INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL MONETARY FUND

ISLAMIC REPUBLIC OF MAURITANIA

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

Approved by Paloma Anos Casero (IDA), Taline Koranchelian and Kevin Fletcher (IMF)

Risk of external debt distress:	High
Overall risk of debt distress:	High
Granularity in the risk rating:	Sustainable
Application of judgment:	No

Mauritania's risk of external debt distress remains high owing to a substantial increase in external debt during 2015–17 to finance infrastructure and external deficits, a contraction in nominal GDP due to the 2014–15 terms-of-trade shock, and the depreciation of the exchange rate in 2016.[1] *The PV of PPG external debt-to-GDP persistently breaches the relevant threshold. However, with a projected downward trend in this ratio, prospects are still for external debt sustainability, although falling below the threshold is delayed by two years under current baseline projections compared to the November 2017 DSA owing to the rescheduling of repayments on an existing debt, and a weaker outlook for the current account balance. The stress tests reveal breaches of the relevant thresholds by all the debt indicators for multiple stress tests. The overall risk of debt distress is also high, reflecting the dominant role of external debt in the public debt dynamics; under the baseline and multiple stress tests, the PV of public debt-to-GDP remains above the benchmark value for several years. Projected export and growth performance as well as fiscal and debt trajectories continue to be vulnerable to lower metal prices, adverse weather, policy implementation risks, and regional security developments. The DSA highlights the need to follow sound economic policies, including a prudent borrowing strategy that avoids non-concessional borrowing and relies instead on grants and concessional financing taken up at a pace consistent with absorptive capacity. Efforts to resolve the external debt in arrears with Kuwait should be continued.*

[1] Prepared under the joint Fund-Bank Low-Income Country Debt Sustainability Framework. The previous DSA was prepared in the context of the Request for a Three-Year Arrangement Under the ECF in November 2017 (IMF Country Report 17/369). Mauritania's Composite Indicator (CI) index, based on the October 2018 WEO and 2017 CPIA index is 2.68 (just below the upper threshold value of 2.69) indicating that the country's debt-carrying capacity is weak. However, Mauritania retains a medium rating as this is a first change in classification (the previous rating and the CI score (2.89) calculated using the April 2018 WEO data gives a rating of medium) and a change in the rating requires two consecutive changes. Compared with the April 2018 WEO calculation the decline in debt-carrying capacity primarily reflects a reduction in projected import coverage of reserves.

PUBLIC DEBT COVERAGE

1. Public sector debt comprises debt contracted by the central government, the central bank (BCM), and state-owned enterprises (SOEs) and debt guaranteed by the government. It excludes borrowing by the state-owned mining company, SNIM, as the company is run on a commercial basis and has borrowed without government guarantees up to end-2016. In 2017 the government provided a guarantee on a new external loan ($105 million or 2.1 percent of 2017 GDP) contracted by SNIM, although to date no disbursements under this loan have been made; the DSA projections include the related disbursements and debt service as part of public and publicly guaranteed (PPG) debt. SNIM's non-guaranteed external debt is classified as private external debt;[2] at end-2017 SNIM's outstanding external debt amounted to 8.4 percent of GDP. Apart from SNIM, outstanding external debt contracted directly by SOEs is virtually zero—at end-2017 this amounted to $0.62 million (0.017 percent of total PPG external debt).[3] Instead, SOEs primarily receive foreign financing through on-lending of loans contracted by the government; at end-2017, the stock of such on-lent debt is estimated at $161 million (4.5 percent of total external PPG debt, 3.3 percent of GDP) mostly to the electricity sector. Public external debt also includes a passive debt in arrears owed to Kuwait.[4]

Coverage of Public Sector Debt

	Subsectors of the public sector	Sub sectors covered
1	Central government	X
2	State and local government	
3	Other elements in the general government	
4	o/w: Social security fund	
5	o/w: Extra budgetary funds (EBFs)	
6	Guarantees (to other entities in the public and private sector, including to SOEs)	X
7	Central bank (borrowed on behalf of the government)	X
8	Non-guaranteed SOE debt	

2. Two changes in coverage have been made compared to the November 2017 DSA. First, Mauritania's SDR allocation is now excluded (1.8 percent of GDP at end-2017); official external debt data published by the authorities still include it.[5] Second, this DSA now includes, as of 2018, a

[2] SNIM's shareholders comprise the government (majority) and two other shareholders with significant holdings. The company has managerial independence including over pricing and employment policies. It operates on a commercial basis, is profitable and does not receive subsidies from, and pays dividends, to the government. It publishes annual reports and audited accounts. Nevertheless, SNIM debt represents a contingent liability for the central government as a majority shareholder and the DSA captures this through the contingent liability test.

[3] Owed by the Airport Company of Mauritania (SAM) and the predecessor (SONELEC) of SOMELEC, the electricity company.

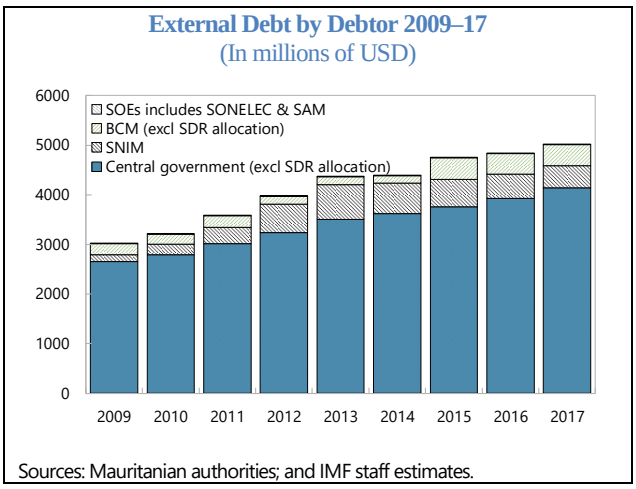
[4] A passive pre-HIPC debt, estimated at 20 percent of GDP in 2017, is owed to the Kuwait Investment Authority (KIA) since the 1970s. Negotiations are continuing between the authorities and the Kuwait to achieve debt relief on at least comparable terms to, or better than, the 2002 HIPC Initiative operation. The authorities are seeking full debt relief from Kuwait, but no agreement has been reached yet. This DSA assumes full debt relief in 2019; in the previous DSA the debt relief was assumed to be granted in 2018.

[5] A country's SDR allocation is not included in the nominal debt stock of gross external debt, because IMF members are generally under no obligation to reconstitute their SDR holding. However, the DSA captures the net interest payments that arise when SDR holdings are below a participant's allocation. This will impact the magnitude of debt service and the PV of PPG debt in the DSA.

government debt to the BCM recognized under a 2018 convention between the BCM and the Ministry of Economy and Finance.[6] Although the coverage of debt includes both the government and the BCM , this debt is not netted out of the stock of domestic debt as the debt service payable by the government is not insignificant and constitutes a fiscal risk. The debt comprises the repayment of past BCM advances to the government, foreign exchange losses, and other unpaid amounts and fees owed to the BCM which remained from two earlier similar conventions signed in 2004 and 2013; it amounts to MRO 153.9 billion (8.3 percent of 2018 GDP) to be repaid over 40 years of which a 10-year grace period. The rest of public sector domestic debt comprises government treasury bills and bonds amounting to 5.2 percent of GDP at end-2018.

DEBT DEVELOPMENTS

3. Public debt rose sharply by about 20 percent of GDP between 2014–16 before stabilizing in 2017, reflecting sizeable external borrowing and a drop in nominal GDP. External borrowing financed large capital investment projects, primarily for infrastructure as part of the government's strategy for stronger, more diversified and inclusive growth. Domestic debt fell by 1.2 percent of GDP during 2015–17 (with a debt stock of 5 percent of GDP at end-2017), while the ratio of external public debt rose by almost 23 percent during 2015–16, before plateauing in 2017 at 93 percent of GDP.[7] [8] The increase in external debt of $799 million (15 percent of 2014 GDP) between 2014–17 was compounded by an 8.7 percent contraction in the nominal dollar GDP during that period on account of a terms-of-trade shock during 2014–15, and by the depreciation of the exchange rate in 2016. Mauritania's stock of external debt includes a passive debt in arrears owed to Kuwait. Excluding this latter debt, external public debt reached 72.5 percent of GDP at end-2017. Much of the nominal increase during 2015-16 owed to a $300 million non-concessional deposit from Saudi Arabia to support the



[6] This convention was adopted by the government and is expected to be approved by parliament before end-2018. While much of the debt it covered was already covered under earlier similar conventions, these had lapsed and the value of outstanding amounts plus further accrued debts was not formally recognized. Therefore, data for these debts prior to 2018 are not included in the domestic debt data.

[7] The changes in public domestic and external debt do not sum to the change in total public debt. The discrepancy arises from different exchange rates (average or end-period) implicitly used to value foreign currency debt in local currency for the calculation of total public debt.

[8] In Table 1, PPG external debt is recorded as 91.9 percent of GDP; the difference stems from different exchange rates (average or end-period) implicitly used to value foreign debt in local currency vs GDP in foreign currency. The 2017 ratio of public external debt to GDP was revised upward by 1.8 percent of GDP since the last review under the ECF arrangement following incorporation of the late reconciliation of debt stocks (and related loan disbursements) with some creditors and GDP revisions.

BCM's reserves in 2015. The rest was mostly contracted by the central government to finance public investment projects.

Mauritania: External Debt, 2013-17

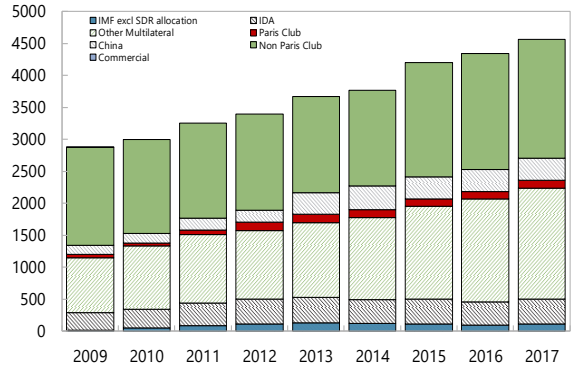
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
	(In millions of USD)					(In percent of GDP)				
External debt	**4,562.9**	**4,566.1**	**4,950.7**	**5,107.5**	**5,306.4**	**79.7**	**84.7**	**102.5**	**109.0**	**107.8**
Public and publicly guaranteed (PPG) external debt	**3,675.0**	**3,766.7**	**4,202.5**	**4,348.0**	**4,566.0**	**64.2**	**69.9**	**87.0**	**92.8**	**92.7**
***Of which:* Excluding passive debt to Kuwait**	**2,674.0**	**2,769.5**	**3,208.6**	**3,354.9**	**3,571.6**	**46.7**	**51.4**	**66.4**	**71.6**	**72.5**
Bilateral creditors	1,977.4	1,986.3	2,250.9	2,274.8	2,325.6	34.5	36.8	46.6	48.6	47.2
Paris Club	136.3	123.1	119.4	115.9	119.7	2.4	2.3	2.5	2.5	2.4
Of which: France	95.5	87.0	81.4	81.6	85.1	1.7	1.6	1.7	1.7	1.7
Spain	35.8	31.7	34.3	31.1	30.9	0.6	0.6	0.7	0.7	0.6
Non Paris Club	1,841.1	1,863.3	2,131.6	2,158.9	2,205.9	32.2	34.6	44.1	46.1	44.8
Of which: China	333.4	367.3	340.4	339.3	346.4	5.8	6.8	7.0	7.2	7.0
Kuwait 1/	1,140.9	1,140.1	1,141.8	1,156.2	1,174.8	19.9	21.1	23.6	24.7	23.9
Saudi Arabia 2/	214.6	212.0	509.4	531.9	552.4	3.7	3.9	10.5	11.4	11.2
Multilateral creditors	1,697.6	1,780.4	1,951.5	2,073.1	2,240.4	29.7	33.0	40.4	44.3	45.5
Of which: Islamic Development Bank (IDB)	218.1	273.8	340.5	371.6	395.1	3.8	5.1	7.0	7.9	8.0
International Development Association (IDA)	396.6	379.5	385.6	365.6	389.3	6.9	7.0	8.0	7.8	7.9
International Monetary Fund (IMF) 3/	131.2	120.2	115.7	96.7	111.4	2.3	2.2	2.4	2.1	2.3
Arab Monetary Fund (AMF)	18.7	47.4	62.4	159.8	149.1	0.3	0.9	1.3	3.4	3.0
Arab Fund for Economic and Social Development (AFESD)	702.5	749.0	819.2	856.4	950.8	12.3	13.9	17.0	18.3	19.3
Non-PPG debt (by debtor)	**887.9**	**799.4**	**748.3**	**759.6**	**740.4**	**15.5**	**14.8**	**15.5**	**16.2**	**15.0**
SNIM 4/	693.9	618.2	546.8	482.5	415.1	12.1	11.5	11.3	10.3	8.4
Commercial banks	194.0	181.2	201.5	277.1	325.3	3.4	3.4	4.2	5.9	6.6
Memorandum items:										
Passive debt to Kuwait Investment Authority (KIA)	1,001.0	997.2	993.9	993.1	994.4	17.5	18.5	20.6	21.2	20.2
Saudi deposit at the central bank	-	-	300.0	300.0	300.0	-	-	6.2	6.4	6.1
Domestic debt	233.1	324.7	262.2	221.6	250.4	4.1	6.0	5.4	4.7	5.1
Nominal GDP	5,724.2	5,391.5	4,830.5	4,684.5	4,923.0	-	-	-	-	-

Source: Mauritanian authorities.

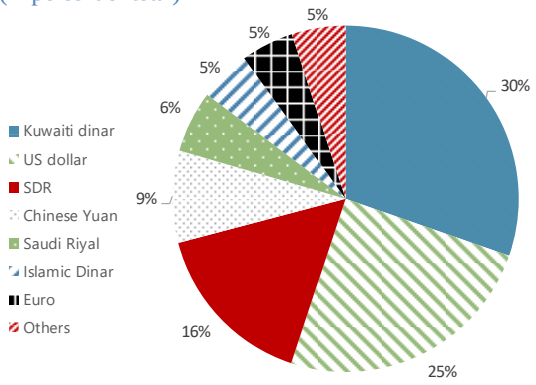
1/ Including passive debt under negotiation.
2/ Including deposit at the central bank.
3/ Excluding SDR allocation.
4/ Creditors include AfDB, KFW, France, IDB, EIB.

4. External debt is largely composed of public debt contracted on concessional or semi-concessional terms with official creditors. External PPG debt represented about 93 percent of total external debt at end-2017. The largest debtor was the central government accounting for 90.6 percent of total external debt, while the BCM accounted for 9.4 percent. The share of BCM's debt in total external debt rose sharply in 2015 when it contracted a $300 million non-concessional deposit from Saudi Arabia to support its foreign exchange reserves. This deposit was scheduled to be repaid over 3 years beginning 2018 but was rescheduled in 2018 with repayments deferred by three years. Private external debt comprises that of SNIM and commercial banks and has been broadly stable as a share of total external debt in recent years. Bilateral and multilateral creditors have accounted for approximately half of PPG external debt in recent years, with Arab bilateral and multilateral funds accounting for the largest share at end-2017. In terms of currencies, PPG external debt at end-2017 was mostly denominated in US dollars and currencies pegged to it (slightly over 60 percent of PPG external debt).

PPG External Debt by Creditor, 2009–17
(In millions of USD)



PPG External Debt by Currency, 2017
(In percent of total)



Sources: Mauritanian authorities; and IMF staff estimates.

5. The authorities continue to actively seek debt relief from Kuwait. An agreement has not yet been reached between the Kuwait Investment Authority (KIA) and Mauritania to resolve this longstanding issue. Both parties are seeking agreement on the valuation of the debt, including interest in arrears. Under the 2002 Paris Club agreement following the completion point for Mauritania in 2002, Mauritania is expected to seek debt relief on at least comparable terms from non-Paris Club creditors. In the DSA's baseline projection, staff assumes full debt relief on these arrears in 2019; in the previous DSA debt relief was assumed to be granted in 2018.

6. The authorities' external borrowing strategy is aimed at strengthening debt sustainability while providing sufficient financing for priority projects that are key to their economic development strategy. To that end, they intend to give preference to loans on concessional terms and grants to finance their development projects, and to contain the pace of borrowing consistent with strengthening debt sustainability. However, in cases where adequate concessional financing is not available to finance priority development projects, notably large-scale projects critical to economic diversification, external non-concessional loans may be contracted on an exceptional basis for priority projects. Under the ECF-supported program two exceptions (amounting to $103 million) to the program's zero non-concessional debt limit are provided for two projects.[9] Consistent with this strategy, following the sharp uptick in PPG external debt in recent years, the authorities decided not to sign any new large project loans in 2018. In addition, the increase in external debt has been curtailed by the slower-than-planned execution of foreign-financed projects due to capacity constraints and delays in project implementation. However, it is expected that new borrowing will pick up in 2019 to support the authorities' national development strategy.

[9] Boulenoir electricity wind farm project and the Nouckchott fishing port project development hub at PK28. The exception has only been needed for the Boulenoir loan which was contracted in late 2017.

7. The authorities are taking measures to improve debt management. To better align borrowing with spending priorities, especially for large infrastructure projects, and to strengthen institutional coordination, the responsibilities and conditions of loan approvals among the ministries are being clarified. In this respect, the National Public Debt Committee (CNDP) was reactivated in April 2018 with updated terms of reference under which it will be involved in the process of selecting, scheduling and monitoring public investment projects established under the new Public Investment Program (PIP) institutional framework. It will also play a role in aligning external borrowing with investment priorities and assessing the impact on debt of any new project funded through external borrowing before its inclusion in the PIP. To this end, measures are being taken to strengthen the Debt Directorate's capacity to perform debt sustainability analyses, and the directorate and other debt-related units benefited from IMF technical assistance on the evaluation and analysis of loans. Also, in April 2018, a coordination procedure between the Public Investment Analysis and Programming Committee (CAPIP) and the CNDP outlining their responsibilities in terms of project selection was established. In September 2018, a gateway interface between the SYGADE-SIGIP-RACHAD software applications for institutions involved in debt-related operations (the debt, budget, treasury, and investment directorates, and the BCM) was established to coordinate external debt disbursements and debt service payments and improve debt recording and monitoring; the interface will permit debt service payment transactions to be included in the automated chain of expenditure system.

MACROECONOMIC PROJECTIONS

8. The projections in the baseline scenario are consistent with the macroeconomic framework presented in the Staff Report for the second ECF program review. Compared to the previous DSA in November 2017, the long-term outlook is broadly similar. In the medium-term, the positive impact of higher iron prices is offset by higher oil import prices, and the suspension of a previously expected expansion of a gold treatment plant that was to have come on line in 2020. As a result, real GDP growth is now lower and the current account deficit wider. The growth of exports is lower reflecting lower projected gold exports and a more moderate rate of increase in fish exports owing to base year effects and in line with the authorities' policy of managing fish resources sustainably. The growth of imports decelerates during 2020–22 primarily because of revised projections of project disbursements for SNIM, the state mining company, as well as lower imported inputs for the gold treatment plant. Fiscal policy and projections are in line with the original program projection with revenues and grants somewhat higher than previously projected reflecting improvements in tax administration achieved in 2017–18.

9. Over the long run, real GDP growth is projected to be slightly higher on average during 2018-28 than in the November 2017 DSA, and slightly lower in 2029-38. For 2018–19, real GDP is projected at 5.3 percent of GDP, owing to sustained non-extractive growth supported by the authorities' public investment program, FDI, and planned structural reforms aimed at improving the business climate and diversifying the economy; gains are projected in the agricultural, fishing, construction and service sectors. In the extractive sector, growth is supported by past upgrades in iron ore and gold coming online; the impact of these earlier gold treatment enhancements is projected to be greater in the longer term than previously projected, offsetting in part the loss in output of gold from the suspended later expansion of

the gold treatment plant. Inflation, as measured by the GDP deflator projected to average 2.3 percent per year during 2018–28.

10. The current account deficit is projected at 7.7 percent of GDP on average over 2018–28, somewhat wider than before, primarily reflecting lower gold production and exports, and the impact of higher oil prices. Notwithstanding a lower rate of growth, fish exports in nominal terms have been revised upwards capturing base year effects and ongoing efforts to improve the quality of fish processing.

Mauritania: LIC DSA Macroeconomic Assumptions, 2017–38

	2017	2018	2019	2020	2021	2022	2023	2018-2028	2029-38 1/
Real GDP growth									
Nov. 2017 DSA	3.1	2.7	4.5	7.5	7.3	5.9	5.2	5.1	4.7
Current	3.0	3.5	5.7	4.8	5.6	5.6	5.3	5.2	4.6
Nominal GDP (in millions of US$)									
Nov. 2017 DSA	5,125	5,324	5,432	5,768	6,238	6,741	7,184	7,233	13,427
Current	4,923	5,252	5,551	5,775	6,058	6,372	6,629	6,853	12,661
Exports, goods & services (growth; in percent)									
Nov. 2017 DSA	18.5	3.1	2.2	18.5	11.9	-0.7	3.0	2.6	2.4
Current	16.9	3.2	8.3	3.4	1.7	2.6	1.8	2.9	1.2
Imports, goods & services (growth; in percent)									
Nov. 2017 DSA	6.2	3.6	0.9	3.4	6.5	1.3	3.1	1.8	2.6
Current	13.1	7.2	1.8	-5.3	-0.1	-1.9	2.6	1.3	1.5
Current account balance (in percent of GDP)									
Nov. 2017 DSA	-10.8	-11.3	-10.3	-5.1	-3.5	-3.8	-3.7	-5.2	-4.8
Current	-14.4	-15.9	-12.6	-8.9	-8.1	-5.6	-5.9	-7.7	-4.4
Revenue and grants (in percent of GDP)									
Nov. 2017 DSA	26.8	26.9	26.8	26.0	25.8	25.9	25.8	26.0	25.8
Current	28.1	28.8	28.7	28.6	28.8	29.0	29.0	28.4	28.0
Primary fiscal balance (in percent of GDP)									
Nov. 2017 DSA	1.2	1.2	1.5	1.7	1.7	1.6	1.1	0.7	-1.4
Current	1.2	1.5	1.5	1.7	1.6	1.6	1.6	1.4	0.9
Price of iron ore (US$/Ton)									
Nov. 2017 DSA	71.7	62.0	57.1	54.6	54.6	54.6	54.6	55.5	54.6
Current	71.1	69.6	67.5	65.8	65.8	65.8	65.8	66.3	65.8

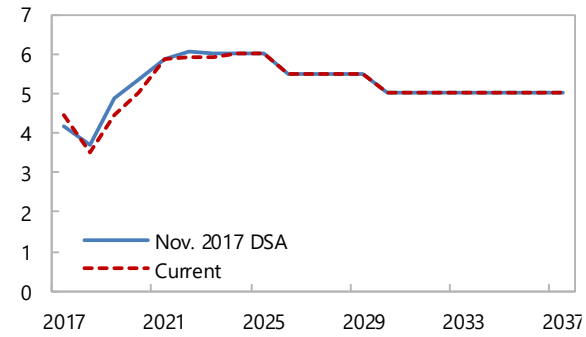
Sources: Mauritanian authorities; and Fund staff estimates and projections.

1/ For Nov. 2017 DSA 2030-37

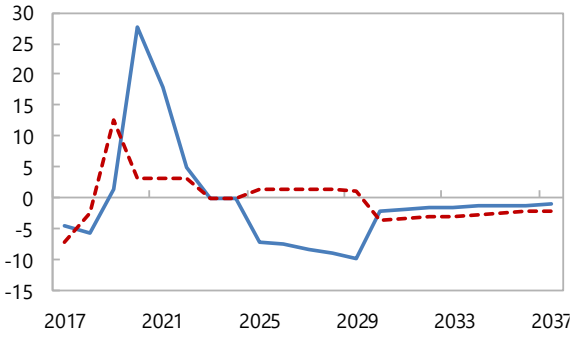
11. The fiscal outlook as measured by the primary fiscal balance is projected to be on average 1.4 percent of GDP during 2018–28, higher than before, reflecting already achieved gains in tax administration and further planned tax reforms. In the longer run, the rationalization of subsidies and decline in the wage bill as a share of GDP are projected to contribute to a further increase in the primary fiscal balance.

Mauritania: Macroeconomic Projections, 2017–37

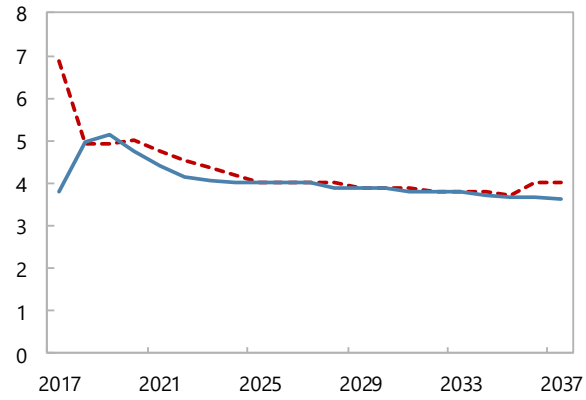
Real Non-Extractive GDP Growth
(Percent change)



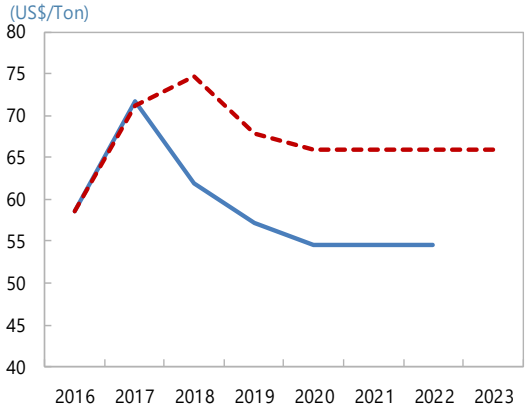
Real Extractive GDP Growth
(Percent change)



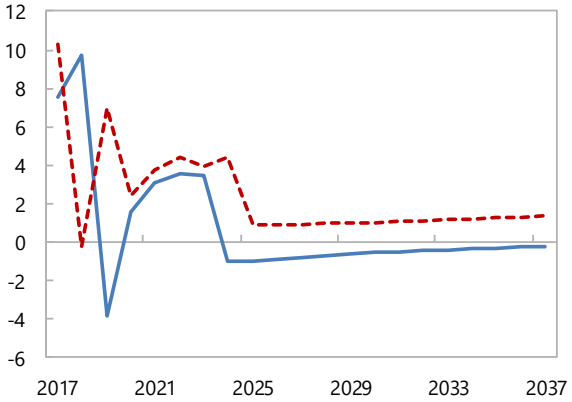
Projected New Debt Disbursements
(In percent of GDP)



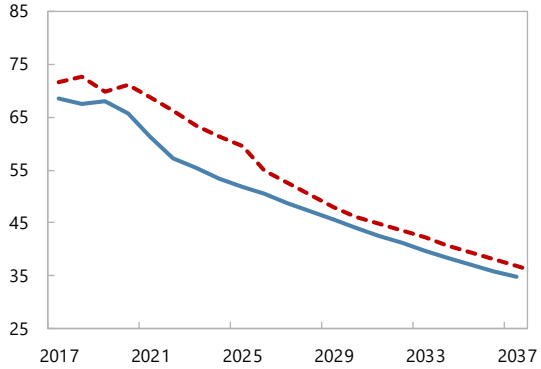
Price of Iron Ore
(US$/Ton)



Terms of Trade
(Percent change)



PPG External Debt 1/
(In percent of GDP)



Source: Mauritanian authorities; and IMF staff estimates

1/ Excluding arrears to Kuwait for which debt relief under HIPC-MDRI is assumed.

13. Taking into account the existing pipeline of project loans and new borrowing needs, external debt disbursements are projected to average 4.4 percent of GDP in 2018–20, unchanged from the last DSA. Over the long term, disbursements are projected to decline gradually to 3.5 percent by 2038, reflecting the greater prioritization of public investment, sound debt management, and a crowding in of private investment and FDI as the authorities' structural reforms take hold. The average grant element of new disbursements gradually declines from 32 percent on average during 2018–28 to 24 percent during 2029–38, reflecting a shift from multilateral sources to non-Paris Club official bilateral creditors and commercial loans. On domestic debt, treasury bonds with maturities greater than one year are progressively introduced beginning in 2024, following planned improvements in debt issuance procedures and reforms in the monetary policy framework. However, reliance on domestic bond financing is projected to be small in view of the shallow depth of the local market and to contain debt service pressures on the budget, with new disbursements amounting to 2 percent of GDP on average in 2018–28, and 1½ percent of GDP in 2029–38.

14. The LIC-DSF realism tools suggest that projections underpinning this DSA are reasonable (Figures 3 and 4). The decomposition of the drivers of debt dynamics, which compare past and projected dynamics and forecast errors in previously projected debt dynamics, flags the importance of unexpected volatile commodity prices which have a significant impact on the current account and growth owing to the undiversified structure of the economy. In addition, the large unanticipated increase in borrowing during 2014-17 is not expected to recur in the context of the authorities' ECF-supported program and their strong commitment to prudent debt management consistent with debt sustainability. Cross-country experience with fiscal adjustment under IMF programs for low-income countries indicates that the programmed three-year primary balance adjustment for Mauritania is realistic. Also, with respect to the projected baseline pick-up in growth, the growth dampening effect of the programmed fiscal adjustment is more than offset by the pickup in growth in the extractive sector and the return to average weather conditions and its impact on agriculture and livestock relative to the preceding period of drought. Consistent with this, the current DSA does not anticipate any major change in the contribution of public investment to growth over the medium term, but rather growth being driven by an increase in the contribution from other factors (private investment, labor and TFP) compared to the past. In sum, the realism tools indicate that the macroeconomic projections are realistic but also flag the potential downside risks of volatile commodity prices and unrealized increases in the drivers of growth.

COUNTRY CLASSIFICATION AND STRESS TESTS

15. Mauritania's debt-carrying capacity remains "medium." Based on the IMF's October 2018 *World Economic Outlook* (WEO) data and 2017 update to the CPIA index, the Composite Indicator (CI) index is calculated at 2.68, indicating weak debt-carrying capacity. However, since this is the first change

in classification relative to its previous "medium" capacity, the medium rating is retained.[10] The relevant debt and debt service burden indicators are listed below.

Calculation of the CI Index

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	3.370	1.30	48%
Real growth rate (in percent)	2.719	4.520	0.12	5%
Import coverage of reserves (in percent)	4.052	24.032	0.97	36%
Import coverage of reserves^2 (in percent)	-3.990	5.775	-0.23	-9%
Remittances (in percent)	2.022	1.906	0.04	1%
World economic growth (in percent)	13.520	3.583	0.48	18%
CI Score			2.69	100%
CI rating			Weak	

16. For the scenario stress tests default values have been used. Under the combined contingent liability stress tests, no contingency is included for PPPs because to date there are none;[11] however, following the adoption of a new PPP law in 2017 a first PPP project is being launched (no firm numbers are available on the magnitude of this PPP) and more are expected in the future. For SOEs, the default parameter of 2 percent of GDP is retained, to capture a potential fiscal risk stemming from SNIM, although in the past SNIM has operated successfully on commercial terms; by way of comparison SNIM's external debt (not guaranteed by the government) was equivalent to 8 percent of GDP. Given the concentration of Mauritania's exports on metal commodities the commodity price stress is triggered using the default parameter values.

EXTERNAL debt burden thresholds	
PV of debt in % of	
Exports	180
GDP	40
Debt service in % of	
Exports	15
Revenue	18
TOTAL public debt benchmark	
PV of total public debt in percent of GDP	55

[10] The score is just below the threshold value of 2.69 for a weak classification. A change in the classification of debt-carrying capacity requires two consecutive changes from the previous classification. As calculated using the April 2018 WEO data, the classification was medium with a CI score of 2.89. As compared to the April 2018 WEO calculation, the decline in debt-carrying capacity primarily reflects a reduction in the projected import coverage of reserves. Under the previous DSA (in 2017), the country classification which was based on the CPIA of 3.36 was medium debt-carrying capacity.

[11] The default value for the PPP contingent liability shock is based on the World Bank's cross-country database of PPPs capital stock. In the database, Mauritania is shown to have no PPP capital stock, and with no alternative firm numbers available on the current or potential prospective size of the capital stock the zero-default value has been retained.

Combined Contingent Liability Shock

1 The country's coverage of public debt	The central government, central bank, government-guaranteed debt		
	Default	Used for the analysis	Reasons for deviations from the default settings
2 Other elements of the general government not captured in 1.	0 percent of GDP	0	
3 SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	2	
4 PPP	35 percent of PPP stock	0.00	
5 Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	5	
Total (2+3+4+5) (in percent of GDP)	7.0		

1/ The default shock of 2% of GDP will be triggered for countries whose government-guaranteed debt is not fully captured under the country's public debt definition (1.). If it is already included in the government debt (1.) and risks associated with SoE's debt not guaranteed by the government is assessed to be negligible, a country team may reduce this to 0%.

DEBT SUSTAINABILITY ASSESSMENT

A. External Debt Sustainability

17. Baseline projections for one of the four debt indicators—the PV of debt-to-GDP—persistently breach its respective threshold (Table 1 and Figure 1). The breaches for two other indicators are small and temporary (one year). The baseline evolution and breaches of all indicators are generally in line with the November 2017 DSA. The PV of debt-to-GDP ratio shows a similar starting point and downward trend but the rescheduling of repayments of the Saudi loan by three years, a slower projected growth in nominal GDP, and a weaker outlook for the current account balance delays the crossover point to below the applicable threshold by two years, from 2024 to 2026. The PV of debt-to exports breaches the applicable threshold in the first projection year and remains below thereafter. The debt service-to-revenues indicators breaches the relevant threshold only in 2021 (reflecting the onset of repayments on the rescheduled Saudi loan); this breach is smaller and shorter than in the November 2017 DSA. Both debt-service indicators are closer to their threshold during the projection period than before, hovering just below their respective thresholds, in part reflecting the downward revision (20 percent to 15 percent and 20 percent to 18 percent, respectively) of the thresholds since the previous DSA.[12]

18. The standardized stress tests show breaches of the thresholds by all the debt indicators (Table 2). The most extreme shocks are the combination shock (PV of debt-to-GDP ratio), the export growth shock (PV debt-to-exports ratio and debt service-to-exports ratio) and the one-time depreciation shock (debt service-to-revenues ratio). Other shocks also result in breaches of the relevant thresholds for all the debt indicators.

19. The tailored commodity price shock results in a persistent breach of the threshold for all four debt indicators. In addition, the tailored stress test for the combined contingent liability shock

[12] The external debt sustainability framework (Table 1) shows a sizeable negative residual (i) in 2018, reflecting a combination primarily of net private sector financial inflows of the mining sector and the impact of endogenous price and exchange rate dynamics; and (ii) in 2019, reflecting assumed debt relief on the debt in arrears to Kuwait.

causes a persistent breach of the PV of debt-to-GDP indicator, and a one-year breach for the debt service-to-revenues indicator.

B. Public Debt Sustainability

20. The dynamics of total public debt is dominated by external debt (Table 3 and Figure 2). The public debt stock is mostly composed of external debt, with domestic debt (primarily short-term treasury bills) amounting to only 5 percent of GDP at end-2017. In 2018, the stock of domestic debt is projected to increase with the addition of debts owed by the government to the BCM covered under the 2018 convention (see earlier discussion on public debt coverage) amounting to 8.3 percent of 2018 GDP. Under the baseline PV of public debt-to-GDP ratio shows a sustained breach of the public debt benchmark value: the addition of this debt causes a one-time increase in the debt ratio, which thereafter steadily declines falling below the 55 percent benchmark in 2023. The breach is less pronounced and protracted than in the external DSA. The PV of debt-to-revenue and debt-service-to revenues indicators also show a steady decline from an initial high point in 2018.[13]

21. The standardized stress tests suggest that the largest negative impact (most extreme shock) on the three debt indicators would stem from an export growth shock (PV of debt-to-GDP ratio and PV of debt-to-revenues ratio) and a real GDP growth shock (debt service-to-revenue ratio) (Table 4). Under all the standardized stress shocks the PV of debt-to-GDP breaches the benchmark value. As regards the tailored stress tests, both contingent liability and commodity price shocks result in breaches of the benchmark value for the PV of debt-to-GDP. These two shocks also have significant impacts on the remaining two debt indicators.

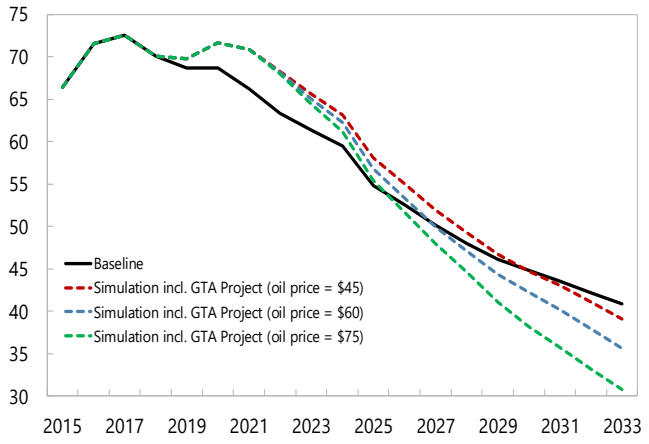
[13] The public debt sustainability (Table 4) shows a sizeable residual in 2019, which reflects debt relief on the debt in arrears to Kuwait, as in the external debt sustainability analysis. Other residuals are due to debt disbursements on loans on-lent by the government to parastatals that are not captured in the central government budget; debt service on these loans, however, is paid by the central government and is included in the budget.

POTENTIAL IMPACT OF OFF-SHORE GAS

22. The long-term outlook would significantly improve with the development of the off-shore gas field Grande-Tortue/Ahmeyim (GTA). Feasibility studies are proceeding apace with a final investment decision (FID) expected by end-2018 on the first of the three phases of the project (Box 1). Until the FID is reached, however, this project has not been incorporated in baseline projections given considerable uncertainty on its implications for the macroeconomic projections and any related PPG external borrowing. Despite the sizeable upfront costs borne by Mauritania's national oil company (NOC) during the first few years of the project, large revenues would accrue to the budget starting in 2022. These revenues could be used to expand growth-enhancing spending which, if efficient and supported by structural reforms, could boost actual and potential growth and reduce long-run debt-to-GDP ratios. Alternatively, if the revenues are saved or used to substitute for external borrowing, net public external debt would eventually drop below the baseline (Text Figure).

23. In the short term, however, the NOC's participation in the GTA project may put debt sustainability at risk. The NOC's participation in the Phase I of the project, estimated at about $307 million, would need to be financed by external borrowing. Under the ECF-supported program, there is zero limit on non-concessional borrowing (NCB), and any such borrowing to finance the project would require an exception to the program limit, as has been provided for two other project loans If the project is financed in full by external borrowing, it would lead to an increase in the debt-to-GDP ratio by up to 5 percent of GDP in 2022 relative to the baseline (Text Figure).

External Public Debt, Illustrative Scenario, 2015–33
(GTA Phase 1 only; excl. Kuwaiti debt, in percent of GDP)



Sources: Mauritanian authorities; World Bank; and IMF staff calculations.

24. Simulations are highly sensitive to multiple technical and economic parameters, including projected oil and gas prices. So far, until the FID is made, the debt and macroeconomic impact of the GTA has not been included in baseline projections.

Box 1. Mauritania: The Grande-Tortue/Ahmeyim Gas Project and Its Financial Impact[1]

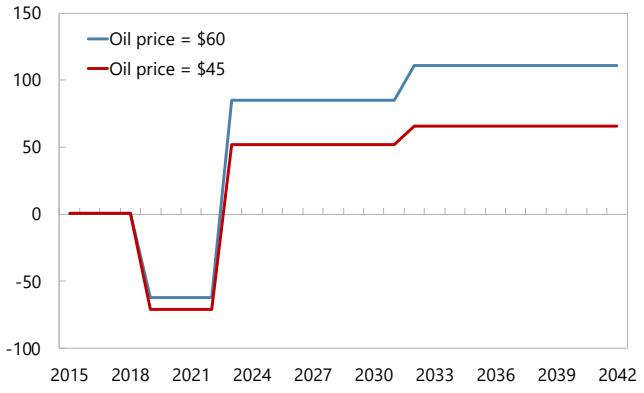
The Grande-Tortue/Ahmeyim (GTA) gas project is an off-shore gas field straddling the maritime boundary between Mauritania and Senegal, under development by BP (operator). With gas resources estimated at 15 trillion cubic feet, the field will be developed as an export project. Phase 1 of production of 2.3 million tons annually (mtpa) would involve drilling several kilometers in very deep water of about 2,800 meters, bringing the gas through 80 km of flowlines to a floating treatment vessel and further to a liquification vessel anchored 8 km offshore in water 30 meters deep, protected by a newly built breakwater. First gas is planned for end-2021. During phases 2 and 3, gas processing and treatment would be done on platforms and each phase would raise production by 4 mtpa over 2–3 years, for about 25 years. The first phase has higher unit costs but allows production to be jumpstarted rapidly, while the subsequent phases would achieve higher rates of return. The final investment decision (FID) to launch the project is expected by end-2018.

Estimates suggest aggregate gross revenues for all three phases around $80 billion over a total of 30 years, under a baseline Brent oil price of $60 per barrel. Revenues minus costs will be shared among BP, Kosmos Energy, the two national oil companies, and the two governments as profit oil, income taxes, and dividends. Net revenues for Mauritania could reach $14 billion during 2022–51 (about 9 percent of 2018 GDP annually), of which $1.4 billion in dividends to the national oil company SMHPM. These estimates vary between $4.2–25.5 billion under oil price assumptions between $30–90 per barrel.

Mauritania's financial participation in GTA as a shareholder is estimated at $307 million (5.5 percent of GDP) for Phase 1, possibly rising to $0.8–1 billion for all three phases, if it buys the maximum contractual share of 14 percent. The minimum participation is 10 percent. The share is payable over four years, with a first payment of $70 million (1¼ percent of GDP) due in 2019. Financing options considered by the authorities include pre-financing by BP or by the gas marketing company, official and commercial loans, a drawdown of the government's oil fund, the use of the 2015 Saudi deposit at the BCM, or combinations thereof. Phases 2 and 3 may be financed by the consortium through project financing, which would reduce the need for the government to fund subsequent development costs.

Projected revenues from Phase 1 are highly uncertain and depend largely on international oil price assumptions. Phase 1 entails payments by the national oil company SMHPM of its share in the project during the first few years, followed by positive cash flows during the production period 2022–42 (Box Figure). Total net revenues from Phase 1 for Mauritania—in the form of income taxes, profit oil, and dividends to SMHPM—could reach between $0.9 billion for a Brent price of $45 per barrel to $1.7 billion at $60 (17–31 percent of 2019 GDP).

Simulated GTA Phase 1 Net Revenues, 2015-42
(In millions of USD)



Sources: Mauritanian authorities; World Bank; and IMF staff calculations

The World Bank is supporting Mauritania and Senegal to strengthen their negotiating and institutional capacities, with grants of $20 million and $29 million, respectively.

[1] Sources: Mauritanian authorities, World Bank, BP, Kosmos Energy, and IMF staff estimates.

RISK RATING AND VULNERABILITIES

25. Mauritania's risk of external debt distress remains high owing to sharp increase in borrowing during 2014-16 to finance infrastructure and external deficits, and a contraction in nominal GDP due to a large terms-of-trade shock and some exchange rate depreciation in 2016. The projected trajectory of the debt-to GDP and the PV of debt-to-GDP ratios is slightly higher than in the November 2017 DSA, reflecting a lower level of gold production associated with the suspension of an expansion of gold extraction capacity in the early years of the projection period. Nevertheless, these two debt burden indicators continue to show a clear downward trend. However, because of a less favorable macroeconomic outlook and the rescheduling of repayments of the Saudi loan, the prospects for an exit from a high risk of distress have been delayed by two years, with the PV of external PPG debt-to-GDP showing a sustained breach of the relevant threshold. The projected trajectories of the two debt service indicators remain close to their thresholds pointing to the need to monitor closely the consequences of any new borrowing on debt service. The stress tests illustrate the vulnerabilities of the debt indicators to negative shocks affecting export and growth performance and the fiscal path, stemming from lower global commodity prices, adverse weather, policy implementation risks, and regional security developments.

26. The DSA also suggests that the overall risk of debt distress is high, with the PV of public debt-to-GDP breaching the benchmark value for a sustained period. Overall public debt dynamics are dominated by those of external PPG debt.

27. The DSA highlights the need to follow sound economic policies, including a prudent borrowing strategy that takes on new debt at a moderate pace, avoids non-concessional borrowing, and relies instead on grants and concessional financing. To avoid exacerbating short-term liquidity risks, new borrowing resulting in significant additional short-term debt service should be avoided. The authorities should also continue their best efforts to resolve the external debt in arrears with Kuwait. More generally, raising prospects for debt sustainability hinge on sustaining structural reforms to promote inclusive growth and economic diversification through private sector development; improving public financial management to raise the efficiency and growth dividends of public current and capital spending; and strengthening debt management capacity. Sound fiscal policy geared towards creating fiscal space for growth-enhancing social and infrastructure spending is also needed. These objectives are reflected in the authorities' growth and development strategy and thus far under the IMF-supported program, the authorities have made progress in implementing the policies and reforms needed to achieve these objectives.

AUTHORITIES' VIEWS

28. While the authorities acknowledge the need for prudent debt policies and stronger public investment management, they question the rating of high risk of debt distress. In particular, the authorities point to the low debt service burden, which in their view makes their largely concessional debt stock manageable. They note that the deposit made at the central bank by a development partner

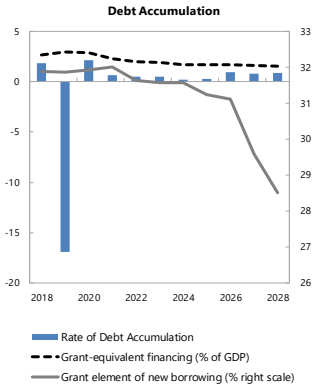
was rescheduled, which suggests a low rollover risk. They look forward to the rebasing of their national accounts, which they expect will raise GDP and therefore reduce debt ratios.

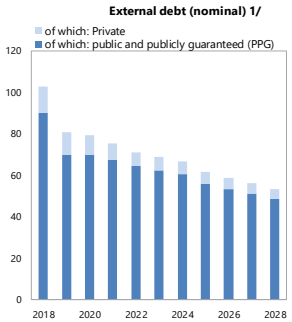
Table 1. Mauritania: External Debt Sustainability Framework, Baseline Scenario, 2015-2038

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2028	2038	Historical	Projections
External debt (nominal) 1/	**106.5**	**110.4**	**107.0**	**102.9**	**80.8**	**79.2**	**75.4**	**71.2**	**68.8**	**53.5**	**36.6**	**88.6**	**70.4**
of which: public and publicly guaranteed (PPG)	**91.0**	**94.1**	**91.9**	**90.1**	**69.9**	**69.8**	**67.4**	**64.5**	**62.4**	**48.7**	**34.6**	**76.4**	**63.0**
Change in external debt	19.3	3.8	-3.4	-4.1	-22.1	-1.5	-3.9	-4.2	-2.3	-2.6	-2.2		
Identified net debt-creating flows	**19.5**	**12.6**	**-2.9**	**1.1**	**0.1**	**-1.6**	**-2.6**	**-4.3**	**-3.7**	**-1.8**	**-1.8**	**3.6**	**-1.8**
Non-interest current account deficit	**18.9**	**14.0**	**12.2**	**13.9**	**10.8**	**7.1**	**6.5**	**4.1**	**4.5**	**4.2**	**3.4**	**15.3**	**6.4**
Deficit in balance of goods and services	-87.4	-89.1	-97.2	-96.2	-95.1	-89.8	-86.2	-82.0	-80.6	-65.7	-41.2	**-106.7**	**-80.5**
Exports	33.8	35.7	39.7	38.4	39.3	39.1	37.9	37.0	36.2	29.8	18.4		
Imports	-53.6	-53.5	-57.6	-57.9	-55.7	-50.7	-48.3	-45.1	-44.4	-36.0	-22.8		
Net current transfers (negative = inflow)	-3.7	-5.2	-5.1	-3.3	-3.5	-3.1	-2.8	-2.7	-2.7	-2.0	-0.9	**-3.8**	**-2.7**
of which: official	-2.1	-3.6	-3.2	-1.4	-1.6	-1.3	-1.0	-1.0	-1.0	-0.7	-0.4		
Other current account flows (negative = net inflow)	110.0	108.4	114.5	113.4	109.3	100.1	95.5	88.9	87.9	72.0	45.5	**125.8**	**89.6**
Net FDI (negative = inflow)	**-10.4**	**-5.8**	**-11.9**	**-11.3**	**-7.0**	**-6.7**	**-6.5**	**-5.9**	**-6.0**	**-4.1**	**-4.2**	**-10.0**	**-5.9**
Endogenous debt dynamics 2/	**11.1**	**4.4**	**-3.2**	**-1.5**	**-3.7**	**-2.0**	**-2.5**	**-2.5**	**-2.2**	**-2.0**	**-1.0**		
Contribution from nominal interest rate	0.9	1.1	2.2	2.0	1.9	1.8	1.7	1.6	1.5	0.8	0.7		
Contribution from real GDP growth	-0.4	-2.0	-3.2	-3.5	-5.6	-3.7	-4.2	-4.0	-3.6	-2.7	-1.7		
Contribution from price and exchange rate changes	10.6	5.3	-2.2	...	...	...	...	...	...	...	...		
Residual 3/	**-0.3**	**-8.8**	**-0.5**	**-5.2**	**-22.1**	**0.0**	**-1.3**	**0.1**	**1.3**	**-0.7**	**-0.4**	**-0.2**	**-3.1**
of which: exceptional financing	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	**...**	**...**	**74.6**	**71.6**	**51.7**	**51.8**	**50.0**	**48.0**	**46.6**	**36.9**	**27.7**		
PV of PPG external debt-to-exports ratio	**...**	**...**	**188.0**	**186.5**	**131.5**	**132.5**	**131.8**	**129.6**	**128.7**	**124.1**	**150.5**		
PPG debt service-to-exports ratio	**17.0**	**18.7**	**10.5**	**12.8**	**12.2**	**12.0**	**14.3**	**13.3**	**12.9**	**12.8**	**18.3**		
PPG debt service-to-revenue ratio	**20.9**	**25.6**	**15.4**	**17.5**	**17.3**	**16.9**	**19.2**	**17.4**	**16.4**	**13.8**	**12.2**		
Gross external financing need (Billion of U.S. dollars)	0.8	0.8	0.6	0.8	0.9	0.7	0.7	0.6	0.6	0.7	0.7		
Key macroeconomic assumptions													
Real GDP growth (in percent)	0.4	1.8	3.0	3.5	5.7	4.8	5.6	5.6	5.3	5.1	4.7	**3.2**	**5.2**
GDP deflator in US dollar terms (change in percent)	-10.8	-4.8	2.0	3.0	0.0	-0.7	-0.6	-0.4	-1.2	1.3	1.7	**1.2**	**0.5**
Effective interest rate (percent) 4/	0.9	1.0	2.1	2.0	1.9	2.3	2.2	2.2	2.1	1.4	2.1	**1.0**	**1.8**
Growth of exports of G&S (US dollar terms, in percent)	-22.3	2.2	16.9	3.2	8.3	3.4	1.7	2.6	1.8	3.2	2.1	**5.6**	**2.9**
Growth of imports of G&S (US dollar terms, in percent)	-27.0	-3.2	13.1	7.2	1.8	-5.3	-0.1	-1.9	2.6	2.7	2.1	**5.0**	**1.3**
Grant element of new public sector borrowing (in percent)	...	...	...	31.9	31.9	31.9	32.0	31.6	31.6	28.5	20.9	**...**	**31.2**
Government revenues (excluding grants, in percent of GDP)	27.6	26.1	27.1	28.0	27.7	27.7	28.2	28.4	28.4	27.6	27.6	**24.0**	**27.9**
Aid flows (in Billion of US dollars) 5/	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	2.6	3.0	2.8	2.3	2.0	1.9	1.5	1.1	**...**	**2.1**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	39.5	41.6	40.0	38.9	39.8	39.8	35.3	29.5	**...**	**38.6**
Nominal GDP (Billion of US dollars)	5	5	5	5	6	6	6	6	7	9	16		
Nominal dollar GDP growth	-10.4	-3.0	5.1	6.7	5.7	4.0	4.9	5.2	4.0	6.5	6.5	**4.5**	**5.7**
Memorandum items:													
PV of external debt 7/	...	...	89.6	84.4	62.6	61.2	57.9	54.6	53.0	41.7	29.7		
In percent of exports	...	...	226.0	219.9	159.2	156.5	152.9	147.7	146.4	140.0	161.3		
Total external debt service-to-exports ratio	23.9	25.8	30.9	34.7	32.0	31.0	32.7	30.8	29.8	25.0	29.0		
PV of PPG external debt (in Billion of US dollars)			3.7	3.8	2.9	3.0	3.0	3.1	3.1	3.3	4.5		
(PVt-PVt-1)/GDPt-1 (in percent)				1.8	-16.9	2.2	0.6	0.5	0.5	0.8	0.8		
Non-interest current account deficit that stabilizes debt ratio	-0.4	10.2	15.6	18.1	32.8	8.6	10.3	8.3	6.8	6.8	5.6		

Definition of external/domestic debt	**Residency-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 - ρ(1+g) + Ɛα (1+r)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, ρ = growth rate of GDP deflator in U.S. dollar terms, Ɛ=nominal appreciation of the local currency, and α= share of local currency-denominated external debt in total external debt.

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.

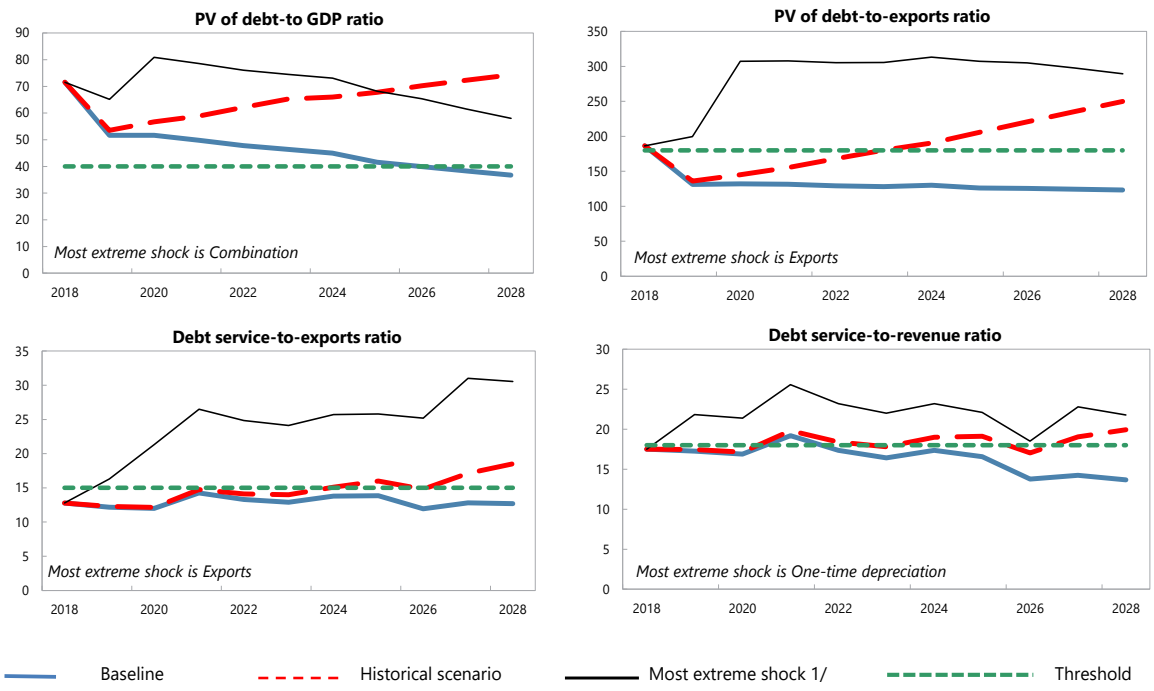
5/ Defined as grants, concessional loans, and debt relief.

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.

Figure 1. Mauritania: Indicators of Public and Publicly Guaranteed External Debt Under Alternatives Scenarios, 2018–28



Customization of Default Settings	Size	Interactions
Tailored Tests		
Combined CLs	No	
Natural Disasters	n.a.	n.a.
Commodity Prices 2/	No	No
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
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	1.8%	1.8%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	20	20
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 2028. 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 exterme 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.

Table 2. Mauritania: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2018–28 (In percent)

	Projections 1/										
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PV of debt-to GDP ratio											
Baseline	**71.6**	**51.7**	**51.8**	**50.0**	**48.0**	**46.6**	**45.3**	**41.8**	**40.2**	38.5	36.9
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2028 2/	**71.6**	**53.6**	**56.9**	**59.1**	**62.5**	**65.7**	**66.5**	**68.3**	**70.6**	**72.4**	**74.2**
B. Bound Tests											
B1. Real GDP growth	**71.6**	**56.0**	**59.8**	**57.7**	**55.4**	**53.8**	**52.3**	**48.3**	**46.4**	**44.5**	**42.7**
B2. Primary balance	**71.6**	**53.9**	**56.8**	**56.2**	**55.0**	**54.4**	**53.9**	**50.6**	**48.9**	**46.9**	**45.1**
B3. Exports	**71.6**	**62.2**	**78.1**	**75.9**	**73.5**	**72.1**	**70.7**	**65.5**	**62.0**	**58.4**	**55.1**
B4. Other flows 3/	**71.6**	**58.4**	**65.2**	**63.3**	**61.2**	**59.9**	**58.6**	**54.1**	**51.4**	**48.6**	**46.0**
B5. One-time 30 percent nominal depreciation	**71.6**	**65.5**	**80.5**	**78.1**	**75.4**	**73.7**	**72.1**	**67.1**	**63.8**	**60.4**	**57.3**
B6. Combination of B1-B5	**71.6**	**65.4**	**81.3**	**79.1**	**76.6**	**75.0**	**73.7**	**68.2**	**64.5**	**60.8**	**57.3**
C. Tailored Tests											
C1. Combined contingent liabilities	**71.6**	**55.6**	**56.7**	**55.7**	**54.4**	**53.8**	**53.2**	**50.1**	**48.5**	**46.7**	**45.0**
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	**71.6**	**57.8**	**63.4**	**63.6**	**63.7**	**64.8**	**65.9**	**63.2**	**62.4**	**61.3**	**60.2**
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.
Threshold	40	40	40	40	40	40	40	40	40	40	40
PV of debt-to-exports ratio											
Baseline	**186.5**	131.5	132.5	131.8	129.6	128.7	130.7	126.9	126.3	125.3	124.1
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2028 2/	**186.5**	136.3	145.6	156.0	169.0	**181.6**	**192.1**	**207.3**	**221.8**	**235.8**	**249.2**
B. Bound Tests											
B1. Real GDP growth	**186.5**	131.5	132.5	131.8	129.6	128.7	130.7	126.9	126.3	125.3	124.1
B2. Primary balance	**186.5**	137.1	145.3	148.3	148.7	150.4	155.6	153.7	153.6	152.8	151.6
B3. Exports	**186.5**	**200.3**	**308.7**	**309.7**	**307.3**	**307.8**	**315.9**	**307.4**	**301.0**	**293.9**	**286.0**
B4. Other flows 3/	**186.5**	148.6	166.8	167.0	165.4	165.4	169.3	164.4	161.5	158.2	154.6
B5. One-time 30 percent nominal depreciation	**186.5**	131.5	162.6	162.7	161.0	160.8	164.5	161.0	158.4	155.4	152.0
B6. Combination of B1-B5	**186.5**	175.3	**180.4**	**233.4**	**231.6**	**232.0**	**238.2**	**231.6**	**226.8**	**221.4**	**215.4**
C. Tailored Tests											
C1. Combined contingent liabilities	**186.5**	141.5	144.9	146.8	147.1	148.6	153.7	152.0	152.3	152.0	151.3
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	**186.5**	**182.3**	**193.5**	**193.7**	**192.1**	**192.5**	**197.5**	**199.0**	**203.5**	**207.2**	**209.9**
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.
Threshold	180	180	180	180	180	180	180	180	180	180	180
Debt service-to-exports ratio											
Baseline	12.8	12.2	12.0	14.3	13.3	12.9	13.8	13.9	12.0	12.9	12.8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2028 2/	12.8	12.3	12.2	14.7	14.1	14.0	**15.1**	**16.3**	**15.6**	**18.1**	**19.7**
B. Bound Tests											
B1. Real GDP growth	12.8	12.2	12.0	14.3	13.3	12.9	13.8	13.9	12.0	12.9	12.8
B2. Primary balance	12.8	12.2	12.1	14.6	13.7	13.4	14.3	15.0	13.7	14.9	15.0
B3. Exports	12.8	**16.3**	**21.3**	**26.5**	**24.8**	**24.1**	**25.7**	**28.4**	**29.4**	**30.7**	**30.3**
B4. Other flows 3/	12.8	12.2	12.4	**15.1**	14.2	13.7	14.6	**16.2**	**15.7**	**16.5**	**16.3**
B5. One-time 30 percent nominal depreciation	12.8	12.2	12.0	**15.0**	14.1	13.6	14.6	14.6	**15.3**	**16.1**	**15.9**
B6. Combination of B1-B5	12.8	14.1	**16.1**	**19.9**	**18.7**	**18.2**	**19.3**	**21.5**	**22.1**	**23.2**	**22.8**
C. Tailored Tests											
C1. Combined contingent liabilities	12.8	12.2	12.2	14.6	13.7	13.3	14.3	14.4	12.6	13.5	13.4
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	12.8	**15.2**	15.0	**17.7**	**16.2**	**15.4**	**16.0**	**17.6**	**16.8**	**18.2**	**18.6**
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.
Threshold	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
Debt service-to-revenue ratio											
Baseline	17.5	17.3	16.9	**19.2**	17.4	16.4	17.4	16.6	13.8	14.4	13.8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2028 2/	17.5	17.5	17.1	**19.8**	**18.4**	17.8	**19.0**	**19.5**	**18.0**	**20.1**	**21.3**
B. Bound Tests											
B1. Real GDP growth	17.5	**18.7**	**19.5**	**22.2**	**20.1**	**19.0**	**20.1**	**19.2**	16.0	16.6	15.9
B2. Primary balance	17.5	17.3	17.1	**19.6**	17.9	17.0	**18.1**	17.9	15.8	16.6	16.1
B3. Exports	17.5	**18.3**	**19.4**	**23.1**	**20.9**	**19.9**	**20.9**	**22.0**	**21.9**	**22.1**	**21.1**
B4. Other flows 3/	17.5	17.3	17.5	**20.3**	**18.5**	17.5	**18.5**	**19.3**	**18.1**	**18.4**	17.6
B5. One-time 30 percent nominal depreciation	17.5	**21.8**	**21.4**	**25.6**	**23.2**	**22.0**	**23.2**	**22.2**	**22.3**	**22.7**	**21.7**
B6. Combination of B1-B5	17.5	**19.0**	**20.2**	**24.0**	**21.8**	**20.7**	**21.8**	**23.0**	**22.8**	**23.0**	**22.0**
C. Tailored Tests											
C1. Combined contingent liabilities	17.5	17.3	17.3	**19.6**	17.8	17.0	18.0	17.2	14.5	15.0	14.4
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	17.5	**18.3**	**18.6**	**21.7**	**19.7**	**18.7**	**19.7**	**20.2**	**18.6**	**19.5**	**19.3**
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.
Threshold	**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.

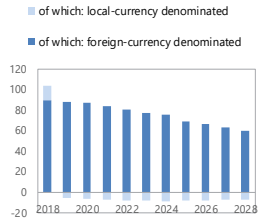
Table 3. Mauritania: Public Sector Debt Sustainability Framework, Baseline Scenario, 2015-2038

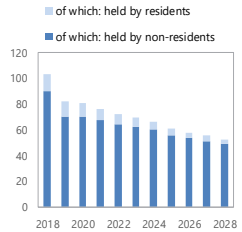
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2028	2038	Historical	Projections
Public sector debt 1/	**96.7**	**98.9**	**97.0**	**103.5**	**82.1**	**80.5**	**76.4**	**72.2**	**69.2**	**52.5**	**38.5**	**82.4**	**70.6**
of which: external debt	**91.0**	**94.1**	**91.9**	**90.1**	**69.9**	**69.8**	**67.4**	**64.5**	**62.4**	**48.7**	**34.6**	**76.4**	**63.0**
Change in public sector debt	18.1	2.2	-2.0	6.5	-21.4	-1.6	-4.1	-4.2	-3.0	-2.8	-1.3		
Identified debt-creating flows	**12.4**	**-0.4**	**-6.7**	**-4.3**	**-5.5**	**-3.7**	**-4.2**	**-4.2**	**-3.3**	**-3.7**	**-2.5**	**-1.6**	**-4.1**
Primary deficit	**2.3**	**-0.5**	**-1.2**	**-1.5**	**-1.5**	**-1.7**	**-1.6**	**-1.6**	**-1.6**	**-1.3**	**-0.9**	**0.3**	**-1.4**
Revenue and grants	29.4	28.0	28.1	28.8	28.7	28.6	28.8	29.0	29.0	28.0	28.0	**25.2**	**28.4**
of which: grants	1.8	1.9	1.0	0.8	1.0	0.8	0.6	0.6	0.6	0.4	0.4		
Primary (noninterest) expenditure	31.7	27.5	26.9	27.3	27.3	26.8	27.2	27.4	27.4	26.8	27.1	**25.5**	**27.0**
Automatic debt dynamics	**10.1**	**0.2**	**-5.5**	**-2.9**	**-4.0**	**-1.9**	**-2.6**	**-2.6**	**-1.7**	**-2.5**	**-1.6**		
Contribution from interest rate/growth differential	-0.2	-2.4	-3.4	-4.0	-6.3	-4.2	-4.6	-4.4	-4.1	-2.9	-1.7		
of which: contribution from average real interest rate	0.1	-0.7	-0.5	-0.7	-0.7	-0.4	-0.4	-0.4	-0.5	-0.2	0.1		
of which: contribution from real GDP growth	-0.3	-1.7	-2.9	-3.3	-5.6	-3.8	-4.2	-4.1	-3.6	-2.7	-1.8		
Contribution from real exchange rate depreciation	10.3	2.6	-2.1	...	...	...	...	...	...	...	...		
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**	**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		
Residual	**5.7**	**2.6**	**4.8**	**12.0**	**-13.6**	**4.3**	**2.1**	**1.8**	**2.8**	**1.3**	**1.4**	**4.0**	**1.4**
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	**...**	**...**	**79.0**	**85.9**	**64.8**	**63.3**	**59.8**	**56.5**	**54.2**	**41.3**	**32.1**		
PV of public debt-to-revenue and grants ratio	**...**	**...**	**281.0**	**298.3**	**225.5**	**221.6**	**208.0**	**195.0**	**186.8**	**147.4**	**114.4**		
Debt service-to-revenue and grants ratio 3/	**8.0**	**9.4**	**15.8**	**34.8**	**34.4**	**33.1**	**31.8**	**26.2**	**22.7**	**15.5**	**16.5**		
Gross financing need 4/	4.6	2.1	3.2	8.3	8.2	7.5	6.4	4.9	3.9	3.0	3.7		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	0.4	1.8	3.0	3.5	5.7	4.8	5.6	5.6	5.3	5.1	4.7	**3.2**	**5.2**
Average nominal interest rate on external debt (in percent)	0.0	0.0	1.3	1.2	1.2	1.5	1.5	1.5	1.5	1.6	2.3	**0.1**	**1.5**
Average real interest rate on domestic debt (in percent)	9.7	1.1	2.3	5.0	0.1	1.9	1.8	1.4	2.0	-0.8	0.9	**4.0**	**0.9**
Real exchange rate depreciation (in percent, + indicates depreciation)	14.4	2.9	-2.4	...	...	...	...	...	...	...	...	**1.4**	**...**
Inflation rate (GDP deflator, in percent)	-4.2	3.3	3.5	3.0	2.9	2.7	2.9	3.1	2.2	4.8	5.3	**4.3**	**3.6**
Growth of real primary spending (deflated by GDP deflator, in percent)	11.8	-11.7	0.8	5.2	5.5	3.2	6.8	6.3	5.3	3.9	4.8	**5.1**	**5.1**
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-15.8	-2.8	0.7	-8.0	20.0	-0.1	2.5	2.6	1.4	1.6	0.3	**-5.9**	**2.6**
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	**Residency-based**
Is there a material difference between the two criteria?	**Yes**

Public sector debt 1/





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 Residency-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.

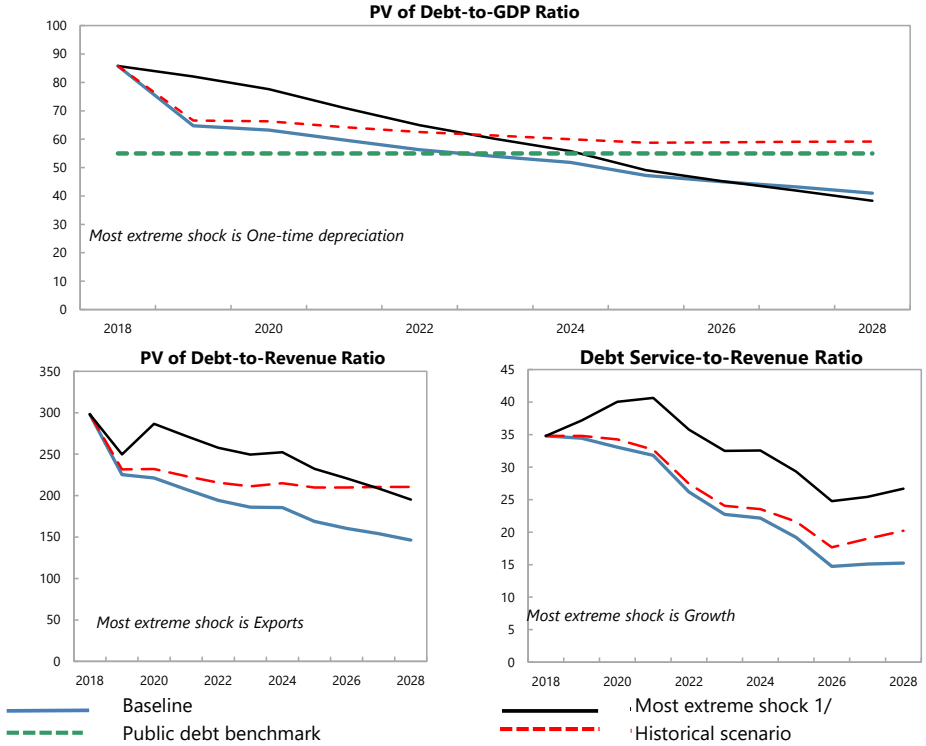
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

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 ((-): a primary surplus), which would stabilizes 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 2. Mauritania: Indicators of Public Debt Under Alternative Scenarios, 2018–28



Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	78%	78%
Domestic medium and long-term	1%	1%
Domestic short-term	22%	22%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.8%	1.8%
Avg. maturity (incl. grace period)	20	20
Avg. grace period	6	6
Domestic MLT debt		
Avg. real interest rate on new borrowing	2.0%	2.0%
Avg. maturity (incl. grace period)	3	3
Avg. grace period	2	2
Domestic short-term debt		
Avg. real interest rate	2%	2.0%

* 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 2028. 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 exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Table 4. Mauritania: Sensitivity Analysis for Key Indicators of Public Debt, 2018-2028

	Projections 1/										
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PV of Debt-to-GDP Ratio											
Baseline	**85.9**	**64.8**	**63.3**	**59.8**	**56.5**	54.2	52.0	47.5	45.3	43.5	41.3
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2028 2/	**86**	**67**	**66**	**64**	**63**	**62**	**60**	**59**	**59**	**60**	**60**
B. Bound Tests											
B1. Real GDP growth	**86**	**72**	**78**	**76**	**75**	**75**	**76**	**73**	**73**	**73**	**74**
B2. Primary balance	**86**	**68**	**69**	**65**	**61**	**59**	**56**	52	49	48	45
B3. Exports	**86**	**72**	**82**	**79**	**75**	**73**	**71**	**65**	**61**	**58**	54
B4. Other flows 3/	**86**	**72**	**77**	**73**	**70**	**68**	**66**	**60**	**57**	54	51
B5. One-time 30 percent nominal depreciation	**86**	**82**	**78**	**71**	**65**	**60**	**56**	49	46	42	39
B6. Combination of B1-B5	**86**	**67**	**67**	**61**	**57**	53	50	46	43	42	40
C. Tailored Tests											
C1. Combined contingent liabilities	**86**	**70**	**68**	**64**	**60**	**58**	**56**	51	49	47	45
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	**86**	**68**	**71**	**72**	**72**	**73**	**74**	**71**	**72**	**72**	**72**
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.
Public debt benchmark	55	55	55	55	55	55	55	55	55	55	55
PV of Debt-to-Revenue Ratio											
Baseline	298.3	225.5	221.6	208.0	195.0	186.8	186.6	169.8	161.6	155.1	147.4
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2028 2/	298	232	233	224	217	213	217	212	211	212	212
B. Bound Tests											
B1. Real GDP growth	298	248	271	264	259	259	271	259	260	262	262
B2. Primary balance	298	235	241	225	211	202	202	184	176	170	162
B3. Exports	298	250	288	273	259	251	254	233	218	206	193
B4. Other flows 3/	298	249	269	255	241	233	235	215	202	192	180
B5. One-time 30 percent nominal depreciation	298	287	273	248	225	209	202	177	163	151	138
B6. Combination of B1-B5	298	233	235	212	196	184	180	164	154	151	144
C. Tailored Tests											
C1. Combined contingent liabilities	298	244	238	223	209	200	200	182	174	168	161
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	298	248	260	262	258	259	269	256	256	258	258
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.
Debt Service-to-Revenue Ratio											
Baseline	34.8	34.4	33.1	31.8	26.2	22.7	22.2	19.2	14.8	15.3	15.5
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2028 2/	35	35	34	33	27	24	24	22	18	20	21
B. Bound Tests											
B1. Real GDP growth	35	37	40	41	36	33	33	30	26	27	28
B2. Primary balance	35	34	36	36	29	25	24	22	18	18	19
B3. Exports	35	34	34	33	28	24	24	22	21	21	21
B4. Other flows 3/	35	34	34	33	27	24	23	22	19	19	19
B5. One-time 30 percent nominal depreciation	35	35	36	36	31	27	27	24	18	19	19
B6. Combination of B1-B5	35	34	34	32	28	25	24	25	20	23	23
C. Tailored Tests											
C1. Combined contingent liabilities	35	34	39	34	28	25	24	21	17	16	16
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	35	37	36	35	34	32	32	29	25	26	28
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.

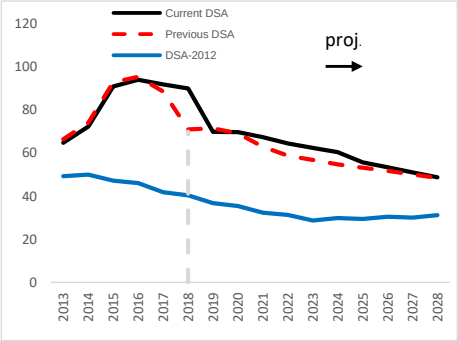
2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.

3/ Includes official and private transfers and FDI.

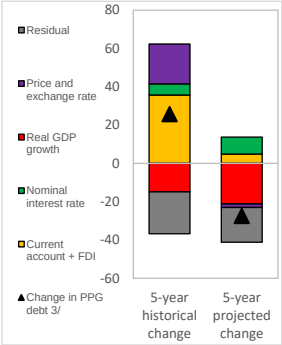
Figure 3. Mauritania: Drivers of Debt Dynamics – Baseline Scenario External Debt

External debt

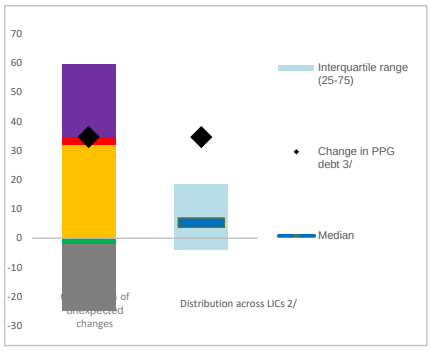
Gross Nominal PPG External Debt
(in percent of GDP; DSA vintages)



Debt-creating flows
(percent of GDP)

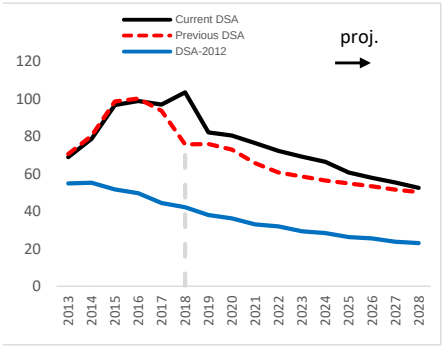


Unexpected Changes in Debt 1/
(past 5 years, percent of GDP)

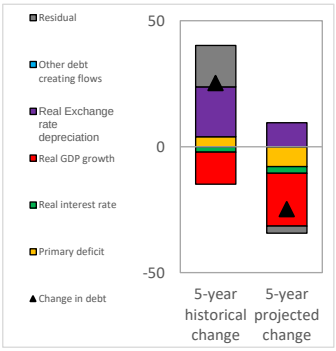


Public debt

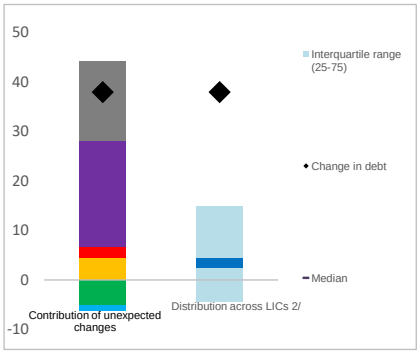
Gross Nominal Public Debt
(in percent of GDP; DSA vintages)



Debt-creating flows
(percent of GDP)



Unexpected Changes in Debt 1/
(past 5 years, percent of GDP)

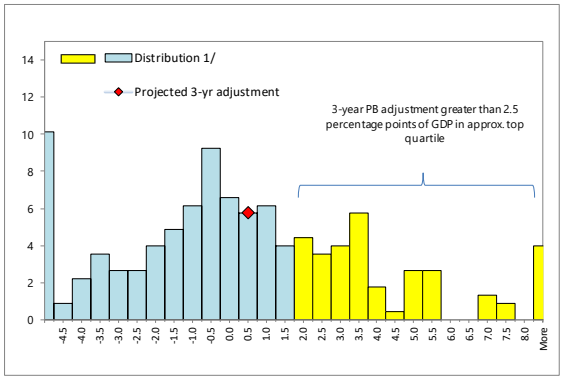


1/ Difference between anticipated and actual contributions on debt ratios.
2/ Distribution across LICs for which LIC DSAs were produced.
3/ Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.

Figure 4. Mauritania: Realism Tools

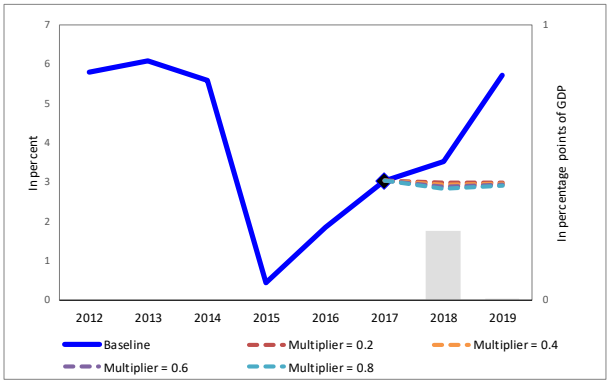
3-Year Adjustment in Primary Balance

(Percentage points of GDP)



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.

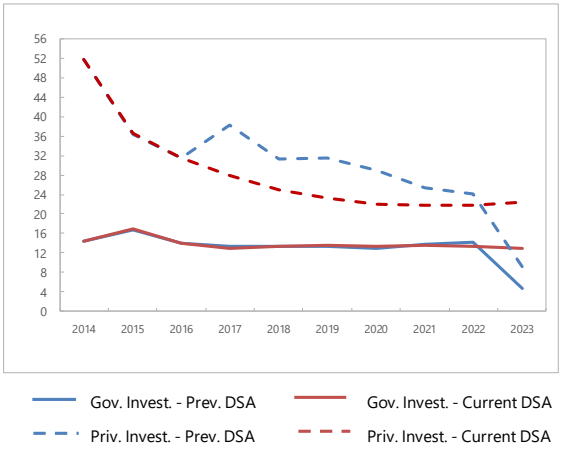
Fiscal Adjustment and Possible Growth Paths 1/



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)



Contribution to Real GDP growth

(Percent, 5-year average)