ISLAMIC REPUBLIC OF MAURITANIA

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STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

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

Mauritania's risk of debt distress remains high. Although an improvement in its CPIA rating led to an increase in debt thresholds this year, the risk rating is unchanged, owing to a substantial increase in external debt over the past three years to finance infrastructure and external deficits, and the contraction in nominal GDP due to the 2014–15 terms-of-trade shock. The outlook has improved, though, due to higher projected growth and lower projected disbursements in the medium term relative to the 2016 DSA. Nevertheless, baseline projections over the next twenty years show sizeable breaches of the debt indicator thresholds for the present value (PV) of public external debt-to-GDP ratio and the debt service-to-revenue ratio—the latter essentially due to the amortization of short-term loans extended to the central bank and the central government to weather the terms-of-trade shock. The PV of public external debt-to-GDP ratio remains above its threshold due to disbursements linked to the authorities' infrastructure projects.[1]

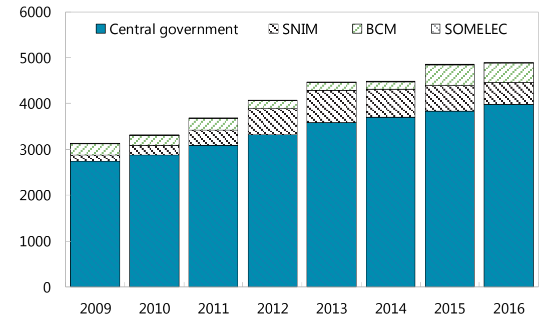
The DSA highlights the need to follow sound economic policies, including a prudent borrowing strategy that avoids non-concessional borrowing and relies instead on grants and concessional financing at a moderate pace. To limit existing near-term liquidity risks, new external borrowing resulting in significant 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, consistent with the HIPC Initiative.

[1] Prepared under the joint Fund-Bank Low-Income Country Debt Sustainability Framework. The 2016 DSA was published in IMF Country Report No. 16/115. Mauritania's policy performance according to the Country Policy and Institutional Assessment (CPIA) improved from "weak" to "medium" this year as the three-year moving average CPIA score remained above 3.25 for two consecutive years (3.30 in 2015 and 3.33 in 2016).

BACKGROUND

1. **External debt rose during the past two years due to sizable borrowing, although the headline impact was amplified by the large contraction in nominal GDP**. Between 2014–16, external public debt rose by $552 million (10 percent of 2014 GDP), but the debt ratio rose by 22 percentage points of GDP to 93.2 percent of GDP on the back of a 12 percent contraction in the nominal dollar GDP, on account of the terms-of-trade shock and the exchange rate depreciation. Mauritania's stock of external debt includes a passive debt in arrears owed to Kuwait. [2] Excluding this latter debt, external public debt reached 72.2 percent of GDP at end-2016. Much of the nominal increase was due to a $300 million non-concessional deposit from Saudi Arabia to support the central bank's reserves in 2015. The rest was mostly contracted by the central government to finance the budget and public investment projects.

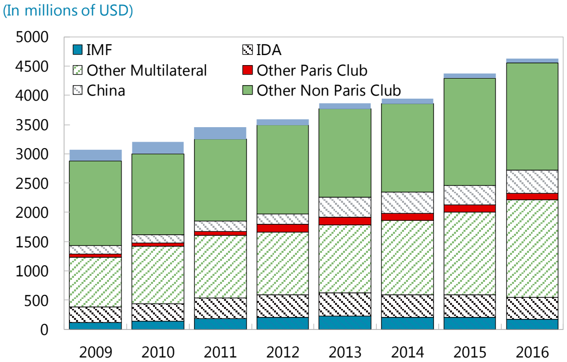
External Debt by Debtor, 2009–16
(In millions of USD)



Source: Mauritanian authorities.

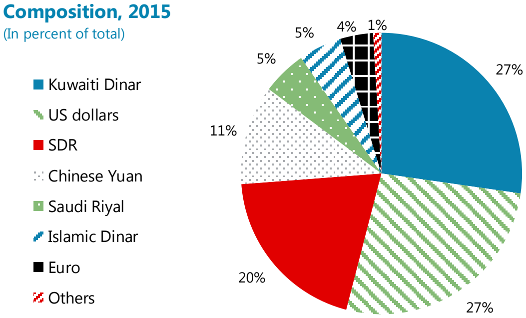
2. **External debt is largely composed of public debt contracted on concessional or semi-concessional terms with official creditors.** Public and publicly guaranteed (PPG) debt represented about 85 percent of total external debt at end-2016. PPG external debt includes debt contracted by the central government, the central bank, and state-owned enterprises (mainly the electricity company SOMELEC). It excludes borrowing by the public mining company, SNIM, as the company is run on a commercial basis and borrowed without government guarantees up to end-2016.[3]. External debt is mostly denominated in U.S. dollars and currencies pegged to or closely following it.

PPG External Debt by Creditor, 2009-16
(In millions of USD)



Sources: Mauritanian authorities.

External Debt of the Central Government: Currency Composition, 2015
(In percent of total)



Sources: Mauritanian authorities.

[2] A passive debt, now estimated at 21 percent of GDP, is owed to the Kuwait Investment Authority (KIA) since the 1970s. The authorities are seeking debt relief from Kuwait, but no agreement has been reached yet. This DSA, as in the previous one, assumes debt relief in the first year of the projection period (2017).

[3] Nevertheless, SNIM debt represents a contingent liability for the central government.

Table 1. Mauritania: Public and Publicly Guaranteed External Debt, 2013–16

	2013	2014	2015	2016	2013	2014	2015	2016
	(in Million of USD)				(in percent of GDP)			
Public and Publicly Guaranteed External Debt	**3,770.1**	**3,856.0**	**4,291.8**	**4,407.6**	**65.9**	**71.5**	**88.6**	**93.2**
Bilateral Creditors	1,985.7	1,994.7	2,289.3	2,294.3	34.7	37.0	47.3	48.5
Paris Club	136.3	123.1	119.4	115.9	2.4	2.3	2.5	2.5
Of which: France	95.5	87.0	81.4	81.5	1.7	1.6	1.7	1.7
Spain	35.8	31.7	34.3	31.1	0.6	0.6	0.7	0.7
Non Paris Club	1,849.4	1,871.6	2,169.9	2,178.4	32.3	34.7	44.8	46.1
Of which: China	333.4	367.3	340.4	339.3	5.8	6.8	7.0	7.2
Kuwait [1/]	1,140.9	1,140.1	1,141.8	1,146.5	19.9	21.1	23.6	24.2
Saudi Arabia [2/]	214.6	212.0	509.4	522.8	3.7	3.9	10.5	11.1
Multilateral Creditors	1,784.4	1,861.4	2,002.5	2,113.2	31.2	34.5	41.3	44.7
Of which: Islamic Development Bank (IDB)	218.1	273.8	340.5	374.9	3.8	5.1	7.0	7.9
International Development Association (IDA)	396.6	379.5	385.6	364.8	6.9	7.0	8.0	7.7
International Monetary Fund (IMF)	211.3	195.5	190.9	166.1	3.7	3.6	3.9	3.5
Arab Monetary Fund (AMF)	18.7	47.4	62.4	159.8	0.3	0.9	1.3	3.4
Arab Fund for Economic and Social Development (AFESD)	702.5	749.0	819.2	856.4	12.3	13.9	16.9	18.1
Memorandum items:								
Passive debt to Kuwait Investment Authority (KIA)	1,001.0	997.2	993.9	993.1	17.5	18.5	20.5	21.0
Saudi deposit at BCM	-	-	300.0	300.0	-	-	6.2	6.3
PPG external debt excluding passive debt to KIA	2,769.2	2,858.8	3,297.9	3,414.5	48.4	53.0	68.1	72.2
Nominal GDP	5,724.2	5,391.5	4,844.2	4,729.0	-	-	-	-

Source: Mauritanian authorities.

1/ Including passive debt to KIA under negotiation.

2/ Including Saudi deposit at BCM.

3. **The authorities' capacity to monitor and record debt remains weak.** Debt stock figures reported to staff for 2013–15 were revised upward by up to $300 million due to incomplete or delayed reporting from government agencies. Improving capacity to monitor and record debt will be critical for effective debt management in the future. In this respect, several initiatives are underway to strengthen debt management: the authorities are introducing information systems that should improve the exchange of information between the Ministry of Finance, central bank and project/investment entities; they also intend to reactivate the National Committee for Public Debt to ensure that it is involved in the investment selection and loan contracting process and to monitor the impact on debt and debt sustainability.

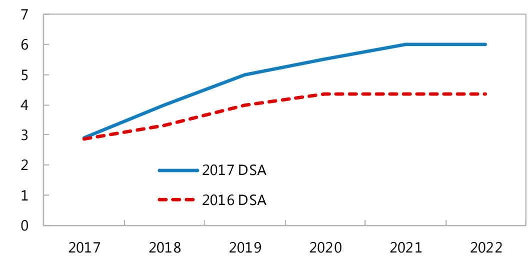
4. **The authorities continue to actively seek debt relief from Kuwait.** An agreement has not yet been reached between the Kuwait Investment Authority (KIA) and Mauritania to resolve this longstanding issue. Both parties are seeking agreement on the valuation of the debt, including interest in arrears. Under the 2002 Paris Club agreement following the completion point for Mauritania in 2002, Mauritania was expected to seek debt relief on at least comparable terms from non-Paris Club creditors.

DEBT SUSTAINABILITY ASSESSMENT

A. Macroeconomic Assumptions and Outlook

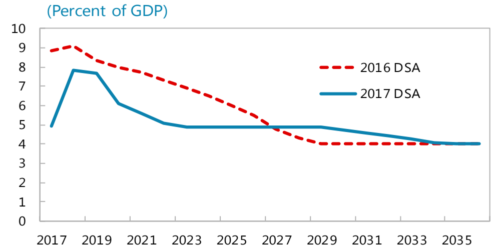
5. Compared to the previous DSA, the outlook has improved, mainly due to higher growth and lower projected disbursements in the medium term. Real GDP growth is projected to be 1–2 percent higher over the medium term on account of the expected rebound in mining and non-extractive activity under the authorities' development strategy for a more inclusive and diversified growth. Growth would be supported by an ambitious public investment program, foreign investment in the extractive sector, and planned structural reforms aimed at improving the business climate, diversifying the economy, and raising inclusive growth. Non-extractive growth is expected to pick up gradually to 2.9 percent in 2017 and should reach 6 percent by 2021, supported by gains in agriculture, fishing, construction, and services as the authorities scale up public infrastructure and implement reforms. The current account deficit will be lower due to higher exports fueled by higher iron ore prices, development of the fishing industry, and continued macroeconomic adjustment to the terms-of-trade shock. Moreover, this DSA projects lower debt disbursements than the previous one, averaging about 6½ percent of GDP over the medium term and converging gradually under 4 percent in the long term, reflecting prioritization of public investment and financing and administrative capacity constraints. The average grant element of new disbursements is assumed to decline over time, along with gradually expanding access to borrowing on commercial terms. As in the 2016 DSA, debt relief from KIA is assumed

Real Non-Extractive GDP Growth
(Percent change)



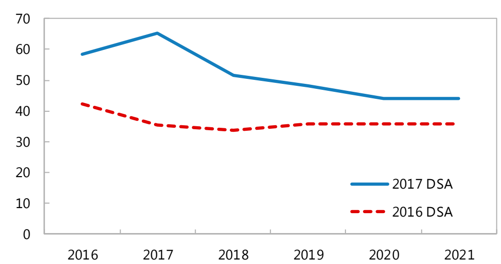
Source: IMF staff projections.

Projected New Debt Disbursements
(Percent of GDP)



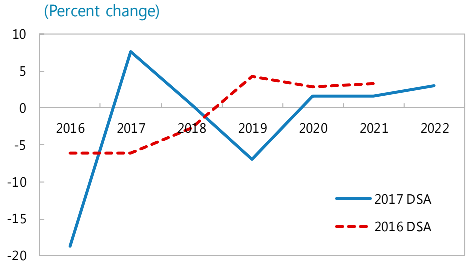
Source: IMF staff projections.

Price of Iron Ore
(US$/Ton)



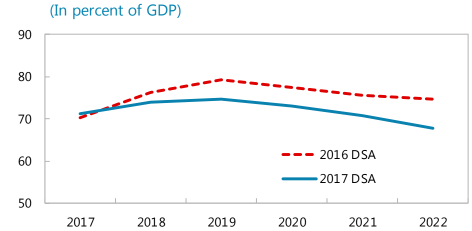
Source: WEO

Terms of Trade
(Percent change)



Source: IMF staff estimates.

PPG External Debt 1/
(In percent of GDP)



1/ Debt relief from Kuwait under the HIPC-MDRI is assumed.
Sources: IMF staff projections.

to take place in the first projection year; this drives the large reduction in public and external debt in 2017. Lastly, an improvement in the CPIA rating has led to Mauritania's classification in the "medium" policy performance group, which results in more accommodative debt thresholds than in the previous DSA.

Table 2. Mauritania: Macroeconomic Assumptions, 2016–37

	2016	2017	2018	2019	2020	2021	2022	2023-29	2030-37
Real GDP growth									
Current DSA	1.7	3.8	3.0	4.6	5.2	4.6	4.0	5.3	4.8
2016 DSA	4.1	3.9	1.7	3.8	3.9	3.2	4.1	4.1	4.2
Nominal GDP (in millions of US$)									
Current DSA	4,729.0	4,960.6	4,999.6	5,164.0	5,417.4	5,710.2	6,073.4	8,132.8	13,503.5
2016 DSA	4,541.3	4,520.1	4,598.6	4,856.1	5,169.2	5,455.1	5,890.6	8,087.7	13,749.2
Exports of goods (growth)									
Current DSA	0.9	13.7	8.8	2.1	1.4	-1.8	-5.1	4.0	0.0
2016 DSA	-4.8	2.8	-3.7	0.9	-1.1	-7.3	4.6	5.3	4.6
Imports of goods (growth)									
Current DSA	-2.5	7.1	-2.6	0.7	0.9	0.4	1.1	4.0	4.2
2016 DSA	-19.2	5.7	-0.4	0.7	3.8	1.1	0.0	0.0	0.0
Current account balance (in percent of GDP)									
Current DSA	-14.9	-15.3	-11.2	-10.3	-9.9	-9.2	-8.9	-7.6	-6.2
2016 DSA	-13.6	-15.8	-13.2	-11.1	-11.3	-10.5	-9.4	-3.0	3.1
Revenue and grants (in percent of GDP)									
Current DSA	27.9	26.3	26.3	26.3	25.9	26.1	26.6	26.6	20.1
2016 DSA	30.6	30.7	29.7	29.0	28.1	28.2	27.6	27.3	26.8
Primary balance (in percent of GDP)									
Current DSA	0.7	0.5	-0.7	-0.5	-0.8	-0.7	-0.7	-0.9	-1.0
2016 DSA	-0.8	-1.4	-1.8	-1.7	-1.5	-1.4	-2.0	-2.6	-3.5
Price of iron ore (US$/Ton)									
Current DSA	58.6	65.1	51.7	48.1	44.2	44.2	44.2	44.2	44.2
2016 DSA	42.4	35.5	33.8	35.9	35.9	35.9	35.9	35.9	35.9

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

B. External Debt Sustainability

6. Baseline projections for three of the five debt indicators breach their respective thresholds, although one indicator shows only a small breach.[4] The size of the breaches is less severe than in the 2016 DSA. The PV of debt-to-GDP ratio is projected on a firm downward trajectory after 2019 and falls below the threshold from 2030 onward. The PV of debt-to-exports ratio breaches its threshold in 2022 and remains above it by a relatively small margin, peaking at 7 percent in 2031 after which it gradually tapers lower. The debt service-to-revenue ratio breaches the threshold during 2018–21 due to the amortization of the $300 million deposit from Saudi Arabia in 2015 to support reserves and of the budget support loans contracted from the Arab Monetary Fund (AMF). Private external debt, which mainly consists of debts of the iron ore mining company SNIM and banking sector liabilities, is relatively small and is projected to decline over the projection period based on a conservative assumption on new borrowing, as private sector borrowing plans are unknown.

7. Standardized stress tests show breaches of respective thresholds by all five debt indicators. Stress tests highlight vulnerabilities to shocks to exports and to exchange rate depreciation. However, the standard historical scenario, which projects rising debt and debt service ratios, is unrealistic since it assumes that the current account deficits due to FDI-financed expansion of mining capacity would in the future be financed by debt.

8. The outlook for external debt sustainability has improved compared to the 2016 DSA, although Mauritania's risk of debt distress continues to be assessed as high. The debt profile has improved owing to projected higher growth and iron ore prices, an improved current account, and lower projected debt disbursements. This DSA suggests that with prudent policies, the authorities can improve debt prospects towards sustainability. However, in the near term the authorities should monitor closely the considerable rise in debt service falling due (owing to the repayment profile of both the $300 million deposit at the central bank and AMF loans to the central government), and ensure that adequate resources are available to meet those payments without undue disruption to other budget expenditures or sharp reductions in international reserves.

C. Public Debt Sustainability

9. While the dynamics of total public debt reflect the large share of external debt, the public debt sustainability assessment is somewhat more favorable than for external debt.[5] The public debt stock is largely composed of external debt, with domestic debt only about 5 percent of GDP at end-2016. Domestic debt consists mostly of short-term (up to 6 months) treasury bills. Under the baseline, the PV of public debt-to-GDP ratio is projected to peak at 61 percent in 2019 and to take a downward trajectory

[4] The external debt sustainability framework (Table 2) shows persistent negative residuals, which are large in the medium term but persist at a lower level throughout the projection horizon. These reflect (i) debt relief on the debt in arrears to the KIA in 2017; (ii) a drawdown in reserves over the medium term; and (iii) net private sector financial inflows of the mining sector.

[5] The public debt sustainability framework (Table 4) shows a sizeable residual in 2017, which, as in the external debt sustainability framework, reflects debt relief on the debt in arrears to the KIA. The remaining residuals are due to debt flows of parastatals that are not captured in the central government budget.

thereafter, crossing the 56 percent benchmark in 2022. The breach is less pronounced and protracted than in the external DSA. The stress test which assumes a fixed primary balance (a small surplus in contrast to persistent deficits in the baseline) shows the importance of a restrained fiscal policy stance to reduce the existing high public debt-to-GDP ratio. The historical scenario illustrates well the risk of a sustained shortfall in growth compared to the baseline which would preclude any marked decline in the debt-to-GDP ratio. This is further highlighted in the bound test for a temporary shock to growth, in which during 2018-2019 real growth is 0.8 percent versus 3.8 percent on average in the baseline. Over the medium-term the impact of the growth shock steadily increases over time: the PV of public debt-to-GDP is initially higher than under the baseline by some 5 percentage points of GDP and the gap steadily widens over the projection horizon reaching 20 percentage points by 2037 and the debt burden indicator remains above the benchmark level until 2037. A similar pattern is observed for the negative impact of a growth shock on the PV of public debt-to-revenue ratio and the debt service-to-revenue ratio. Indeed, this bound test has the second largest impact (after the most extreme test) on the debt burden indicators during the first 10 years of the projections. The most extreme shock is associated with a one-time depreciation and illustrates the significant vulnerability related to the preponderance of foreign currency-denominated debt.

CONCLUSIONS

10. Mauritania's risk of debt distress remains high despite an improvement in its CPIA rating, following the increase in external debt over the past three years to finance infrastructure and external deficits, and a contraction in nominal GDP due to the terms-of-trade shock and exchange rate depreciation. The outlook has improved since the previous DSA due to stronger projected growth and lower projected disbursements in the medium term. Nevertheless, baseline projections over the next twenty years indicate sizeable breaches in thresholds for the present value (PV) of debt-to-GDP ratios and the debt service-to-revenue ratios; the latter is mainly due to the amortization of short-term loans extended to the central bank and the central government to weather the terms-of-trade shock.

11. 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 monitoring and governance to raise the efficiency and growth dividends of the public investment program; and strengthening debt management capacity. To the extent that the authorities, as planned, turn to public-private partnerships (PPP) to finance and manage future projects, they should also strengthen their capacity to evaluate and monitor PPP-related contingent liabilities for the budget. They should also minimize their direct financial participation in PPPs and avoid providing explicit guarantees or taking on implicit contingent budget liabilities related to the financial performance of PPP projects.

12. The authorities acknowledge the need for prudent debt policies and stronger investment management, but question the risk rating of external debt distress. They consider that public debt is sustainable and can be serviced, even in the current environment of low commodity prices. They acknowledge the need to strengthen public investment and debt management by implementing the recently adopted framework to prioritize projects under the public investment program, and highlight the progress made in this regard during this past year. They believe that their long-term public investment strategy is critical for Mauritania's development and that this strategy will be viable if it generates the sustained strong economic growth and crowds-in sufficient FDI, which would serve as an alternative financing source for future development. They also note that most borrowing benefits from favorable terms, even if those terms fall slightly short of the Fund's concessionality threshold. They underscore the high priority given to strengthening the governance and efficiency of public enterprises as well to improving the business climate. They also aim at relying more on financing projects through PPPs involving only a small financial participation, if any, by the government. However, in the absence of alternative financing options, they consider that it will be necessary to use external borrowing to finance projects considered critical for the country's development and demonstrated to be cost-effective.

Table 3. Mauritania: External Debt Sustainability Framework, Baseline Scenario, 2014–37 1/

(in percent of GDP, unless otherwise indicated)

	Actual			Historical 6/ Average	Standard 6/ Deviation	Projections									
	2014	2015	2016			2017	2018	2019	2020	2021	2022	2017-2022 Average	2027	2037	2023-2037 Average
External debt (nominal) 1/	**88.9**	**108.1**	**110.5**			**87.0**	**88.3**	**87.5**	**83.1**	**79.6**	**75.2**		**62.0**	**42.2**	
of which: public and publicly guaranteed (PPG)	74.1	92.7	94.5			72.9	75.7	76.6	73.8	71.4	68.4		57.6	40.0	
Change in external debt	7.0	19.2	2.4			-23.5	1.3	-0.8	-4.4	-3.5	-4.5		-2.2	-2.1	
Identified net debt-creating flows	23.0	19.5	11.9			2.3	4.4	2.3	1.2	0.8	0.9		0.4	-1.0	
Non-interest current account deficit	**25.6**	**17.9**	**12.9**	**15.1**	**7.0**	**13.3**	**9.2**	**8.4**	**8.1**	**7.5**	**7.3**		**6.5**	**4.3**	5.9
Deficit in balance of goods and services	26.7	19.7	17.7			19.0	14.5	13.6	12.5	11.8	12.0		9.8	6.4	
Exports	39.0	33.7	35.3			36.2	38.8	38.4	37.2	34.8	31.3		26.4	20.9	
Imports	65.8	53.4	53.0			55.2	53.3	52.0	49.7	46.7	43.3		36.2	27.2	
Net current transfers (negative = inflow)	-2.1	-3.7	-5.2	-3.7	1.2	-3.7	-3.9	-3.8	-3.1	-2.7	-2.7		-2.2	-1.4	-1.9
of which: official	-1.2	-2.1	-3.6			-2.2	-2.3	-2.2	-1.5	-1.2	-1.2		-0.9	-0.5	
Other current account flows (negative = net inflow)	1.0	1.9	0.4			-2.0	-1.4	-1.4	-1.3	-1.7	-2.0		-1.1	-0.7	
Net FDI (negative = inflow)	**-9.3**	**-10.4**	**-5.7**	**-9.3**	**8.3**	**-9.1**	**-4.2**	**-4.1**	**-4.4**	**-4.8**	**-5.1**		**-4.0**	**-4.2**	-4.2
Endogenous debt dynamics 2/	**6.7**	**11.9**	**4.8**			**-1.9**	**-0.6**	**-1.9**	**-2.5**	**-1.9**	**-1.4**		**-2.1**	**-1.1**	
Contribution from nominal interest rate	1.7	1.9	2.2			2.1	2.0	2.0	1.9	1.7	1.6		0.9	0.9	
Contribution from real GDP growth	-4.9	-0.9	-1.9			-4.0	-2.6	-3.9	-4.3	-3.6	-3.0		-3.1	-2.0	
Contribution from price and exchange rate changes	9.9	11.0	4.6			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**-16.1**	**-0.3**	**-9.5**			**-25.8**	**-3.1**	**-3.1**	**-5.6**	**-4.3**	**-5.3**		**-2.6**	**-1.2**	
of which: exceptional financing	-0.2	-0.1	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	91.0			67.8	67.9	66.4	62.5	59.6	56.0		46.8	33.0	
In percent of exports	...	...	257.7			187.5	174.8	172.8	168.1	171.2	178.7		176.8	158.4	
PV of PPG external debt	**...**	**...**	**75.0**			**53.7**	**55.2**	**55.5**	**53.2**	**51.4**	**49.2**		**42.4**	**30.8**	
In percent of exports	**...**	**...**	**212.4**			**148.5**	**142.3**	**144.4**	**143.1**	**147.5**	**157.0**		**160.3**	**147.7**	
In percent of government revenues	**...**	**...**	**288.2**			**218.6**	**225.4**	**225.7**	**214.3**	**202.8**	**190.2**		**161.7**	**117.5**	
Debt service-to-exports ratio (in percent)	**11.9**	**15.5**	**16.6**			**17.9**	**21.8**	**21.0**	**20.8**	**20.1**	**20.0**		**14.3**	**18.1**	
PPG debt service-to-exports ratio (in percent)	**6.4**	**8.6**	**9.6**			**11.6**	**16.1**	**15.9**	**15.9**	**15.4**	**15.7**		**14.3**	**18.1**	
PPG debt service-to-revenue ratio (in percent)	**10.0**	**10.6**	**13.1**			**17.0**	**25.5**	**24.9**	**23.8**	**21.2**	**19.0**		**14.4**	**13.6**	
Total gross financing need (Billions of U.S. dollars)	1.3	0.8	0.8			0.8	0.9	0.9	0.9	0.8	0.8		0.8	0.9	
Non-interest current account deficit that stabilizes debt ratio	18.7	-1.3	10.5			36.8	7.9	9.2	12.4	11.0	11.8		8.7	6.5	
Key macroeconomic assumptions															
Real GDP growth (in percent)	5.6	0.9	1.7	3.2	2.5	3.8	3.0	4.6	5.2	4.6	4.0	4.2	5.1	4.8	5.0
GDP deflator in US dollar terms (change in percent)	-10.8	-11.0	-4.0	1.5	10.6	1.1	-2.2	-1.3	-0.3	0.8	2.3	0.1	1.9	2.0	1.9
Effective interest rate (percent) 5/	1.9	1.9	2.0	1.5	0.9	2.0	2.4	2.3	2.3	2.2	2.2	2.2	1.5	2.2	1.8
Growth of exports of G&S (US dollar terms, in percent)	-25.1	-22.3	2.2	4.2	24.5	7.4	8.2	2.2	1.5	-1.3	-4.2	2.3	3.9	4.8	4.2
Growth of imports of G&S (US dollar terms, in percent)	-12.3	-27.0	-3.2	9.0	25.1	9.2	-2.6	0.7	0.2	-1.0	-1.2	0.9	4.1	3.9	3.8
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	34.2	33.9	33.8	33.9	32.9	32.8	33.6	30.3	18.1	26.1
Government revenues (excluding grants, in percent of GDP)	24.8	27.5	26.0			24.6	24.5	24.6	24.8	25.3	25.9		26.2	26.2	26.2
Aid flows (in Billions of US dollars) 7/	0.0	0.1	0.1			0.2	0.3	0.3	0.2	0.2	0.2		0.2	0.2	
of which: Grants	0.0	0.1	0.1			0.1	0.1	0.1	0.1	0.0	0.0		0.0	0.1	
of which: Concessional loans	0.0	0.0	0.0			0.1	0.2	0.2	0.2	0.1	0.1		0.2	0.1	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			3.6	4.6	4.5	3.3	2.6	2.4		1.9	1.1	1.6
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			50.1	45.7	45.4	43.1	40.7	41.4		35.6	26.4	32.3
Memorandum items:															
Nominal GDP (Billions of US dollars)	5.4	4.8	4.7			5.0	5.0	5.2	5.4	5.7	6.1		8.6	16.8	
Nominal dollar GDP growth	-5.8	-10.2	-2.4			4.9	0.8	3.3	4.9	5.4	6.4	4.3	7.1	6.9	7.0
PV of PPG external debt (in Billions of US dollars)			3.5			2.6	2.7	2.8	2.9	2.9	3.0		3.6	5.1	
(PVt-PVt-1)/GDPt-1 (in percent)						-18.9	1.9	2.0	1.1	0.9	1.0	-2.0	1.8	0.7	1.5
Gross workers' remittances (Billions of US dollars)	0.0	0.1	0.1			0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1	
PV of PPG external debt (in percent of GDP + remittances)	...	...	73.9			52.9	54.4	54.6	52.4	50.6	48.5		41.9	30.5	
PV of PPG external debt (in percent of exports + remittances)	...	...	203.3			142.4	136.6	138.6	137.2	141.2	149.8		153.1	141.7	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	9.2			11.1	15.4	15.3	15.2	14.8	14.9		13.7	17.4	

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)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

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

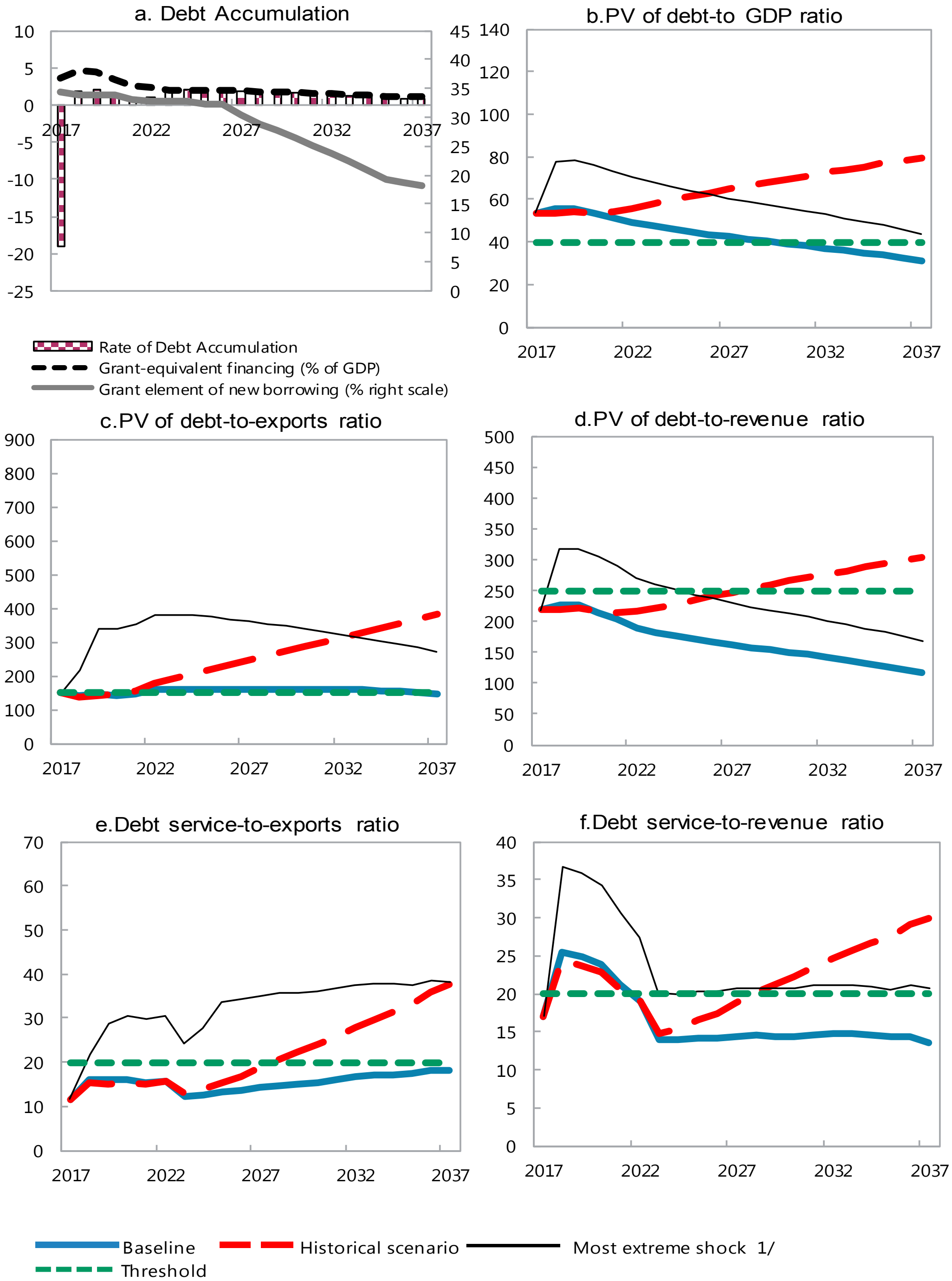
5/ Current-year interest payments divided by previous period debt stock.

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).

Figure 1. Mauritania: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2017–37 1/



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

1/ The most extreme stress test is the test that yields the highest ratio on or before 2027. In figure (b) it corresponds to a one-time depreciation shock; in (c) to an exports shock; in (d) to a one-time depreciation shock; in (e) to an exports shock; and in figure (f) to a one-time depreciation shock.

Table 4. Mauritania: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2017–37

(In percent)

	Projections							
	2017	2018	2019	2020	2021	2022	**2027**	2037
PV of debt-to GDP ratio								
Baseline	54	55	55	53	51	49	**42**	31
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	54	54	54	54	54	56	**65**	79
A2. New public sector loans on less favorable terms in 2017-2037 2/	54	56	58	58	57	56	**53**	49
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	54	55	57	56	54	52	**44**	32
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	54	62	74	73	71	68	**55**	32
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	54	58	63	61	59	57	**49**	35
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	54	57	61	59	57	55	**46**	31
B5. Combination of B1-B4 using one-half standard deviation shocks	54	60	71	69	67	65	**53**	34
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	54	78	78	76	73	70	**60**	44
PV of debt-to-exports ratio								
Baseline	149	142	144	143	148	157	**160**	148
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	149	138	141	144	156	178	**244**	381
A2. New public sector loans on less favorable terms in 2017-2037 2/	149	143	150	155	164	178	**201**	236
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	149	139	141	141	146	155	**158**	146
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	149	216	337	341	354	379	**361**	269
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	149	139	141	141	146	155	**158**	146
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	149	148	159	160	165	176	**174**	149
B5. Combination of B1-B4 using one-half standard deviation shocks	149	177	224	225	233	249	**243**	197
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	149	139	141	141	146	155	**158**	146
PV of debt-to-revenue ratio								
Baseline	219	225	226	214	203	190	**162**	118
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	219	219	221	216	215	215	**246**	303
A2. New public sector loans on less favorable terms in 2017-2037 2/	219	227	235	232	225	216	**203**	188
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	219	225	234	225	213	199	**169**	123
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	219	252	303	293	279	264	**209**	123
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	219	236	257	247	234	219	**186**	135
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	219	234	248	239	227	213	**176**	118
B5. Combination of B1-B4 using one-half standard deviation shocks	219	245	289	279	265	250	**203**	130
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	219	317	318	305	289	271	**230**	167

Table 4. Mauritania: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt 2017–37 (concluded)

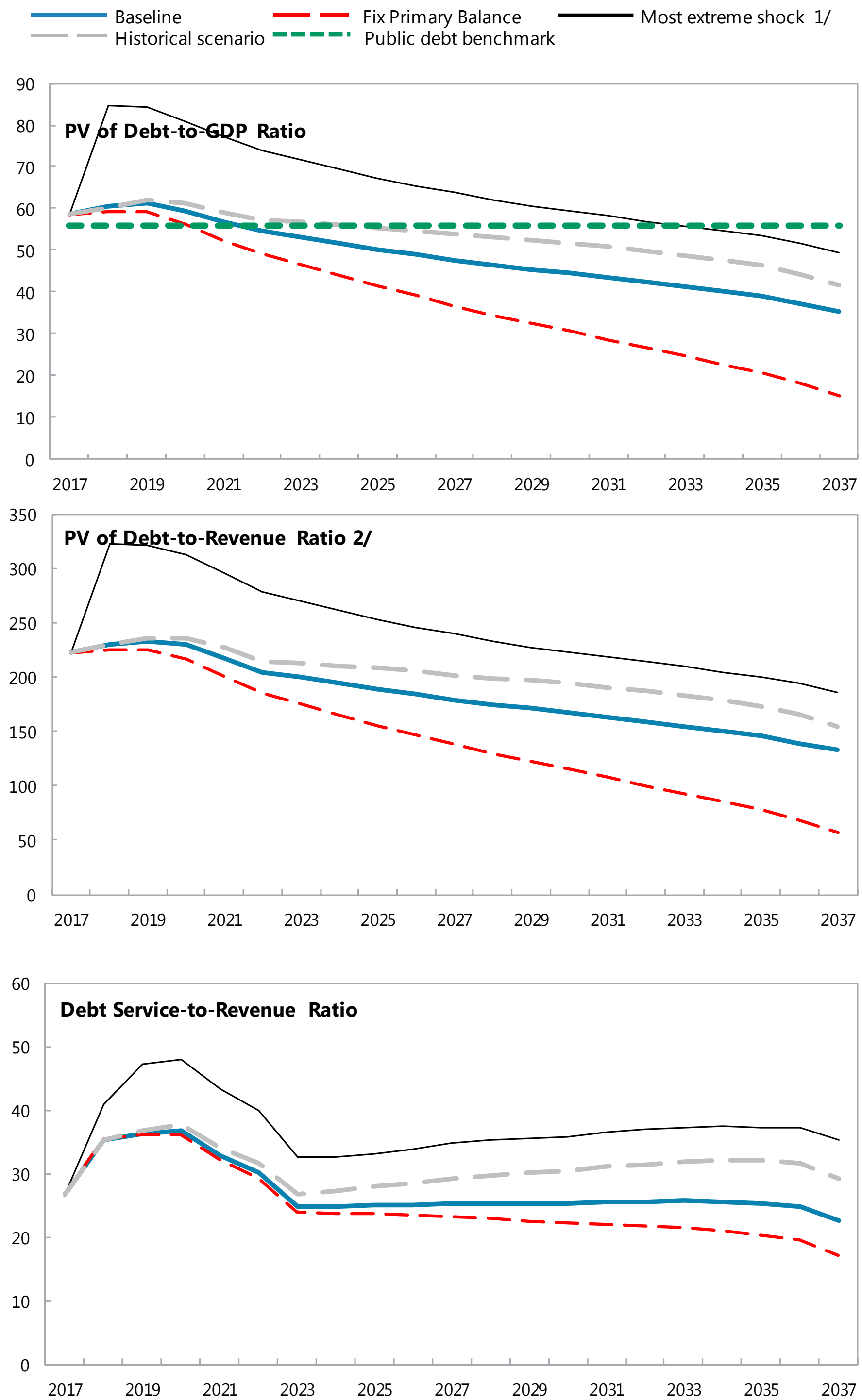
(In percent)

	Projections							
	2017	2018	2019	2020	2021	2022	**2027**	2037
Debt service-to-exports ratio								
Baseline	12	16	16	16	15	16	**14**	18
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	12	15	15	15	15	16	**19**	38
A2. New public sector loans on less favorable terms in 2017-2037 2/	12	16	16	16	16	17	**17**	25
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	12	16	16	16	15	16	**14**	18
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	12	22	29	30	30	30	**35**	38
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	12	16	16	16	15	16	**14**	18
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	12	16	16	16	16	16	**16**	19
B5. Combination of B1-B4 using one-half standard deviation shocks	12	19	21	22	21	22	**23**	26
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	12	16	16	16	15	16	**14**	18
Debt service-to-revenue ratio								
Baseline	17	25	25	24	21	19	**14**	14
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	17	25	24	23	21	19	**19**	30
A2. New public sector loans on less favorable terms in 2017-2037 2/	17	25	25	24	22	21	**17**	20
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	17	26	26	25	23	20	**15**	15
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	17	25	26	26	23	21	**20**	17
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	17	27	29	28	25	22	**17**	17
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	17	25	25	25	22	20	**16**	15
B5. Combination of B1-B4 using one-half standard deviation shocks	17	26	27	27	24	22	**19**	17
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	17	37	36	34	31	27	**21**	21
Memorandum item:								
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 assuming
an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Figure 2. Mauritania: Indicators of Public Debt Under Alternative Scenarios, 2017–37 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 2027.
2/ Revenues are defined inclusive of grants.

Table 5. Mauritania: Public Sector Debt Sustainability Framework, Baseline Scenario, 2014–37
(In percent of GDP, unless otherwise indicated)

	Actual					Estimate					Projections				
	2014	2015	2016	Average 5/	Standard Deviation 5/	2017	2018	2019	2020	2021	2022	2017-22 Average	2027	2037	2023-37 Average
Public sector debt 1/	80.4	98.4	99.3			77.7	80.8	82.3	80.0	76.7	73.7		62.9	44.4	
of which: foreign-currency denominated	74.1	92.7	94.5			72.9	75.7	76.6	73.8	71.4	68.4		57.6	40.0	
Change in public sector debt	9.8	18.0	0.9			-21.5	3.1	1.5	-2.3	-3.3	-3.0		-1.9	-2.4	
Identified debt-creating flows	10.7	12.8	-0.6			-3.3	1.4	-0.6	-2.6	-1.9	-2.5		-2.2	-0.7	
Primary deficit	3.5	2.2	-0.9	0.6	2.2	-0.9	0.5	0.4	0.7	0.7	0.7	0.4	0.9	1.3	0.9
Revenue and grants	25.0	29.3	27.9			26.3	26.3	26.3	25.9	26.1	26.6		26.6	26.6	
of which: grants	0.1	1.8	1.9			1.7	1.8	1.7	1.1	0.7	0.8		0.4	0.4	
Primary (noninterest) expenditure	28.4	31.5	27.0			25.4	26.8	26.8	26.6	26.7	27.3		27.6	27.9	
Automatic debt dynamics	7.2	10.7	0.3			-2.4	0.8	-1.1	-3.4	-2.6	-3.2		-3.2	-1.9	
Contribution from interest rate/growth differential	-3.5	-0.1	-1.8			-4.3	-2.4	-3.6	-4.0	-3.5	-3.1		-3.3	-2.0	
of which: contribution from average real interest rate	0.2	0.6	-0.1			-0.6	-0.1	0.0	0.0	0.0	-0.1		-0.1	0.2	
of which: contribution from real GDP growth	-3.7	-0.7	-1.7			-3.6	-2.3	-3.6	-4.1	-3.5	-3.0		-3.2	-2.1	
Contribution from real exchange rate depreciation	10.7	10.7	2.1			1.9	3.2	2.5	0.7	0.9	-0.1		...	...	
Other identified debt-creating flows	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	-0.9	5.2	1.5			-18.3	1.7	2.2	0.3	-1.3	-0.5		0.4	-1.7	
Other Sustainability Indicators															
PV of public sector debt	...	...	79.8			58.6	60.4	61.2	59.4	56.7	54.5		47.7	35.3	
of which: foreign-currency denominated	...	...	75.0			53.7	55.2	55.5	53.2	51.4	49.2		42.4	30.8	
of which: external	...	...	75.0			53.7	55.2	55.5	53.2	51.4	49.2		42.4	30.8	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	13.6	14.7	10.4			10.5	14.4	14.7	15.6	14.9	13.6		12.6	11.8	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	285.8			222.6	229.4	232.8	229.3	217.6	204.9		179.3	132.5	
PV of public sector debt-to-revenue ratio (in percent)	...	...	306.5			238.3	246.4	249.2	239.1	223.9	210.8		182.1	134.6	
of which: external 3/	...	...	288.2			218.6	225.4	225.7	214.3	202.8	190.2		161.7	117.5	
Debt service-to-revenue and grants ratio (in percent) 4/	23.4	20.7	21.6			26.7	35.3	36.3	36.7	32.7	30.2		25.4	22.6	
Debt service-to-revenue ratio (in percent) 4/	23.5	22.0	23.1			28.5	37.9	38.8	38.3	33.7	31.0		25.7	22.9	
Primary deficit that stabilizes the debt-to-GDP ratio	-6.3	-15.8	-1.9			20.7	-2.6	-1.1	3.1	3.9	3.7		2.8	3.7	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	5.6	0.9	1.7	3.2	2.5	3.8	3.0	4.6	5.2	4.6	4.0	4.2	5.1	4.8	5.0
Average nominal interest rate on forex debt (in percent)	1.2	1.1	1.2	0.8	0.9	1.2	1.6	1.6	1.6	1.6	1.6	1.5	1.7	2.3	1.9
Average real interest rate on domestic debt (in percent)	16.0	9.7	0.3	4.9	8.6	4.9	7.6	7.6	6.3	5.4	4.6	6.0	2.0	1.9	2.0
Real exchange rate depreciation (in percent, + indicates depreciation)	17.2	14.6	2.4	0.8	9.4	2.1	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	-9.2	-4.4	4.1	4.3	8.5	4.2	2.6	3.7	3.2	3.0	4.5	3.5	4.1	4.2	4.1
Growth of real primary spending (deflated by GDP deflator, in percent)	25.3	12.0	-12.9	3.1	11.2	-2.2	8.8	4.2	4.7	5.0	6.1	4.4	5.2	13.3	5.7
Grant element of new external borrowing (in percent)	...	...	...	...	...	34.2	33.9	33.8	33.9	32.9	32.8	33.6	30.3	18.1	...

Sources: Country authorities; and staff estimates and projections.

1/ Includes central government, state owned enterprises and central bank debt. 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 6. Mauritania: Sensitivity Analysis for Key Indicators of Public Debt, 2017–37

	Projections							
	2017	2018	2019	2020	2021	2022	2027	2037
PV of Debt-to-GDP Ratio								
Baseline	59	60	61	59	57	55	48	35
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	59	60	62	61	59	57	54	41
A2. Primary balance is unchanged from 2017	59	59	59	56	52	49	37	15
A3. Permanently lower GDP growth 1/	59	61	62	61	59	57	56	58
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019	59	62	67	66	64	63	61	55
B2. Primary balance is at historical average minus one standard deviations in 2018-2019	59	62	65	63	60	58	51	37
B3. Combination of B1-B2 using one half standard deviation shocks	59	62	65	64	62	60	56	47
B4. One-time 30 percent real depreciation in 2018	59	85	84	81	77	74	64	49
B5. 10 percent of GDP increase in other debt-creating flows in 2018	59	68	69	67	64	62	54	39
PV of Debt-to-Revenue Ratio 2/								
Baseline	223	229	233	229	218	205	179	132
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	223	229	236	236	227	215	202	155
A2. Primary balance is unchanged from 2017	223	225	225	217	201	184	138	57
A3. Permanently lower GDP growth 1/	223	231	236	235	226	216	209	217
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019	223	236	252	253	245	236	228	206
B2. Primary balance is at historical average minus one standard deviations in 2018-2019	223	236	246	243	231	217	190	138
B3. Combination of B1-B2 using one half standard deviation shocks	223	235	248	247	237	226	210	177
B4. One-time 30 percent real depreciation in 2018	223	322	320	312	296	278	239	186
B5. 10 percent of GDP increase in other debt-creating flows in 2018	223	258	262	258	246	232	202	146
Debt Service-to-Revenue Ratio 2/								
Baseline	27	35	36	37	33	30	25	23
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	27	35	37	38	34	32	29	29
A2. Primary balance is unchanged from 2017	27	35	36	36	32	29	23	17
A3. Permanently lower GDP growth 1/	27	35	37	37	34	31	27	29
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019	27	36	38	39	35	33	29	29
B2. Primary balance is at historical average minus one standard deviations in 2018-2019	27	35	36	38	34	31	26	23
B3. Combination of B1-B2 using one half standard deviation shocks	27	36	38	38	34	32	28	27
B4. One-time 30 percent real depreciation in 2018	27	41	47	48	43	40	35	35
B5. 10 percent of GDP increase in other debt-creating flows in 2018	27	35	37	39	34	31	28	24

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.