Primary deficit that stabilizes the debt-to-GDP ratio 5/	1.5	-0.5	2.2	-2.5	-1.9	2.3	2.4	2.2	2.6	1.1	1.0	1.1	1.2
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

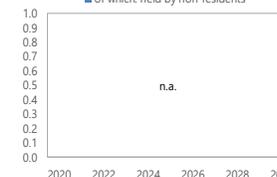
Definition of external/domestic debt	Currency-based
Is there a material difference between the two criteria?	Yes

Public sector debt 1/

■ of which: local-currency denominated  
■ of which: foreign-currency denominated



■ of which: held by residents  
■ of which: held by non-residents



Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central government, central bank, government-guaranteed debt. Definition of external debt is Currency-based.

2/ The underlying PV of external debt-to-GDP ratio under the public DSA differs from the external DSA with the size of differences depending on exchange rates projections.

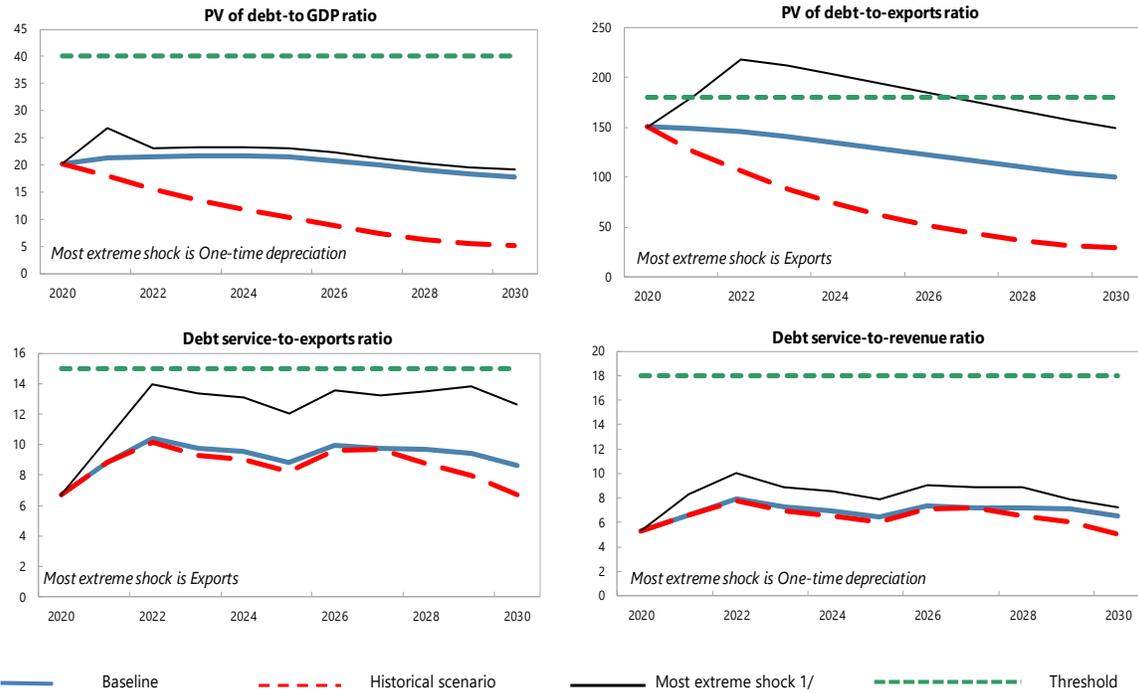
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

4/ 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 and other debt creating/reducing flows.

5/ Defined as a primary deficit minus a change in the public debt-to-GDP ratio (i.e., a primary surplus), which would stabilize the debt ratio only in the year in question.

6/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

**Figure 1. Malawi: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2020–2030**



Customization of Default Settings		
	Size	Interactions
<b>Tailored Tests</b>		
Combined CLs	Yes	
Natural Disasters	No	No
Commodity Prices <sup>2/</sup>	n.a.	n.a.
Market Financing	n.a.	n.a.

Note: "Yes" indicates any change to the size or interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply.

Borrowing Assumptions for Stress Tests*		
	Default	User defined
<b>Shares of marginal debt</b>		
External PPG MLT debt	100%	
<b>Terms of marginal debt</b>		
Avg. nominal interest rate on new borrowing in USD	0.8%	0.8%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	34	34
Avg. grace period	6	6

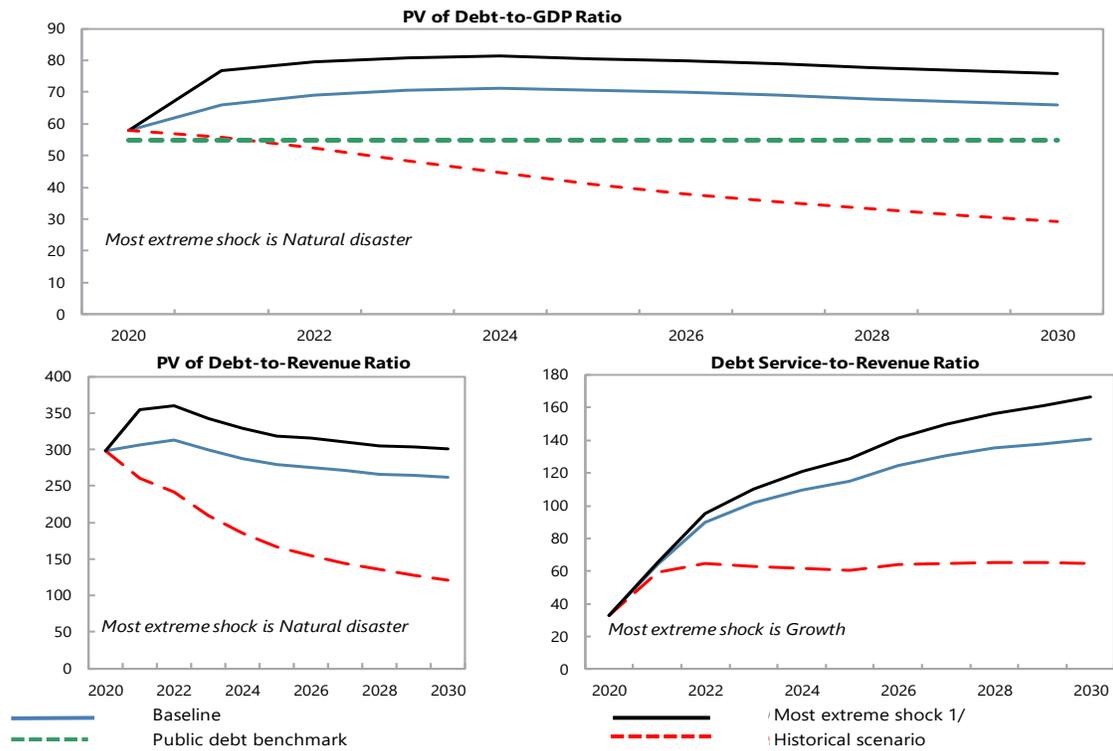
\* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2030. Stress tests with one-off breaches are also presented (if any), while these one-off breaches are deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

2/ The magnitude of shocks used for the commodity price shock stress test are based on the commodity prices outlook prepared by the IMF research department.

**Figure 2. Malawi: Indicators of Public Debt Under Alternative Scenarios, 2020–2030**



Borrowing Assumptions for Stress Tests*	Default	User defined
<b>Shares of marginal debt</b>		
External PPG medium and long-term	11%	11%
Domestic medium and long-term	27%	27%
Domestic short-term	62%	62%
<b>Terms of marginal debt</b>		
<b>External MLT debt</b>		
Avg. nominal interest rate on new borrowing in USD	0.8%	0.8%
Avg. maturity (incl. grace period)	34	34
Avg. grace period	6	6
<b>Domestic MLT debt</b>		
Avg. real interest rate on new borrowing	7.4%	7.4%
Avg. maturity (incl. grace period)	2	2
Avg. grace period	1	1
<b>Domestic short-term debt</b>		
Avg. real interest rate	4%	4.0%

\* Note: The public DSA allows for domestic financing to cover the additional financing needs generated by the shocks under the stress tests in the public DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2030. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

**Table 3. Malawi: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2020–2030**

	Projections 1/										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>PV of debt-to-GDP ratio</b>											
<b>Baseline</b>	20.3	21.3	21.5	21.7	21.7	21.5	20.9	20.0	19.2	18.4	17.7
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2020-2030 2/	20.3	18.0	15.7	13.6	11.8	10.3	8.9	7.5	6.4	5.5	5.1
<b>B. Bound Tests</b>											
B1. Real GDP growth	20.3	21.8	22.6	22.9	22.8	22.6	21.9	21.0	20.1	19.3	18.7
B2. Primary balance	20.3	21.4	21.7	22.1	22.2	22.2	21.6	20.8	20.0	19.3	18.7
B3. Exports	20.3	22.4	24.6	24.9	24.8	24.7	24.0	23.0	22.0	21.0	20.2
B4. Other flows 3/	20.3	22.7	24.5	24.8	24.7	24.6	23.9	22.9	22.0	20.9	20.1
B5. One-time 30 percent nominal depreciation	20.3	26.8	23.1	23.4	23.3	23.1	22.3	21.3	20.4	19.6	19.1
B6. Combination of B1-B5	20.3	23.7	24.4	24.7	24.6	24.4	23.7	22.7	21.7	20.8	20.0
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	20.3	21.8	22.3	22.9	23.1	23.2	22.7	22.0	21.3	20.6	20.1
C2. Natural disaster	20.3	22.2	22.7	23.4	23.7	23.9	23.5	22.8	22.2	21.6	21.2
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	40	40	40	40	40	40	40	40	40	40	40
<b>PV of debt-to-exports ratio</b>											
<b>Baseline</b>	150.5	148.6	145.5	141.2	134.9	129.0	122.4	116.1	110.3	104.8	100.2
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2020-2030 2/	150.5	125.5	106.1	88.5	73.5	61.9	52.0	43.5	36.8	31.6	29.0
<b>B. Bound Tests</b>											
B1. Real GDP growth	150.5	148.6	145.5	141.2	134.9	129.0	122.4	116.1	110.3	104.8	100.2
B2. Primary balance	150.5	149.3	147.3	143.7	138.2	132.8	126.6	120.8	115.2	109.9	105.5
B3. Exports	150.5	<b>182.1</b>	<b>218.6</b>	<b>211.9</b>	<b>202.6</b>	<b>193.9</b>	<b>184.3</b>	175.3	166.5	157.4	149.8
B4. Other flows 3/	150.5	158.7	166.1	161.0	153.9	147.3	140.0	133.2	126.4	119.5	113.7
B5. One-time 30 percent nominal depreciation	150.5	148.6	123.9	120.3	114.9	109.8	103.8	98.2	92.9	88.9	85.7
B6. Combination of B1-B5	150.5	175.3	157.0	179.2	171.3	163.9	155.7	148.0	140.2	132.8	126.6
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	150.5	152.1	151.0	148.5	143.7	139.0	133.3	127.9	122.7	117.8	113.7
C2. Natural disaster	150.5	157.5	156.8	154.7	150.1	145.6	140.2	135.1	130.3	125.7	121.9
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	180	180	180	180	180	180	180	180	180	180	180
<b>Debt service-to-exports ratio</b>											
<b>Baseline</b>	6.7	8.8	10.4	9.8	9.6	8.8	10.0	9.8	9.7	9.4	8.6
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2020-2030 2/	6.7	8.8	10.2	9.3	9.0	8.2	9.6	9.7	8.8	8.0	6.7
<b>B. Bound Tests</b>											
B1. Real GDP growth	6.7	8.8	10.4	9.8	9.6	8.8	10.0	9.8	9.7	9.4	8.6
B2. Primary balance	6.7	8.8	10.4	9.8	9.6	8.9	10.0	9.8	9.8	9.5	8.8
B3. Exports	6.7	10.3	14.0	13.3	13.1	12.0	13.5	13.3	13.5	13.8	12.6
B4. Other flows 3/	6.7	8.8	10.6	10.1	9.9	9.1	10.2	10.0	10.3	10.5	9.6
B5. One-time 30 percent nominal depreciation	6.7	8.8	10.4	9.4	9.3	8.5	9.7	9.5	9.4	8.3	7.6
B6. Combination of B1-B5	6.7	9.7	12.4	11.7	11.5	10.6	11.9	11.7	12.0	11.8	10.8
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	6.7	8.8	10.5	9.8	9.7	9.0	10.1	9.9	9.8	9.6	8.8
C2. Natural disaster	6.7	9.1	10.8	10.2	10.0	9.3	10.5	10.3	10.2	9.9	9.1
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	15	15	15	15	15	15	15	15	15	15	15
<b>Debt service-to-revenue ratio</b>											
<b>Baseline</b>	5.3	6.6	7.9	7.3	7.0	6.5	7.4	7.2	7.2	7.1	6.5
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2020-2030 2/	5.3	6.6	7.7	6.9	6.6	6.0	7.1	7.2	6.5	6.0	5.1
<b>B. Bound Tests</b>											
B1. Real GDP growth	5.3	6.8	8.3	7.6	7.3	6.8	7.7	7.6	7.6	7.4	6.9
B2. Primary balance	5.3	6.6	8.0	7.3	7.0	6.5	7.4	7.3	7.3	7.2	6.7
B3. Exports	5.3	6.6	8.1	7.6	7.2	6.7	7.6	7.5	7.7	7.9	7.3
B4. Other flows 3/	5.3	6.6	8.1	7.5	7.2	6.7	7.5	7.4	7.7	7.9	7.3
B5. One-time 30 percent nominal depreciation	5.3	8.3	10.0	8.8	8.5	7.9	9.0	8.9	8.9	7.9	7.2
B6. Combination of B1-B5	5.3	6.9	8.5	7.8	7.4	6.9	7.8	7.7	8.0	7.9	7.3
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	5.3	6.6	8.0	7.3	7.0	6.6	7.5	7.3	7.3	7.2	6.7
C2. Natural disaster	5.3	6.6	8.0	7.3	7.1	6.6	7.5	7.3	7.3	7.2	6.7
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	18	18	18	18	18	18	18	18	18	18	18

Sources: Country authorities; and staff estimates and projections.

1/ A bold value indicates a breach of the threshold.

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

3/ Includes official and private transfers and FDI.

**Table 4. Malawi: Sensitivity Analysis for Key Indicators of Public Debt, 2020–2030**

	Projections 1/										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>PV of Debt-to-GDP Ratio</b>											
<b>Baseline</b>	<b>57.9</b>	<b>66.1</b>	<b>69.0</b>	<b>70.5</b>	<b>71.3</b>	<b>70.5</b>	<b>69.9</b>	<b>69.0</b>	<b>67.7</b>	<b>67.0</b>	<b>65.8</b>
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2020-2030 2/	58	56	52	48	45	41	38	35	33	31	29
<b>B. Bound Tests</b>											
B1. Real GDP growth	58	68	74	76	78	78	78	78	78	78	77
B2. Primary balance	58	68	72	74	74	73	73	72	70	69	68
B3. Exports	58	67	72	73	74	73	73	72	70	69	68
B4. Other flows 3/	58	68	72	74	74	74	73	72	71	70	68
B5. One-time 30 percent nominal depreciation	58	66	67	68	68	66	64	62	60	58	56
B6. Combination of B1-B5	58	65	68	69	69	68	67	67	66	65	64
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	58	75	77	78	79	77	77	75	74	73	72
C2. Natural disaster	58	77	79	81	82	81	80	79	78	77	76
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Public debt benchmark</b>	55	55	55	55	55	55	55	55	55	55	55
<b>PV of Debt-to-Revenue Ratio</b>											
<b>Baseline</b>	<b>297.7</b>	<b>305.9</b>	<b>313.0</b>	<b>299.6</b>	<b>287.8</b>	<b>278.9</b>	<b>275.8</b>	<b>271.0</b>	<b>266.6</b>	<b>264.9</b>	<b>261.3</b>
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2020-2030 2/	298	261	241	210	185	167	155	144	136	128	121
<b>B. Bound Tests</b>											
B1. Real GDP growth	298	315	333	322	313	307	308	306	305	307	306
B2. Primary balance	298	314	328	313	300	290	287	281	277	275	271
B3. Exports	298	311	326	312	300	291	287	282	277	275	270
B4. Other flows 3/	298	313	327	313	301	291	288	283	278	275	271
B5. One-time 30 percent nominal depreciation	298	308	306	290	275	262	254	246	237	232	224
B6. Combination of B1-B5	298	302	311	293	280	270	267	262	259	257	254
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	298	345	349	332	317	306	302	296	291	288	284
C2. Natural disaster	298	355	360	343	328	319	315	310	305	304	300
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Debt Service-to-Revenue Ratio</b>											
<b>Baseline</b>	<b>33.2</b>	<b>63.9</b>	<b>89.7</b>	<b>101.7</b>	<b>109.7</b>	<b>115.1</b>	<b>124.5</b>	<b>130.6</b>	<b>135.1</b>	<b>137.7</b>	<b>140.9</b>
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2020-2030 2/	33	59	64	63	62	61	64	65	65	65	64
<b>B. Bound Tests</b>											
B1. Real GDP growth	33	65	95	110	121	129	141	150	157	161	167
B2. Primary balance	33	64	95	112	119	123	132	137	141	144	146
B3. Exports	33	64	90	102	110	115	125	131	135	138	142
B4. Other flows 3/	33	64	90	102	110	115	125	131	136	138	142
B5. One-time 30 percent nominal depreciation	33	60	85	94	103	108	117	123	127	129	132
B6. Combination of B1-B5	33	62	88	102	108	112	122	128	133	136	139
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	33	64	116	126	130	134	141	146	149	151	153
C2. Natural disaster	33	65	121	132	136	140	148	154	158	159	162
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

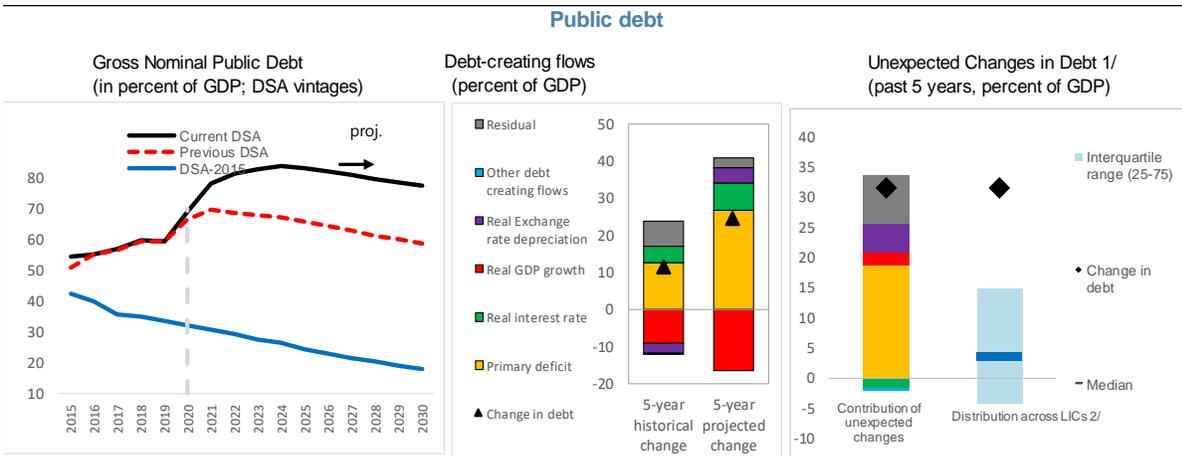
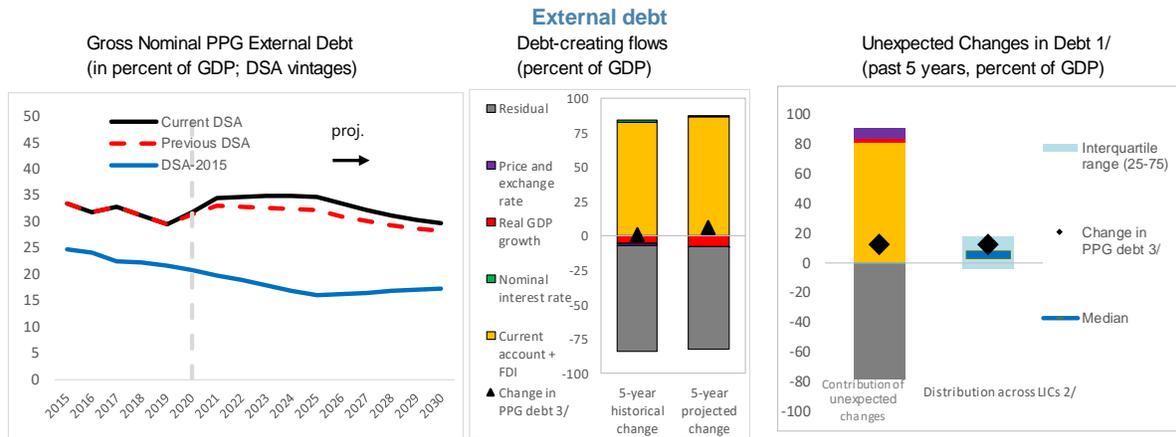
Sources: Country authorities; and staff estimates and projections.

1/ A bold value indicates a breach of the threshold.

2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.

3/ Includes official and private transfers and FDI.

**Figure 3. Malawi: Drivers of Debt Dynamics—Baseline Scenario**



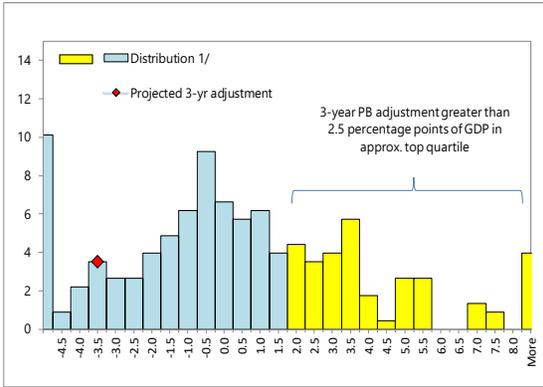
1/ Difference between anticipated and actual contributions on debt ratios.

2/ Distribution across LICs for which LIC DSAs were produced.

3/ Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.

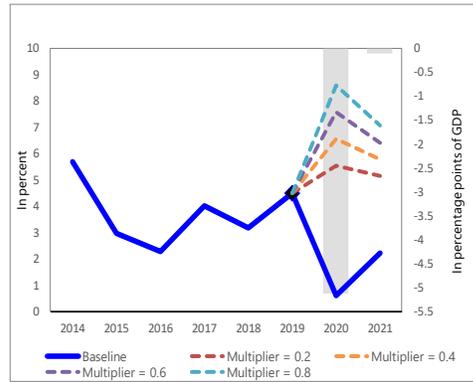
**Figure 4. Malawi: Realism Tools**

**3-Year Adjustment in Primary Balance**  
(Percentage points of GDP)



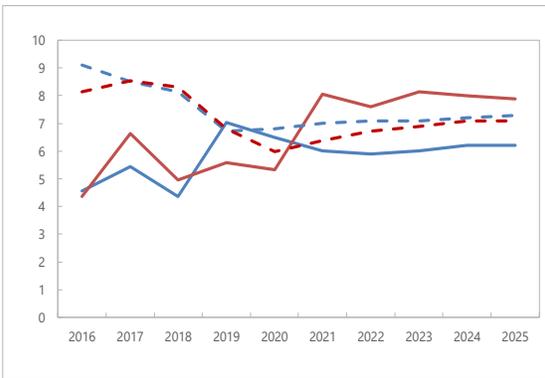
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

**Fiscal Adjustment and Possible Growth Paths 1/**



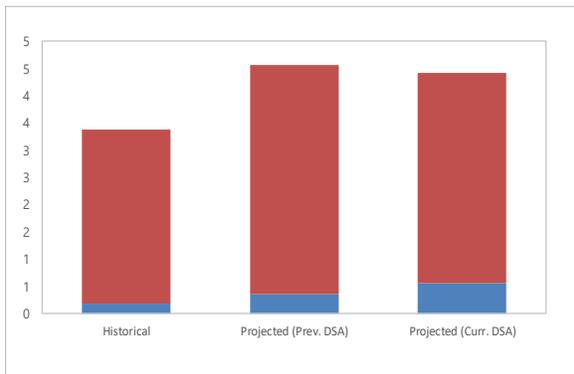
1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

**Public and Private Investment Rates**  
(% of GDP)



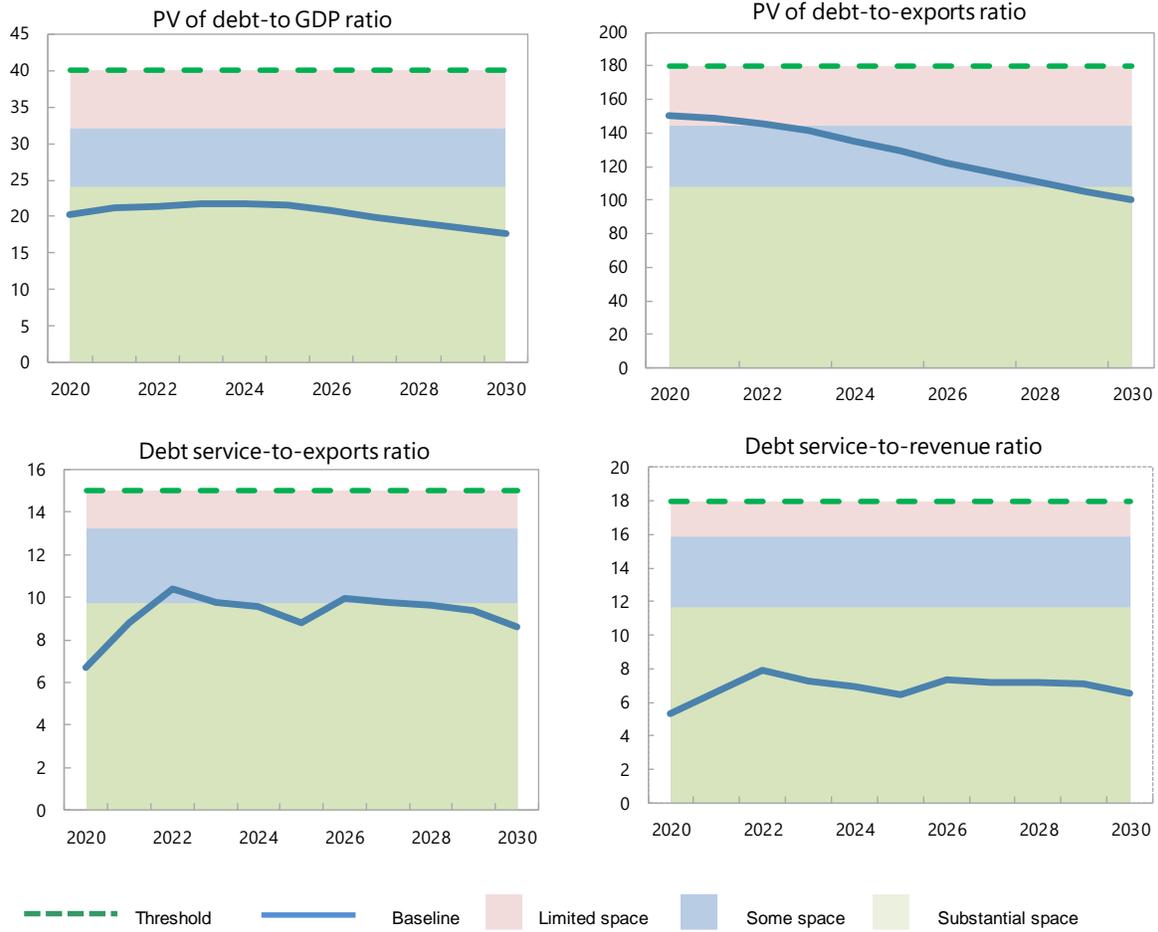
— Gov. Invest. - Prev. DSA      — Gov. Invest. - Current DSA  
 - - - Priv. Invest. - Prev. DSA      - - - Priv. Invest. - Current DSA

**Contribution to Real GDP growth**  
(percent, 5-year average)



■ Contribution of other factors  
 ■ Contribution of government capital

**Figure 5. Malawi: Qualification of the Moderate Category, 2020–2030 1/**



Sources: Country authorities; and staff estimates and projections.

1/ For the PV debt/GDP and PV debt/exports thresholds, x is 20 percent and y is 40 percent. For debt service/Exports and debt service/revenue thresholds, x is 12 percent and y is 35 percent.