



# REPUBLIC OF MOZAMBIQUE

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## STAFF REPORT FOR THE 2015 ARTICLE IV CONSULTATION, FIFTH REVIEW UNDER THE POLICY SUPPORT INSTRUMENT AND REQUEST FOR MODIFICATION OF ASSESSMENT CRITERIA, AND REQUEST FOR AN 18-MONTH ARRANGEMENT UNDER THE STANDBY CREDIT FACILITY—DEBT SUSTAINABILITY ANALYSIS

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*This debt sustainability analysis (DSA) provides a further update to the joint IMF/IDA DSA from April 2014 and June 2015 update.<sup>1</sup> Mozambique remains at moderate risk of external public debt distress, but risks have heightened considerably as the metical depreciation vis-à-vis the US dollar of about 25 percent between end-2014 and mid-November 2015 has increased debt level indicators.<sup>2</sup> Relative to GDP and exports, debt levels stand only barely below thresholds in 2015 and will remain elevated in the next few years, though debt service remains manageable. Going forward, downward trajectories in debt ratios should be ensured by the authorities' commendable policy response to strictly limit external and non-concessional borrowing and fiscal consolidation agreed under the program. Meanwhile, improvements in investment planning capacity are important to identify those projects most important for development. In light of upwardly-revised assumptions on the size of investments in the natural gas sector, private external debt will peak above 150 percent of GDP in the early*

<sup>1</sup>The DSA presented in this document is based on the standard low-income countries (LIC) DSA framework. See "Staff Guidance Note on the Application of the Joint Bank-Fund Debt Sustainability Framework for Low-Income Countries" (<http://www.imf.org/external/pp/longres.aspx?id=4827>) and World Bank Report No. ACS6956, 10/23/13). Under the World Bank Country Policy and Institutional Assessment (CPIA); updated on July 25, 2014 with the 2013 CPIA rating, Mozambique maintains the medium policy performer rating, albeit close to the threshold of 3.75 for strong performers, with an average rating of 3.64 during 2012–14; the DSA uses the indicative thresholds for medium performers.

<sup>2</sup> Computed based on US dollars per metical exchange rates; computation based on meticais per US dollar would return a 33 percent depreciation instead.

*2020s. The authorities were in broad agreement with the DSA outlook and presentation. They emphasized that any changes in risk of debt distress rating should not occur purely in response to exogenous factors beyond the authorities' control, such as exchange rate depreciation.*

## UNDERLYING DSA ASSUMPTIONS

**1. There have been significant changes in assumptions compared to the previous DSA.** This DSA is consistent with the macroeconomic framework outlined in the Staff Report for the Fifth Review under the PSI (Box 1). Compared to the previous DSA,<sup>3</sup> the main changes are threefold. First, the continued depreciation of the metical has led to a significant upward shift in debt and debt service ratios in the short term. Second, updated assumptions reflect considerably larger planned investments in the natural gas sector (Box 1 provides details). Third, following the government's new policy, there has been a considerable scaling back of public sector external borrowing plans, which is projected to result in a lower profile of external disbursement over the next years.

**a. The medium-term macroeconomic framework has been updated, including to reflect the metical's depreciation and larger planned size of investments in the natural gas sector** (Text Table 1). The economic outlook remains robust, although somewhat less buoyant than previously projected, with economic growth projected at 6.3 percent in 2015 and 6.5 percent in 2016 (compared to 7.0 and 8.2 percent respectively in the last DSA). The main reasons being slower-than-expected increases in coal production and substantial tightening of fiscal and monetary policies to address external imbalances. Nevertheless, growth is expected to accelerate over the medium term on the back of extractive industries and infrastructure investments. To ensure debt sustainability and alleviate external imbalances, substantial fiscal consolidation is underway and programmed to continue in 2016. After an election-year deficit of over 10 percent of GDP, the fiscal deficit is expected to contract to 6 percent in 2015 and further to 4 percent in 2016—the level at which it would stabilize over the medium term. The current account deficit is projected to increase to 90 percent of GDP by 2020 reflecting significant imports of goods and services, mainly related to construction of processing facilities for liquefied natural gas (LNG). Approximately one third of these imports are financed by FDI with the remainder financed by private debt.

**Text Table 1. Evolution of Selected Macroeconomic Indicators between DSA Updates**

	2013	2014	2015	2016	2017
			Projections		
<b>Real GDP growth (%)</b>					
Previous DSA	7.4	7.4	7.0	8.2	7.9
Current DSA	7.1	7.2	6.3	6.5	7.2
<b>Nominal GDP (US\$ billion)</b>					
Previous DSA	15.6	16.7	17.0	19.0	21.2
Current DSA	16.0	17.0	15.2	14.8	16.4
<b>Overall fiscal deficit (%GDP)</b>					
Previous DSA	2.7	10.3	6.5	5.1	5.5
Current DSA	2.7	10.6	6.0	4.0	4.3
<b>Current account deficit (% GDP)</b>					
Previous DSA	40.0	34.7	38.2	42.1	39.9
Current DSA	39.1	34.1	30.2	33.1	55.4
<b>FDI (% of GDP)</b>					
Previous DSA	39.5	29.4	23.8	24.7	22.9
Current DSA	38.6	28.9	25.2	30.6	28.3

<sup>3</sup> See IMF Country Report No. 15/223.

### Box 1. Macroeconomic Assumptions 2015–35

*The medium-term assumptions in the baseline scenario for 2015–35 are consistent with the medium-term macroeconomic framework underlying the Staff Report for the Fifth Review under the Policy Support Instrument and the request for a new arrangement under the Stand By Credit Facility.*

**Real GDP growth** is expected to accelerate to 7–8 percent range over the medium term, supported by the expansion in coal mining and infrastructure investments, including support for coal exports and LNG manufacturing. A sharp increase in growth in 2021 reflects the assumed coming on line of the first natural gas production plant (“train”) and related exports in that year. While growth of the non-LNG sector is sustained in the long term by strong population/labor force growth, continued infrastructure investment, and related productivity gains, overall GDP growth rate will moderate once the LNG production reaches its full capacity in 2028. Risks to growth include public and private investment not achieving expected payoffs and thus limiting productivity gains, and the possibility of Dutch disease.

**LNG sector.** LNG plants are assumed to be under construction during 2016–27. The projection has significantly updated assumptions on this investment in line with information from the private developers and now assumes that 13 onshore LNG manufacturing units (“trains”) and 4 floating trains (FLNG) would be built (versus only 4 onshore trains assumed in the previous DSA). The first onshore train and the first floating train are assumed to start production in 2021, followed by remaining trains sequentially starting production. The final train will start production in 2028. Total investment from 2016 is projected at \$110 billion. The sector’s contribution to GDP is expected to be small during the construction period due to high import content. Annual LNG output will reach 89 million tons in 2028, constituting more than 50 percent of nominal GDP by then. The schedule and size of the projects depend on the timing and content of final investment decisions expected to be made by the investors by end-2016.

**Consumer price inflation** is projected to remain in the authorities’ target range of 5–6 percent over the medium term.<sup>4</sup>

**Export value growth** is considerably higher than in the previous DSA due to revised assumptions on the size of LNG production facilities. On average exports are projected to be 18 percent on average over the projection period, but show large intertemporal variation. Exports are expected to resume modest growth in 2016 before increasing to around 14 percent during 2017–20 as coal exports expand with completion of the Nacala rail corridor. Average annual growth rates are then projected peak around 50 percent during 2021–25 as LNG exports come onstream, before falling back to around 4½ percent when traditional export growth (of 13 percent) becomes their main driver.

**Imports** are projected to contract in the near term in response to metical depreciation and economic adjustment measures, before recovering gradually and reaching 18 percent annual growth during 2023–27, as LNG production increases available resources. Subsequently, import value growth is projected to return to around 10½ percent.

**The non-interest external current account balance** is projected to record a deficit of over 80 percent of GDP in the medium term largely driven by imports for LNG investment.<sup>5</sup> The deficit will be primarily financed through FDI and private external borrowing. The large size of LNG exports under the revised baseline implies it would subsequently turn into surplus, projected to exceed 10 percent of GDP during the late 2020s and early 2030s.

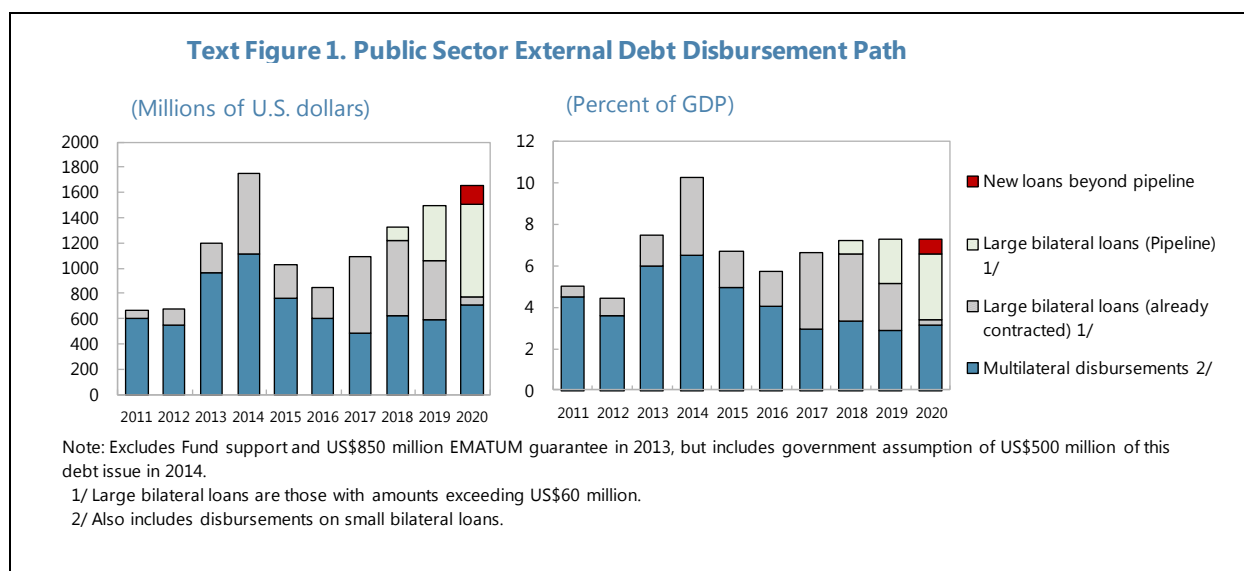
**The non-interest primary fiscal deficit** is projected to contract in 2015 to 4¾ percent of GDP and further to a range of 2–2½ percent during 2016–20 in response to the fiscal consolidation envisaged under the authorities’ program. The fiscal balance is expected to improve further beyond 2020 as LNG revenue ramps up. The total fiscal revenues from the LNG project throughout the entire project period until 2045 could reach about \$500 billion.<sup>6</sup> Even though the gas production would rapidly scale up during the early 2020s, fiscal revenues during the first few years are limited, because of the large cost recovery for continuous investments in building liquefaction plants. By the late 2020s, the fiscal revenues from the gas projects would account for more than half of total fiscal revenues.

<sup>4</sup> Gas and coal prices, which are important determinants of export receipts, are throughout the projection period expected to remain relatively subdued relative to recent peaks in line with Fall 2015 WEO assumptions.

<sup>5</sup> Meanwhile, the non-megaproject current account is expected to remain on the order of 11–12 percent during the next years.

<sup>6</sup> Main sources of the fiscal revenues are (i) the government’s share of gas profits, (ii) the corporate income tax on the concessionaires, and (iii) the dividends paid by the state-owned hydrocarbon company (ENH), which owns 10 and 15 percent stakes in the two exploration areas where gas has been found.

- b. The external borrowing profile is now considerably more benign, as the authorities have taken strong measures to slow contracting of new debt.** These measures more than offset decreasing donor support, which continues its steady downward trend.<sup>7</sup> In 2015, new borrowing has continued to be limited with face value of new external debt contraction expected to total less than US\$750 million by year-end, of which US\$200 million are non-concessional borrowing.<sup>8</sup> Moreover, the authorities have suspended negotiations on the vast majority of loans, which were considered in the pipeline by the last DSA and totaled US\$ 2.2 billion. These loans have been sent back to line ministries for reevaluation and prioritization. There is currently no clear timeline when (some of) these pipeline loan negotiations may recommence, but any contraction is expected only in 2017 or later and at a more measured pace than in the last DSA. As a result, the external borrowing plan for 2016 envisages lower contraction than in 2015 with loans amounting to US\$400 million, of which about 80 percent are expected at concessional terms (see Staff Report Tables 8, 9). Finally, the updated profile of future disbursements is further reduced by the authorities' decisions to delay implementation of a few projects for which financing has already been obtained (Text Figure 1).
- c. Private sector medium-term borrowing has been considerably revised further upwards, in line with the higher assumptions on LNG investment.** The International Investment Position data now puts private external debt at 31 per-cent of GDP in 2014. It is projected to rise to some 132 percent by 2020, compared to 85 percent in the previous DSA. Debt will also increase further until its peak in 2022 as net repayments commence. The ratio is expected to fall back quickly to below 50 percent by 2030 as LNG revenues are utilized to amortize this private borrowing. This debt is mobilized and repaid entirely through offshore SPVs, which limits risk to the domestic financial system.



<sup>7</sup> Total donor disbursements have fallen from 12 percent of GDP in 2010-11 to a projected 9½ percent in 2015, mainly on account of lower program aid. This declining trend is projected to continue throughout the projection period.

<sup>8</sup> Thereby, total non-concessional borrowing under the PSI program has reached US\$ 1,498 million.

## EXTERNAL DEBT SUSTAINABILITY ANALYSIS

**2. Total external debt is projected to rise more rapidly during this decade than previously projected, reflecting higher private sector investment in the natural gas sector.** External debt (both public and private) is expected to peak at 232 percent of GDP in 2022. By that time private sector debt will represent more than 80 percent of total external debt with its increase mostly driven by investments in the natural gas sector. In the near term, coal sector investment to complete the

Nacala rail corridor project will also have a small impact as it is now expected to be financed by debt rather than FDI. The significant build up of private sector external debt needs to be monitored by the authorities to contain vulnerabilities, though risks (as noted above) are limited due to the financing structures through SPVs offshore. With renowned global companies leading investments in the natural resource sector, vulnerabilities are expected to be limited to those specific to the natural resource operations. Likewise, the risk for government contingent liabilities is deemed modest, though the authorities are well advised to remain vigilant, including in complex negotiation with private sector concessionaires and their prospective lenders.

**3. All public external debt indicators remain below their respective thresholds in the baseline, but two indicators relating to debt levels barely so** (Figure 1).<sup>9</sup> These level indicators are those of external debt relative to GDP and exports. Meanwhile, debt service indicators remain benign although debt service which has started on the US\$850 million EMATUM bond will amount to approximately US\$200 million per year from 2016, effectively doubling public debt service and weighing on Mozambique's international reserves.<sup>10</sup>

- **The PV of debt in terms of GDP** now stands at 39.9 percent in 2015 (Table 1),<sup>11</sup> compared to 31.9 percent in the previous DSA and a threshold of 40 percent. This increase is completely attributable to the depreciation of the metical, as external disbursements during 2015 have been lower than expected in the last DSA. In contrast, its medium-term trajectory is now more benign as a result of public borrowing restraint with ratios projected to consistently decrease to 36½ percent by 2020, while the previous DSA forecasted increases throughout the remainder of the 2010s. Thereafter, strong GDP expansion related to LNG production is expected to stabilize the ratio at a lower level of around 20 percent of GDP.

<sup>9</sup> As in the previous DSAs, the historical scenario has been excluded from Figures 1 and 3. The reason for the exclusion is that such a scenario shows unrealistically fast declines of public debt ratios over the medium term, because it fixes the non-interest current account deficit at a historical average of 19.3 percent of GDP. This is much lower than the average projected deficit of 67 percent of GDP during 2017-22. With private debt accumulation assumed to remain unchanged compared to the baseline, this assumption then results in unrealistically fast declines of public debt ratios.

<sup>10</sup> The government is currently exploring options for refinancing this debt with an aim to *inter alia* lengthen its maturity, which could reduce near term debt service requirements.

<sup>11</sup> Large residuals in Table 1 after 2020 result from large debt service and dividend payments on LNG investment, which are not included in the identified net debt-creating flows. They ramp up in line with LNG production and increasing from about 20 percent of GDP per year in the mid-2020s to over 25 percent of GDP in the early 2030s.

- **The PV of debt in terms of exports** in 2015 has increased considerably relative to the previous DSA (143 percent versus 112 percent) as a result of downward revisions to exports on account of weak commodity prices, which is also slowing expansion in export volumes, particularly with regards to coal. Nonetheless, exports are expected to recover over the medium term, partly as the delayed completion of the Nacala rail corridor project underpins coal exports. This should return the ratio to below 120 percent during the next years, with further considerable declines and stabilization below 40 percent as a result of LNG production.

**4. Mozambique’s risk of debt distress remains moderate.** In cases such as Mozambique, whose debt ratios are within 5 percent of thresholds, it is useful to consider also an alternate methodology in determining the final classification.<sup>12</sup> Instead of specifying thresholds based on past experiences of debt distress across LIDCs, this methodology takes into account Mozambique-specific factors such as higher than average GDP growth and a CPIA rating toward the upper end of the medium range. Its results provide support for Mozambique’s risk of debt distress indeed remaining moderate at this juncture (Figure 3). Nonetheless, the authorities are well advised to retain their current prudent borrowing strategy, while continuing to make progress in investment selection to ensure that those projects with high development impacts are appropriately prioritized.

**5. External debt ratios are sensitive to exchange rate shocks and terms of trade shocks.**<sup>13</sup> The thresholds for the PV of debt relative to GDP, exports and revenues are breached under various stress tests for a sustained period.<sup>14</sup> A combination shock consisting of reductions in non-debt creating flows such as FDI, export prices and growth in 2016-2017 would push ratios well above their prudent thresholds in the near term, with peaks of about 70 percent in the debt-to-GDP and 260 percent in the debt-to-export ratio (Figure 1).<sup>15</sup> Apart from this combination shock, a further sharp depreciation of the metical in 2016 could push the debt-to-GDP ratio well above the 50 percent mark in the medium term. Unlike in the previous DSA, ratios in all the stress scenarios would return below the thresholds during the early 2020s in light of the now higher increases in GDP and exports because of larger size of the LNG facilities. A shock to FDI is also shown to lead to considerable breaches of thresholds; however, this scenario should not be overemphasized as a fall in FDI, and particularly megaproject FDI, would mainly be linked to lower imports rather than higher borrowing as implicitly assumed in this shock scenario.

**6. Ensuring that LNG production materializes remains important to underpin Mozambique’s long-run debt sustainability.** The same applies for completion of coal investment.

<sup>12</sup> For more information see IMF (2013), “Staff Guidance Note on the Application of the Joint Bank-Fund Debt Sustainability Framework for Low-Income Countries”.

<sup>13</sup> The impact the of the standard shocks in the DSA template is heightened by the fact that the standard stress tests revert to historical values, which are significantly different from current and expected values because of the structural change in the Mozambican economy resulting from the large-scale exploitation of coal and natural gas since 2011.

<sup>14</sup> The scenario in which variables are at their historical levels has been omitted given that it generates negative debt as a result of the large changes in variables in the baseline arising from LNG activities.

<sup>15</sup> The charts in Figure 1 display the stress test with the most adverse outcome in 2025.

The authorities have made significant progress in establishing legal frameworks for the sector. Negotiations with private operators on outstanding issues recently regained momentum after some delays. It is crucial that jointly satisfactory agreements are reached soon to ensure that LNG investment can move forward.

## PUBLIC SECTOR DEBT SUSTAINABILITY

**7. Risks to total public debt have heightened in line with external debt** (Table 3 and Figure 2). With over 80 percent of public debt being external, the evolution of total public debt mirrors its trajectory. PV of public debt is expected to stand at 50 percent of GDP at end 2015. Debt-to-GDP and debt-to-revenue ratios are expected to consistently decline over the projection period, in line with external debt, and reinforced by envisaged fiscal consolidation leading to a reduction in net domestic debt. Under the baseline scenario, the PV of public debt remains below the indicative 56 percent of GDP benchmark that research has linked to increased probability of debt distress. However, and in contrast to the previous DSA, public debt ratios would now exceed the benchmark briefly during 2016 and 2017, if the metical were to suffer another sharp depreciation in the upcoming year. Thereby Mozambique's overall risk of public debt distress is now considered heightened. The debt service-to-revenue ratio experiences a pronounced upward shift starting in 2016 as a result of debt service having commenced on the \$850 million commercial borrowing related to defense spending and the state-owned tuna fishing company EMATUM.

**8. These increased risks underline the importance of the authorities' planned fiscal consolidation, including to safeguard future borrowing space for priority public investment.** In light of the tighter constraints, rigorous evaluation and prioritization of investment projects and building increased capacity in this area is becoming even more important. Over the medium and long term, underpinning development will require considerable further public investment, including in the energy sector. With prospective revenue increases tied to LNG production only expected to materialize from the mid to late 2020s, careful resource management is needed to create space for such investments while safeguarding macroeconomic stability.

## AUTHORITIES' VIEWS

**9. The authorities, were in broad agreement with the DSA's results, but emphasized that an elevation of debt vulnerability rating should not result from purely external factors, such as exchange rate devaluation.** They were mindful that a degradation of Mozambique's rating could arise in the future, particularly if the metical were to depreciate further. They emphasized that any changes in risk of debt distress rating should not occur purely in response to such exogenous factors beyond the authorities' control. In addition, they expressed that the government's capacity to service its debt should be the main factor in making the assessment.

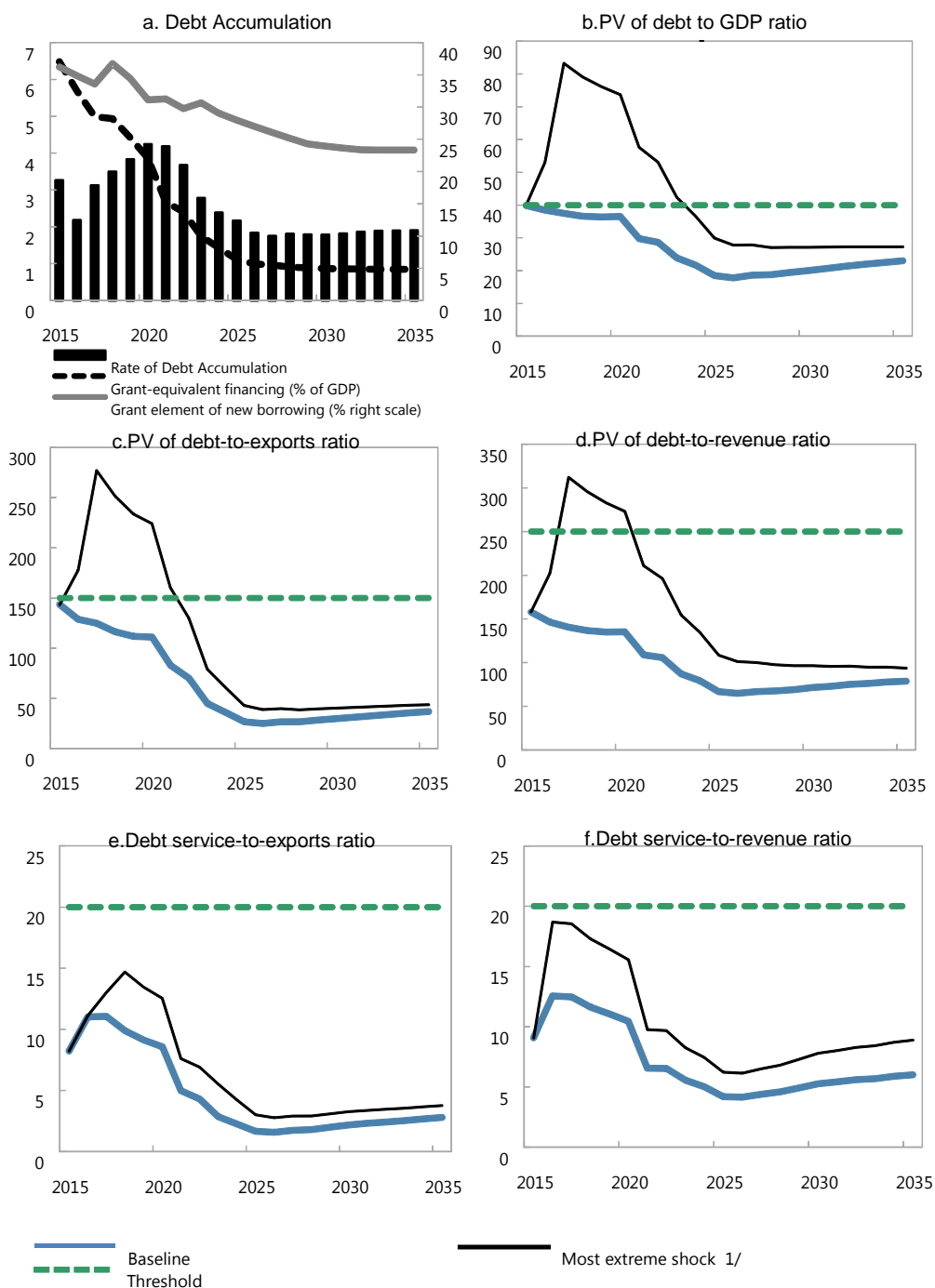


## CONCLUSION

**10. Debt remains manageable, but heightened vigilance—as demonstrated by the authorities—is indeed essential.** Not surprisingly, exchange rate depreciation has had a sizable adverse impact on public debt ratios, given that most public debt is external and denominated in foreign currency. Debt service has become more challenging as the beginning of repayments on the EMATUM bond has doubled debt service commitments in nominal terms, placing some strain on a balance of payments already weakened by commodity price shocks and a temporary slowdown in investment inflows. It is thus important to exercise caution in contraction of new external debt, particularly on non-concessional terms, as well as limit domestic debt issuance to ensure that the fiscal sector supports the external adjustment, as envisaged in the program. In addition, limiting issuance of public guarantees and enhancing monitoring of financial positions of state-owned enterprises are crucial. Shock scenarios highlight that Mozambique's debt remains vulnerable to a general deterioration in economic conditions and the terms-of-trade as well as to further currency depreciation. As some further currency depreciation could be a possibility in light of the balance of payments position, it is comforting that—despite recent increases—public debt service overall remains manageable, given that the vast majority of Mozambique's debt features concessional terms.

**11. The conclusions for strategic debt management are fourfold and similar to those of the previous DSA.** First, debt management and investment planning capacity should continue to be improved to ensure that the most deserving public investment projects are selected and yield their desired payoff. This has become more important as higher debt level ratios resulting from depreciation prescribe a more cautious borrowing path, which the authorities have already charted out, underpinned by sending many projects back to line ministries for reevaluation and prioritization. Second, it is important for the authorities to implement the fiscal consolidation envisaged in their program, both to address the economy's external imbalance and to place public debt on a gradual downward trajectory over the medium term while addressing key public investment priorities. Third, it remains crucial—including from a debt sustainability perspective—to bring the negotiations with the private gas companies to a jointly satisfactory conclusion to ensure that LNG investment moves forward, so that production and its beneficial effects on GDP and fiscal revenue can be realized. They would ensure that, even in case of further adverse shocks explored in the stress scenarios, Mozambique's debt indicators would revert to prudent levels soon thereafter. Fourth, while Mozambique had made substantial progress in debt management under the previous PSI-supported program and debt management capacity has been adequate, reinvigorating improvements in this area is becoming more important in light of heightened risks.

**Figure 1. Mozambique: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2015-2035 1/**



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2025. In figure b. it corresponds to a Non-debt flows shock; in c. to a Non-debt flows shock; in d. to a Non-debt flows shock; in e. to a Combination shock and in figure f. to a One-time depreciation shock

**Table 1. Mozambique: External Debt Sustainability Framework, Baseline Scenario, 2012-2035 1/**  
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average <sup>6/</sup>	Standard Deviation <sup>6/</sup>	Projections						2015-2020		2021-2035		
	2012	2013	2014			2015	2016	2017	2018	2019	2020	Average	2025	2035	Average	
<b>External debt (nominal) 1/</b>	<b>70.9</b>	<b>78.3</b>	<b>84.5</b>			<b>106.3</b>	<b>115.6</b>	<b>118.6</b>	<b>120.2</b>	<b>126.8</b>	<b>188.7</b>			<b>115.5</b>	<b>76.8</b>	
<i>of which: public and publicly guaranteed (PPG)</i>	34.5	42.4	48.1			63.4	60.9	59.1	57.7	57.0	56.5			26.7	30.8	
Change in external debt	0.3	7.4	6.2			21.8	9.3	3.0	1.6	6.6	61.9			-36.3	2.7	
Identified net debt-creating flows	-1.9	-3.2	0.7			5.4	4.6	3.0	2.5	7.7	62.2			-54.9	-23.2	
<b>Non-interest current account deficit</b>	<b>44.1</b>	<b>38.4</b>	<b>33.2</b>	<b>19.3</b>	<b>14.6</b>	<b>29.1</b>	<b>31.4</b>	<b>52.9</b>	<b>70.1</b>	<b>77.3</b>	<b>83.4</b>			<b>-9.9</b>	<b>-4.3</b>	1.7
Deficit in balance of goods and services	51.1	47.6	40.9			34.4	36.8	57.0	73.4	80.1	85.8			-26.9	-15.8	
Exports	30.6	29.8	27.4			27.8	29.9	30.1	31.5	32.6	32.9			69.5	62.4	
Imports	81.7	77.3	68.3			62.2	66.7	87.1	104.9	112.6	118.7			42.6	46.6	
Net current transfers (negative = inflow)	-6.8	-8.9	-8.1	-7.0	1.1	-5.7	-6.0	-5.1	-4.6	-4.1	-3.8			-1.5	-1.8	-2.0
<i>of which: official</i>	-4.7	-6.8	-6.4			-2.9	-3.0	-2.2	-1.8	-1.5	-1.3			-0.3	-0.1	
Other current account flows (negative = net inflow)	-0.2	-0.3	0.4			0.4	0.7	1.0	1.3	1.4	1.5			18.6	13.2	
<b>Net FDI (negative = inflow)</b>	<b>-37.1</b>	<b>-38.6</b>	<b>-28.9</b>	<b>-16.5</b>	<b>14.8</b>	<b>-18.9</b>	<b>-21.5</b>	<b>-44.9</b>	<b>-62.0</b>	<b>-64.9</b>	<b>-19.7</b>			<b>-19.5</b>	<b>-18.9</b>	-20.1
<b>Endogenous debt dynamics 2/</b>	<b>-8.9</b>	<b>-3.0</b>	<b>-3.7</b>			<b>-4.8</b>	<b>-5.3</b>	<b>-5.0</b>	<b>-5.7</b>	<b>-4.8</b>	<b>-1.5</b>			<b>-25.5</b>	<b>0.1</b>	
Contribution from nominal interest rate	0.7	0.7	0.8			1.1	1.8	2.5	3.1	3.5	7.0			5.2	2.6	
Contribution from real GDP growth	-4.4	-4.8	-5.3			-5.9	-7.1	-7.5	-8.8	-8.2	-8.6			-30.7	-2.6	
Contribution from price and exchange rate changes	-5.1	1.1	0.8			...	...	...	...	...	...			...	...	
<b>Residual (3-4) 3/</b>	<b>2.1</b>	<b>10.6</b>	<b>5.5</b>			<b>16.4</b>	<b>4.7</b>	<b>0.0</b>	<b>-0.8</b>	<b>-1.0</b>	<b>-0.3</b>			<b>18.7</b>	<b>25.9</b>	
<i>of which: exceptional financing</i>	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
PV of external debt 4/	...	...	66.2			82.8	93.1	97.0	99.1	106.2	168.8			107.3	69.0	
In percent of exports	...	...	242.0			297.6	311.8	322.7	315.0	326.0	512.9			154.3	110.7	
<b>PV of PPG external debt</b>	<b>...</b>	<b>...</b>	<b>29.8</b>			<b>39.9</b>	<b>38.4</b>	<b>37.5</b>	<b>36.6</b>	<b>36.4</b>	<b>36.5</b>			<b>18.4</b>	<b>23.0</b>	
<b>In percent of exports</b>	<b>...</b>	<b>...</b>	<b>108.9</b>			<b>143.4</b>	<b>128.7</b>	<b>124.7</b>	<b>116.3</b>	<b>111.6</b>	<b>111.1</b>			<b>26.5</b>	<b>36.8</b>	
<b>In percent of government revenues</b>	<b>...</b>	<b>...</b>	<b>109.0</b>			<b>158.1</b>	<b>146.6</b>	<b>140.6</b>	<b>136.8</b>	<b>135.1</b>	<b>135.5</b>			<b>66.9</b>	<b>78.9</b>	
<b>Debt service-to-exports ratio (in percent)</b>	<b>12.5</b>	<b>12.8</b>	<b>14.3</b>			<b>19.9</b>	<b>23.9</b>	<b>27.1</b>	<b>26.9</b>	<b>26.1</b>	<b>35.8</b>			<b>20.6</b>	<b>8.4</b>	
<b>PPG debt service-to-exports ratio (in percent)</b>	<b>2.0</b>	<b>2.7</b>	<b>3.6</b>			<b>8.2</b>	<b>11.0</b>	<b>11.1</b>	<b>9.9</b>	<b>9.1</b>	<b>8.6</b>			<b>1.7</b>	<b>2.8</b>	
<b>PPG debt service-to-revenue ratio (in percent)</b>	<b>2.8</b>	<b>3.1</b>	<b>3.6</b>			<b>9.1</b>	<b>12.6</b>	<b>12.5</b>	<b>11.6</b>	<b>11.1</b>	<b>10.5</b>			<b>4.2</b>	<b>6.0</b>	
Total gross financing need (Billions of U.S. dollars)	1.6	0.6	1.4			2.4	2.5	2.7	3.1	4.3	17.2			-11.5	-26.8	
Non-interest current account deficit that stabilizes debt ratio	43.8	31.0	27.1			7.3	22.2	49.9	68.5	70.7	21.5			26.4	-7.0	
<b>Key macroeconomic assumptions</b>																
Real GDP growth (in percent)	7.2	7.1	7.2	7.5	1.1	6.3	6.5	7.2	8.3	7.6	7.5	7.2	26.2	3.7	11.0	
GDP deflator in US dollar terms (change in percent)	7.8	-1.5	-1.0	2.4	9.3	-15.8	-8.6	3.5	3.4	3.5	3.5	-1.8	2.4	2.4	2.5	
Effective interest rate (percent) 5/	1.1	1.1	1.1	1.8	0.8	1.2	1.6	2.4	2.9	3.2	6.1	2.9	4.4	3.8	5.0	
Growth of exports of G&S (US dollar terms, in percent)	33.4	2.6	-2.4	11.1	14.9	-9.1	4.5	11.7	17.3	15.3	12.3	8.7	48.3	4.5	20.0	
Growth of imports of G&S (US dollar terms, in percent)	62.8	-0.1	-6.3	19.4	25.3	-18.5	4.3	44.9	34.9	19.6	17.1	17.1	3.0	8.8	6.5	
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	36.2	34.9	33.6	36.7	34.5	31.1	34.5	28.0	23.4	26.1	
Government revenues (excluding grants, in percent of GDP)	21.9	26.3	27.3	...	...	25.2	26.2	26.7	26.8	26.9	27.0	...	27.6	29.1	28.0	
Aid flows (in Billions of US dollars) 7/	1.3	1.7	1.4	...	...	1.2	1.0	1.1	1.2	1.2	1.0	...	1.3	2.1	...	
<i>of which: Grants</i>	0.8	0.8	0.7	...	...	0.6	0.5	0.5	0.4	0.4	0.4	...	0.3	0.1	...	
<i>of which: Concessional loans</i>	0.5	0.9	0.7	...	...	0.6	0.4	0.6	0.8	0.8	0.7	...	1.1	2.0	...	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...	...	...	6.5	5.7	5.0	4.9	4.4	3.9	...	1.1	0.8	1.2	
Grant-equivalent financing (in percent of external financing) 8/	...	...	...	...	...	60.1	60.4	53.0	51.9	48.0	43.5	...	35.7	25.2	31.9	
<b>Memorandum items:</b>																
Nominal GDP (Billions of US dollars)	15.2	16.0	17.0	...	...	15.2	14.8	16.4	18.4	20.5	22.8	...	75.8	148.4	...	
Nominal dollar GDP growth	15.6	5.5	6.1	...	...	-10.5	-2.7	10.9	12.0	11.3	11.2	5.4	29.2	6.2	13.8	
PV of PPG external debt (in Billions of US dollars)	...	...	4.7	...	...	5.3	5.6	6.1	6.7	7.4	8.2	...	13.8	33.6	...	
(Pvt-Pvt-1)/GDPt-1 (in percent)	...	...	...	...	...	3.3	2.2	3.1	3.5	3.8	4.2	3.3	2.2	1.9	2.2	
Gross workers' remittances (Billions of US dollars)	0.0	0.0	0.0	...	...	0.1	0.1	0.1	0.1	0.1	0.1	...	0.1	0.2	...	
PV of PPG external debt (in percent of GDP + remittances)	...	...	29.8	...	...	39.8	38.3	37.4	36.5	36.2	36.4	...	18.4	22.9	...	
PV of PPG external debt (in percent of exports + remittances)	...	...	109.4	...	...	141.7	127.1	123.3	115.1	110.5	110.0	...	26.5	36.7	...	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	3.6	...	...	8.1	10.9	10.9	9.8	9.0	8.5	...	1.7	2.8	...	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as  $[r - g - p(1+g)] / (1+g+p+gp)$  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/ Assumes that PV of private sector debt is equivalent to its face value.

5/ Current-year interest payments divided by previous period debt stock.

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

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

8/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

**Table 2. Mozambique: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2015-2035**

(In Percent)

	Projections							2035
	2015	2016	2017	2018	2019	2020	2025	
<b>PV of debt-to GDP ratio</b>								
<b>Baseline</b>	40	38	37	37	36	37	<b>18</b>	23
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2015-2035 1/	40	29	25	22	17	-25	<b>-6</b>	215
A2. New public sector loans on less favorable terms in 2015-2035 2	40	40	40	41	43	44	<b>25</b>	36
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	40	38	37	36	36	36	<b>18</b>	23
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	40	40	43	42	41	41	<b>20</b>	23
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	40	37	40	39	39	39	<b>20</b>	25
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	40	53	83	79	76	74	<b>30</b>	27
B5. Combination of B1-B4 using one-half standard deviation shocks	40	43	72	68	66	64	<b>27</b>	26
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	40	57	55	54	53	54	<b>27</b>	33
<b>PV of debt-to-exports ratio</b>								
<b>Baseline</b>	143	129	125	116	112	111	<b>27</b>	37
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2015-2035 1/	143	97	85	71	51	-75	<b>-8</b>	345
A2. New public sector loans on less favorable terms in 2015-2035 2	143	132	134	131	130	134	<b>36</b>	57
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	143	127	123	115	110	110	<b>26</b>	36
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	143	145	182	169	160	158	<b>36</b>	47
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	143	127	123	115	110	110	<b>26</b>	36
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	143	178	277	251	234	224	<b>43</b>	44
B5. Combination of B1-B4 using one-half standard deviation shocks	143	157	262	239	223	215	<b>43</b>	46
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	143	127	123	115	110	110	<b>26</b>	36
<b>PV of debt-to-revenue ratio</b>								
<b>Baseline</b>	158	147	141	137	135	135	<b>67</b>	79
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2015-2035 1/	158	110	96	84	62	-91	<b>-20</b>	738
A2. New public sector loans on less favorable terms in 2015-2035 2	158	151	151	154	158	164	<b>90</b>	122
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	158	145	140	136	134	135	<b>66</b>	78
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	158	152	163	157	154	153	<b>71</b>	79
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	158	142	152	148	146	146	<b>72</b>	84
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	158	202	312	296	283	273	<b>108</b>	94
B5. Combination of B1-B4 using one-half standard deviation shocks	158	165	269	256	245	238	<b>98</b>	89
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	158	215	207	201	198	199	<b>97</b>	115

**Table 2. Mozambique: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2015-2035 (concluded)**

(In percent)

<b>Debt service-to-exports ratio</b>								
<b>Baseline</b>	8	11	11	10	9	9	2	3
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2015-2035 1/	8	10	9	8	7	6	-1	17
A2. New public sector loans on less favorable terms in 2015-2035 2	8	11	11	10	9	9	2	4
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	8	11	11	10	9	9	2	3
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	8	12	14	13	12	11	2	4
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	8	11	11	10	9	9	2	3
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	8	11	13	15	13	12	3	4
B5. Combination of B1-B4 using one-half standard deviation shocks	8	11	13	15	13	13	3	4
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	8	11	11	10	9	9	2	3
<b>Debt service-to-revenue ratio</b>								
<b>Baseline</b>	9	13	12	12	11	10	4	6
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2015-2035 1/	9	11	10	10	9	8	-2	36
A2. New public sector loans on less favorable terms in 2015-2035 2	9	13	12	11	11	11	5	9
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	9	13	13	12	11	11	4	6
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	9	13	13	12	12	11	5	6
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	9	12	14	13	12	11	5	7
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	9	13	14	17	16	15	8	8
B5. Combination of B1-B4 using one-half standard deviation shocks	9	12	13	16	15	14	7	7
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	9	19	19	17	16	16	6	9
<i>Memorandum item:</i>								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	24	24	24	24	24	24	24	24

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.

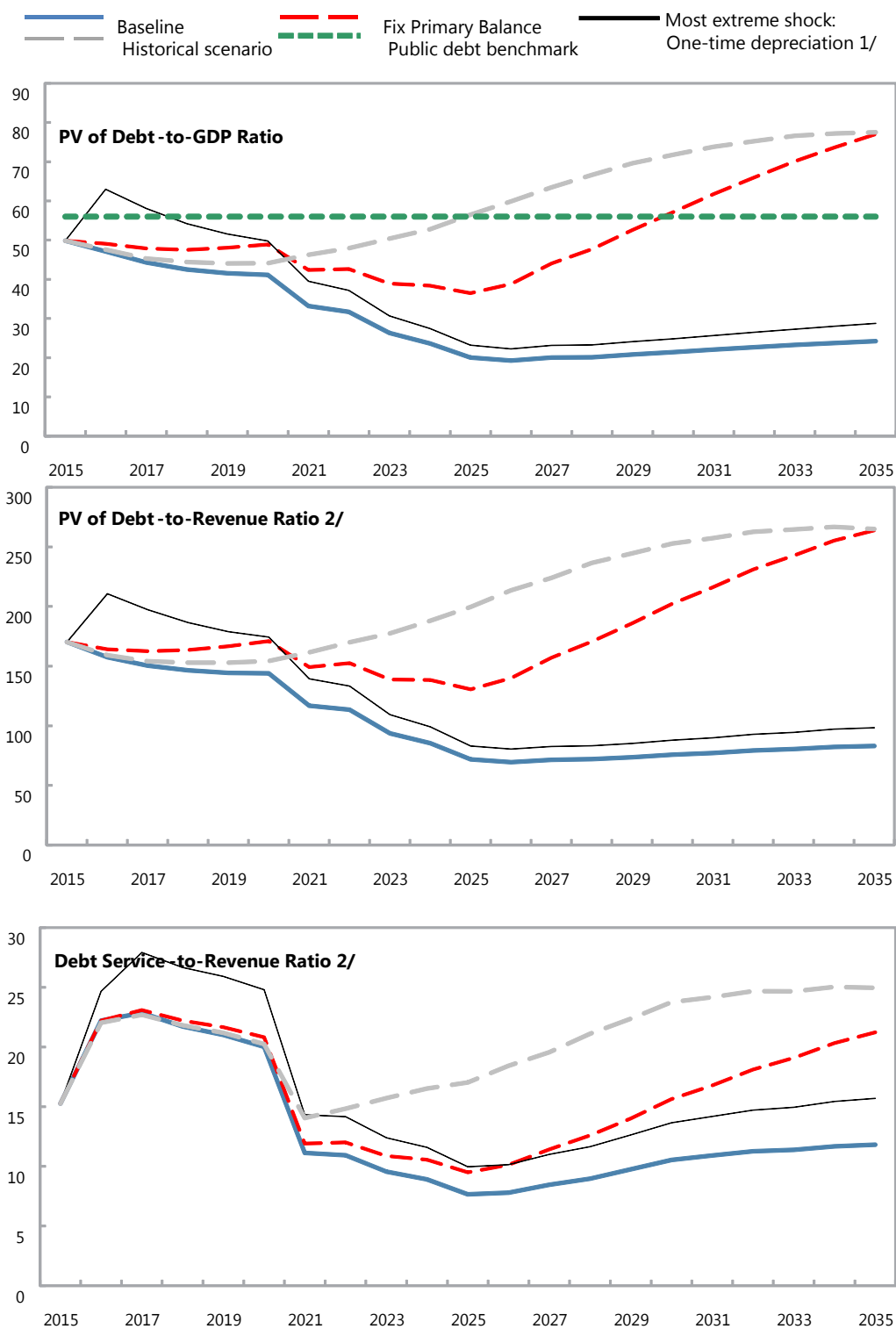
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly a an offsetting adjustment in import levels).

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. Mozambique: Indicators of Public Debt Under Alternative Scenarios, 2015-2035 1/**



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2025.

2/ Revenues are defined inclusive of grants.

**Table 3. Mozambique: Public Sector Debt Sustainability Framework, Baseline Scenario, 2012-2035**  
(In percent of GDP, unless otherwise indicated)

	Actual			Average <sup>5/</sup>	Standard Deviation <sup>5/</sup>	Estimate						Projections			
	2012	2013	2014			2015	2016	2017	2018	2019	2020	2015-20 Average	2025	2035	2021-35 Average
<b>Public sector debt 1/</b>	39.9	50.9	56.6			73.4	69.5	65.9	63.6	62.2	61.1		28.3	32.0	
<i>of which: foreign-currency denominated</i>	34.5	42.4	48.1			63.4	60.9	59.1	57.7	57.0	56.5		26.7	30.8	
Change in public sector debt	2.0	11.0	5.6			16.8	-3.9	-3.7	-2.3	-1.4	-1.1		-5.4	0.5	
Identified debt-creating flows	1.8	-1.1	10.0			14.7	-3.0	-2.7	-2.8	-2.4	-2.1		-8.4	-1.7	
Primary deficit	2.9	1.8	9.6	3.3	2.4	4.7	2.1	2.4	2.5	2.4	2.5	2.8	-1.4	-0.7	-0.9
Revenue and grants	27.0	31.4	31.6			29.3	29.9	29.4	29.0	28.8	28.6		27.9	29.2	
<i>of which: grants</i>	5.1	5.2	4.2			4.0	3.7	2.8	2.3	1.9	1.6		0.3	0.1	
Primary (noninterest) expenditure	29.8	33.2	41.2			34.0	32.0	31.9	31.6	31.2	31.0		26.5	28.5	
Automatic debt dynamics	-1.1	-2.9	0.4			10.0	-5.1	-5.1	-5.3	-4.7	-4.6		-7.0	-0.9	
Contribution from interest rate/growth differential	-2.5	-2.5	-3.3			-3.0	-3.9	-4.3	-4.7	-4.1	-3.9		-6.9	-0.8	
<i>of which: contribution from average real interest rate</i>	0.0	0.2	0.1			0.3	0.6	0.4	0.4	0.4	0.5		0.1	0.3	
<i>of which: contribution from real GDP growth</i>	-2.5	-2.7	-3.4			-3.4	-4.5	-4.7	-5.0	-4.5	-4.3		-7.0	-1.1	
Contribution from real exchange rate depreciation	1.4	-0.4	3.7			13.0	-1.1	-0.8	-0.7	-0.6	-0.7		...	...	
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	0.2	12.1	-4.4			2.1	-0.9	-1.0	0.6	1.0	1.0		3.0	2.2	
<b>Other Sustainability Indicators</b>															
<b>PV of public sector debt</b>	...	...	38.3			49.9	47.1	44.3	42.5	41.6	41.1		20.0	24.2	
<i>of which: foreign-currency denominated</i>	...	...	29.8			39.9	38.4	37.5	36.6	36.4	36.5		18.4	23.0	
<i>of which: external</i>	...	...	29.8			39.9	38.4	37.5	36.6	36.4	36.5		18.4	23.0	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	4.5	3.5	11.6			9.2	8.7	9.2	8.8	8.4	8.2		0.7	2.7	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	121.3			170.3	157.4	150.4	146.4	144.2	144.0		71.8	83.1	
PV of public sector debt-to-revenue ratio (in percent)	...	...	140.1			197.6	179.5	165.9	158.9	154.5	152.5		72.6	83.3	
<i>of which: external 3/</i>	...	...	109.0			158.1	146.6	140.6	136.8	135.1	135.5		66.9	78.9	
Debt service-to-revenue and grants ratio (in percent) 4/	6.0	5.4	6.4			15.3	22.2	22.9	21.7	21.0	20.0		7.6	11.8	
Debt service-to-revenue ratio (in percent) 4/	7.3	6.5	7.3			17.7	25.3	25.2	23.6	22.5	21.2		7.7	11.8	
Primary deficit that stabilizes the debt-to-GDP ratio	0.9	-9.2	4.0			-12.1	6.0	6.1	4.8	3.8	3.5		4.0	-1.3	
<b>Key macroeconomic and fiscal assumptions</b>															
Real GDP growth (in percent)	7.2	7.1	7.2	7.5	1.1	6.3	6.5	7.2	8.3	7.6	7.5	7.2	26.2	3.7	11.0
Average nominal interest rate on forex debt (in percent)	0.9	1.2	1.1	0.9	0.6	1.3	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.8	2.3
Average real interest rate on domestic debt (in percent)	5.2	5.3	2.7	4.6	3.6	2.8	6.0	7.9	11.7	14.0	15.8	9.7	4.6	4.6	4.6
Real exchange rate depreciation (in percent, + indicates depreciation)	4.8	-1.3	9.4	3.1	12.1	28.7	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	5.9	3.9	3.6	5.5	2.4	5.1	5.6	5.6	5.6	5.6	5.6	5.5	5.6	5.6	5.6
Growth of real primary spending (deflated by GDP deflator, in percent)	2.5	19.2	33.1	5.6	11.3	-12.2	0.1	6.8	7.3	6.2	7.0	2.5	23.0	5.3	10.2
Grant element of new external borrowing (in percent)	...	...	...	...	...	36.2	34.9	33.6	36.7	34.5	31.1	34.5	28.0	23.4	...

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 4. Mozambique: Sensitivity Analysis for Key Indicators of Public Debt 2015-2035**

	Projections							
	2015	2016	2017	2018	2019	2020	2025	2035
<b>PV of Debt-to-GDP Ratio</b>								
<b>Baseline</b>	50	47	44	43	42	41	20	24
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	50	48	45	44	44	44	56	78
A2. Primary balance is unchanged from 2015	50	49	48	48	48	49	36	77
A3. Permanently lower GDP growth 1/	50	47	45	43	42	42	22	33
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2016-2017	50	47	45	43	42	42	21	26
B2. Primary balance is at historical average minus one standard deviations in 2016-2017	50	50	49	47	46	45	22	25
B3. Combination of B1-B2 using one half standard deviation shocks	50	49	47	45	44	44	21	24
B4. One-time 30 percent real depreciation in 2016	50	63	58	54	52	50	23	29
B5. 10 percent of GDP increase in other debt-creating flows in 2016	50	55	51	49	48	47	22	26
<b>PV of Debt-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	170	157	150	146	144	144	72	83
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	170	159	154	153	153	154	200	265
A2. Primary balance is unchanged from 2015	170	164	163	164	167	171	131	264
A3. Permanently lower GDP growth 1/	170	158	151	148	147	148	79	113
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2016-2017	170	157	152	148	147	147	75	90
B2. Primary balance is at historical average minus one standard deviations in 2016-2017	170	167	168	163	160	158	77	87
B3. Combination of B1-B2 using one half standard deviation shocks	170	163	161	156	153	152	74	82
B4. One-time 30 percent real depreciation in 2016	170	211	197	187	179	174	83	98
B5. 10 percent of GDP increase in other debt-creating flows in 2016	170	182	174	169	165	164	79	88
<b>Debt Service-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	15	22	23	22	21	20	8	12
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	15	22	23	22	21	20	17	25
A2. Primary balance is unchanged from 2015	15	22	23	22	22	21	9	21
A3. Permanently lower GDP growth 1/	15	22	23	22	21	20	8	14
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2016-2017	15	22	23	22	21	20	8	12
B2. Primary balance is at historical average minus one standard deviations in 2016-2017	15	22	23	22	22	21	8	12
B3. Combination of B1-B2 using one half standard deviation shocks	15	22	23	22	21	20	8	12
B4. One-time 30 percent real depreciation in 2016	15	25	28	27	26	25	10	16
B5. 10 percent of GDP increase in other debt-creating flows in 2016	15	22	24	23	22	21	8	12

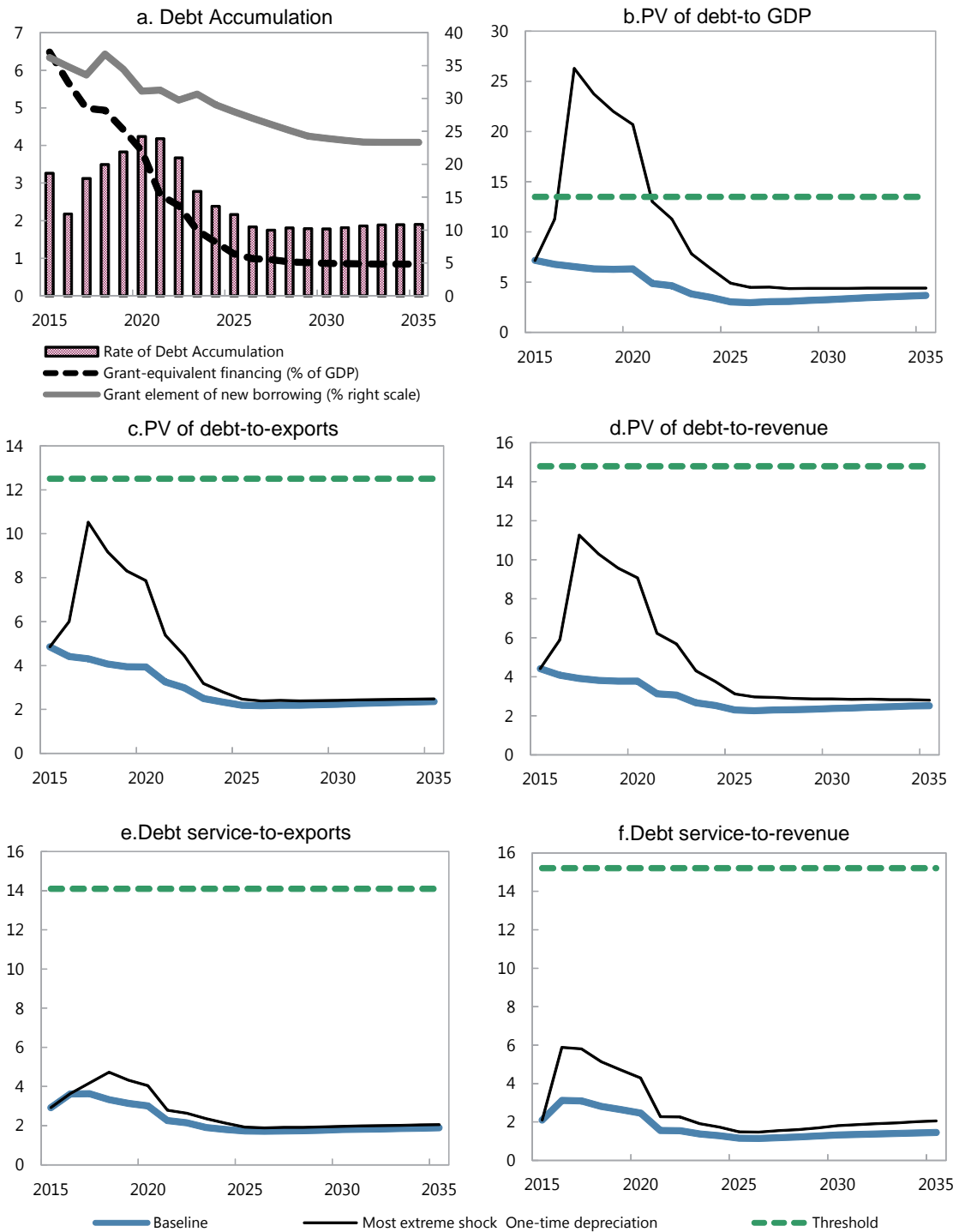
Sources: Country authorities; and staff estimates and projections.

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.



**Figure 3. Mozambique: Probability of Debt Distress of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2015-2035 1/**



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2025. In figure b. it corresponds to a Non-debt flows shock; in c. to a Non-debt flows shock; in d. to a Non-debt flows shock; in e. to a Combination shock and in figure f. to a One-time depreciation shock