INTERNATIONAL MONETARY FUND

MALI

November 14, 2014

FIRST AND SECOND REVIEWS UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT, REQUEST FOR WAIVER OF PERFORMANCE CRITERIA, AND REQUEST FOR MODIFICATION OF PERFORMANCE CRITERIA—DEBT SUSTAINABILITY ANALYSIS

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Risk of external debt distress:	*Moderate*
Augmented by significant risks stemming from domestic public debt?	*No*

Mali's risk of debt distress continues to be assessed as moderate—unchanged from the previous Debt Sustainability Analysis (DSA). Debt sustainability remains sensitive to a tightening of financial terms, a reduction in transfers and foreign direct investment and an export shock stemming from the concentration of exports in gold.

A. Background

Recent Developments in Public External Debt

1. As a result of the enhanced Highly Indebted Poor Countries (HIPC) Initiative and the Multilateral Debt Relief Initiative (MDRI), Mali's stock of external debt has declined significantly. Mali's stock of public and publicly guaranteed external debt declined from 89 percent of GDP in 2001 to 19 percent in 2006 owing to enhanced HIPC debt relief in 2002 and MDRI debt relief in 2006 (Text Table 1). At end–2013, it had increased to 26 percent of GDP owing mainly to new loans granted by the International Development Association (IDA), the African Development Bank (ADB), the Islamic Development Bank (IsDB), and the IMF (mainly through an allocation of SDR 74 million in 2009). The bulk of Mali's stock of external public debt is public is owed to multilateral creditors, mainly IDA, ADB and IsDB. There are no official estimates of Mali's total private external debt stock but a rough proxy suggests this is likely to be small, at around 6 percent of GDP.[1]

Text Table 1: Mali: External Debt Stock at Year-End, 2001–13
(billions of CFAF)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total	1,969	1,156	1,169	1,185	1,474	606	583	868	891	1,253	1,231	1,356	1,407
(percent of GDP)	89.0	52.0	47.7	45.0	50.9	18.9	17.0	22.2	21.1	26.8	24.4	25.5	25.7
Multilateral	1,506	824	741	878	1,199	357	448	616	767	896	1,006	1,105	1,160
IMF [1]	110	100	94	79	66	4	6	19	68	72	101	101	83
World Bank/IDA	343	106	176	268	384	84	216	263	313	414	494	578	586
African Development Bank	329	116	239	289	380	121	134	112	136	158	257	247	229
Islamic Development Bank	45	40	36	55	64	31	57	96	112	114	124	118	111
Others	678	462	195	187	306	117	34	126	138	139	30	62	151
Bilateral	456	327	423	302	270	247	193	192	188	236	222	276	284
Paris Club official debt	127	31	8	17	18	13	16	4	4	10	13	13	10
Non-Paris Club official debt	328	297	416	285	252	234	178	188	184	226	209	263	275
Other Creditors	7	4	4	4	6	2	3	3	3	3	2	2	1

Sources: Malian authorities, staff estimates.

[1] Includes August 2009 SDR allocation.

Recent Developments in Public Domestic Debt

2. Mali's domestic public debt is small (5.9 percent of GDP in 2013, Text Table 2). It consists of commercial bank loans, treasury bills and bonds issued on the regional market of the West African Economic and Monetary Union (WAEMU) and arrears owed to domestic suppliers. Domestic debt more than tripled between 2009 and 2013 mainly as a result of new issuances of treasury bills and bonds, but

[1] Calculated as the gross external liabilities of commercial banks resident in Mali from the monetary survey and the gross external liabilities of the Malian non-bank sector vis-à-vis banks that report to the Bank of International Settlements (BIS). The latter may also include any debt of the public sector to BIS-reporting banks.

also owing to an inventory of all loans contracted or guaranteed by the government that the authorities have been conducting as part of their plan to strengthen debt management.

Text Table 2: Mali: Public Domestic Debt Stock at Year-End, 2009–13 (billions of CFAF)

	2009	2010	2011	2012	2013
Total	97	203	238	231	318
Nominal GDP	4233	4667	5038	5328	5484
(percent of GDP)	2.3	4.4	4.7	4.3	5.8
Central bank (ex IMF)	8	6	3	1	0
Commercial banks	82	94	114	112	172
Other [1]	6	104	120	119	146

Sources: Malian authorities, staff estimates.

[1] Includes debt owed to non-banks and banks resident outside Mali.

Debt Burden Thresholds under the Debt Sustainability Framework

3. **Mali is a medium policy performer for the purpose of determining the debt burden thresholds under the Debt Sustainability Framework (DSF).** Mali's rating on the World Bank's Country Policy and Institutional Assessment (CPIA) averaged 3.47 (on a scale of 1 to 6) during 2011–13, making it a medium policy performer. The corresponding external public debt burden thresholds are shown in Text Table 3.

Text Table 3. External Public Debt Thresholds for "Medium Policy Performers" under the Debt Sustainability Framework

	Without remittances	With remittances
Present value of external debt in percent of:		
GDP	40	36
Exports	150	120
Revenue	250	250
External debt service in percent of:		
Exports	20	16
Revenue	20	20

B. Underlying assumptions

Baseline Scenario

4. **In the short run the economy is expected to grow above trend as activity recovers following the political and security crisis of 2012.** The baseline scenario remains broadly in line with that of the December 2013 DSA[2] and assumes a stable political environment, the implementation of sound macroeconomic and structural policies, and the resumption of aid and foreign direct investment (FDI), which in the near term allow for above-trend GDP growth and slightly larger fiscal and current account deficits. Notable revisions compared to the December 2013 DSA include (Text Table 4):

- Gold prices are around 5 percent lower over the projection period, which in turn impacts on the level of export receipts.
- Real GDP growth is expected to be slightly weaker in the near term owing to increased business and consumer uncertainty stemming from unsettled security problems in the North.
- Official aid in 2014 is expected to be higher than in the previous DSA, following updated commitments made by donors at the May 2014 Bamako conference to help Mali's recovery from the security and political crisis of 2012.
- The overall fiscal deficit (excluding grants) is projected to be moderately higher than in the previous DSA in the near term, given the higher projected official aid.
- The near-term current account deficit (excluding grants) is expected to be lower than in the previous DSA due to lower oil prices and projected new gold mining coming on stream, which together outweigh the impact of lower gold prices on export receipts.
- All new borrowing is projected to be on concessional terms, that is with a grant element of at least 35%.

[2] See Joint IDA/IMF Debt Sustainability Analysis in IMF Country Report No. 13/380.

Text Table 4. Mali: Evolution of Selected Macroeconomic Indicators

	2013	2014	2015	2016	2017	Long term [1]
Real GDP growth						
Current DSA	1.7	5.8	5.5	5.1	5.2	4.9
Previous DSA	5.1	6.6	5.5	5.5	4.9	5.1
Overall fiscal deficit (excluding grants, percent of GDP)						
Current DSA	-6.5	-10.1	-7.7	-5.9	-5.9	-5.5
Previous DSA	-6.7	-7.8	-6.5	-6.0	-5.3	-5.3
Current account deficit [2] (excluding grants, percent of GDP)						
Current DSA	-17.9	-19.8	-13.3	-8.9	-6.7	-8.7
Previous DSA	-24.2	-19.5	-14.2	-13.2	-10.5	-9.3
Official aid [3] (percent of GDP)						
Current DSA	6.1	9.8	8.1	6.3	6.3	6.3
Previous DSA	6.8	8.8	7.2	6.7	6.1	6.0
Gold prices (US$/fine ounce London fix)						
Current DSA	1411	1290	1286	1295	1320	1619
Previous DSA	1459	1459	1459	1459	1459	1694

[1] Defined as the last 15 years of the projection period. For the current DSA, the long term covers the 2020-34 period. For the previous DSA, it covered 2019-33.

[2] The large current account (excluding grants) deficit in 2013-15 reflects the international military intervention in the North, which is registered as imports of security services financed by grants of averaging 7% of GDP over the 3 year period.

[3] Defined as the sum of grants and loans.

5. **The central feature of Mali's medium- and long-term macroeconomic outlook is the steady decline of annual gold production expected to be compensated only in part by other exports.** The baseline long-term scenario assumes a slightly higher-than-trend GDP growth as strong growth in the secondary and tertiary sectors offsets the steady decline of gold production (Box 1). Inflation is expected to remain moderate as prudent fiscal policies are implemented with no recourse to domestic borrowing monetary policies in line with the objectives of the regional central bank. The current account deficit is expected to remain stable, as the decline in gold exports is compensated by an increase of other exports including agricultural products and other minerals, and a deceleration in import growth. The deceleration of import growth stems from the decline in gold exports that are import intensive.

Box 1. Mali: Macroeconomic Assumptions Underlying the Baseline Scenario, 2014–34

- **Real GDP growth** is expected to pick up after zero percent growth caused by the political and security challenges in 2012 and low growth (1.7 percent) in 2013 caused by a poor harvest. Near term growth in 2014 is projected to rebound significantly to 5.8 percent, while long-term growth is expected to average 4.9 percent per year, moderately higher than the trend observed during the last 10 years including the crisis (3.8 percent) but in line with average growth over the past 25 years (4.6 percent). Gold output is projected to decline by about 2 percent annually starting in 2017. Strong growth in the secondary and tertiary sectors, aided by political stability and supported by structural reforms is expected to offset this decline over time. With a projected rapid population growth, the baseline scenario thus assumes low per capita income growth and therefore continuous access to concessional financing linked to low income status.

- **Consumer price inflation** is projected to remain below the WAEMU convergence criterion of 3 percent, reflecting low global inflation and favorable domestic weather conditions.

- **Fiscal policy**. Owing to pressing public spending needs, the overall fiscal deficit (excluding grants) is expected to increase to about 10 percent of GDP in 2014 from about 7 percent in 2013 with the difference to be financed by an increase in grants and loans pledged by the international community to help with the country's recovery from the 2012–13 crisis. The overall fiscal deficit (excluding grants) is projected to come down to and average around 5.5 percent of GDP in 2020-34, and to be financed in equal proportion by grants and external loans. The basic fiscal balance (revenue plus budgetary grants minus domestically financed expenditure) is expected to remain at zero in line with the convergence criterion of the WAEMU of which Mali is a member. Tax revenue, as percent of GDP, is expected to increase by about 4.8 percentage points over the projection period, finance the increase of domestically financed expenditure, and compensate the reduction of aid after the surge in 2013–16. Therefore, there is no recourse to additional domestic borrowing to finance the budget, except for rolling over current stock of domestic debt at market rates.

- **The non-interest current account deficit** (including transfers) is projected to average around 6.4 percent of GDP over 2014–34, in line with the historic average (6.9 percent of GDP). The non-interest current account deficit is expected to increase from 3.7 percent of GDP in 2013 to 6.7 percent of GDP in 2014 and this increase is expected to be financed by the above mentioned surge in grants and loans. Gold export volumes are expected to decline steadily over time, and the share of gold in total exports is projected to fall from 60 percent in 2013 to about 29 percent in 2034. This decline is projected to be compensated by a gradual increase in other exports (including food, cotton, tourism and other minerals such as cement, phosphate, uranium, bauxite, iron ore, copper, nickel, oil) and a deceleration of import growth. Remittances are projected to remain at their current level of 8 percent of GDP.

C. External DSA

6. Under the baseline assumptions, all external debt and debt-service ratios remain below the policy-dependent thresholds throughout the projection period (Figure 1a). The present value (PV) of external debt, calculated using a 5 percent discount rate, is expected to remain broadly constant throughout the projection period, at around 17-20 percent of GDP (Table 1a). As production from existing gold mines declines starting in 2017 and growing other exports only partly compensate for that decline, the PV of the external debt-to-exports ratio is projected to increase from 70 percent in 2014 to 148 percent in 2034, below the threshold of 150 percent (Figure 1a, Table 1a). With a 4.8 percentage point increase in tax revenue to GDP during the projection period, the PV of the external debt-to-revenue ratio is expected to decrease from 97 percent in 2014 to 86 percent in 2034, remaining, significantly below the threshold of 250 percent (Figure 1a, Table 1a).

7. Under the alternative probability approach, all external debt and debt-service ratios also remain below the policy-dependent thresholds throughout the projection period (Figure 1b). Since Mali's debt-to-export ratio lies within 10% of the threshold in the baseline case (and is hence considered borderline), the use of the "probability approach" is recommended. The "probability approach" is an alternative and complementary methodology for assessing external debt sustainability, based on the evolution of the probability of debt distress over time, rather than on the evolution of debt burden indicators. Under the probability approach, the projected probability of debt distress (expressed as a percent) associated with each debt burden indicator is compared to a threshold level, which in contrast to the baseline approach, is country specific; in this case the thresholds incorporate Mali's individual CPIA score and average GDP growth rate. Application of the probability approach in Mali's case yields the same conclusion as the standard approach, with no breaches under the baseline and one breach under the most extreme shock (Figure 1b).

8. Mali's external debt sustainability is sensitive to a reduction in transfers and FDI, a tightening of financial terms, and an export shock, limiting the scope for non-concessional borrowing. Under a bound test that reduces FDI and official and private transfers in 2015–16 by 5 percent of GDP, the PV of the debt-to-exports ratio would exceed the threshold from 2019 until the end of the projection period (Table 1b, Scenario B4). Under a tightening of financial terms, the PV of debt-to-exports ratio would breach the threshold in 2022 and continue to increase until the end of the projection period to reach about 260 percent in 2034 (Figure 1a, Table 1b, Scenario A2). Under a bound test that reduces export *growth* temporarily in 2015–16 with the effect of reducing exports *levels* permanently by 15 percent, the PV of the debt-to-exports ratio would reach the threshold in 2026 (Table 1b, Scenario B2).

9. Mali's external debt sustainability assessment remains similar when remittances are accounted for. Workers' remittances represent a reliable source of foreign exchange in Mali: they averaged 5.1 percent of GDP during the past decade and 7.7 percent of GDP during the past three years. Under the baseline assumptions, all external debt and debt-service ratios remain below the policy-dependent thresholds throughout the projection period (Figure 2, Table 3). Over 2014–34, the PV of debt-to-GDP plus remittances remains constant at around 16-18 percent and the PV of debt-to-exports plus remittances increases from 53 percent to 93 percent. Under a bound test that tightens financial terms, the

PV of debt-to-exports plus remittances ratio would breach the threshold in 2024, and remain above it for the entire projection period (Figure 2, Table 3).

D. Public DSA

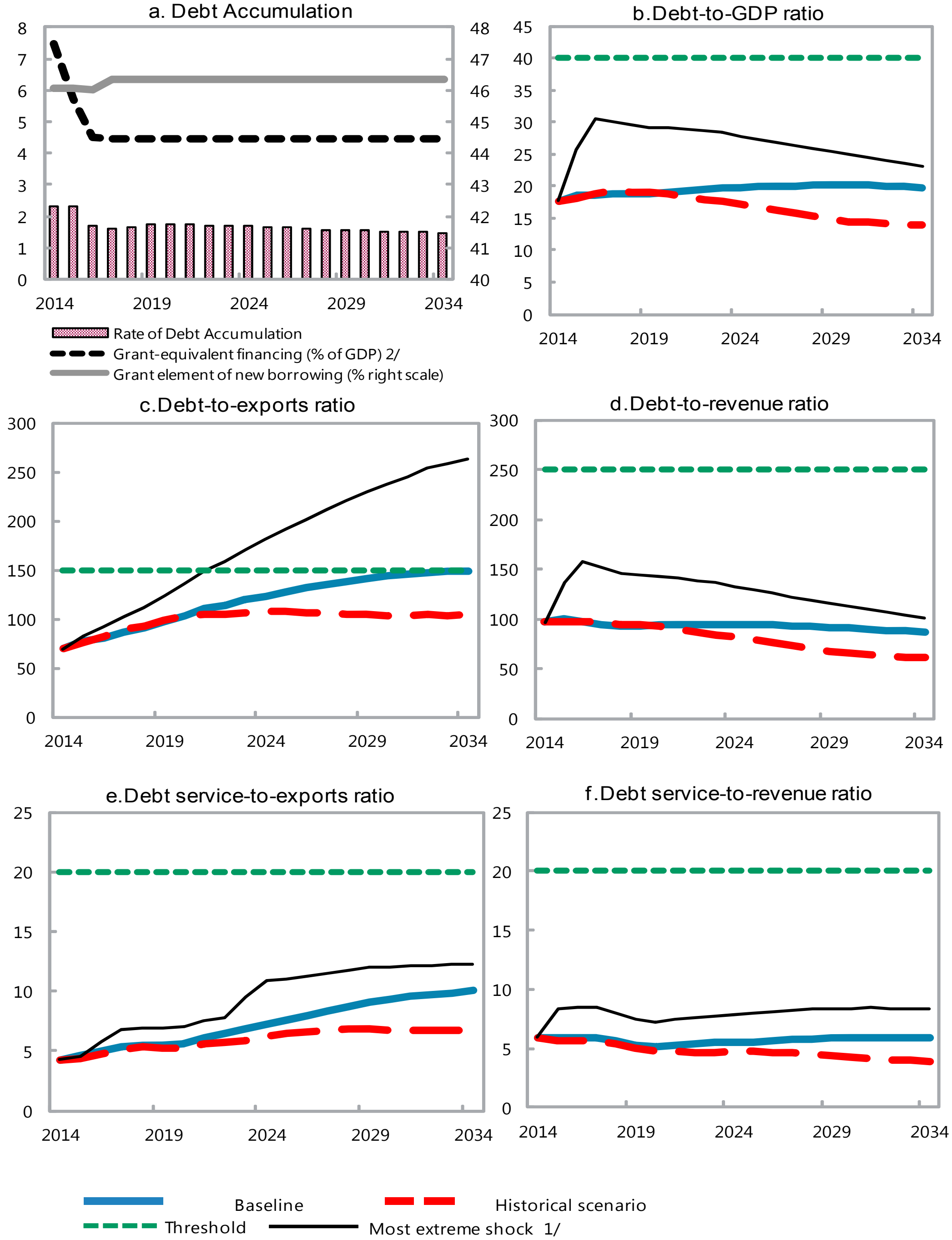
10. The inclusion of domestic debt does not alter the assessment of Mali's debt sustainability. Given the small size of Mali's domestic debt and the absence of recourse to additional domestic borrowing in the baseline scenario, the public debt sustainability analysis closely mirrors the external debt sustainability analysis (Figure 3 and Table 2a). The PV of public sector debt-to-GDP ratio stays between 21-23 percent of GDP during the whole projection period.

11. The Malian authorities agreed with the conclusions of the DSA. They reaffirmed their commitment under their Extended Credit Facility (ECF) arrangement to continue meeting most of their financing need with grants and concessional loans with a minimum grant element of 35 percent. However, they also stressed the need for flexibility to be able to finance investment projects carrying high return and/or positive spillovers to the rest of the economy with market financing if concessional finance is not available and provided that the implementation of such projects would remain compatible with debt sustainability.

E. Conclusion

12. The DSA indicates that Mali remains at moderate risk of debt distress based on the external debt burden indicators. As in last year's DSA, none of the debt burden thresholds are breached over the 20–year projection period under the baseline scenario, and debt sustainability remains mostly sensitive to a reduction in transfers and FDI, a tightening of financing terms, and an export shock owing to the export concentration in gold,. However, given recent downward revisions to the outlook for gold prices, the expected decline in gold exports in the medium term, and the uncertain prospects for export diversification, Mali's debt sustainability needs to remain under close scrutiny. The above mentioned factors highlight the importance for the Malian government of continuing to meet its external financing needs with grants and concessional loans, consistent with their commitment under the ECF supported program. Increasing other exports to compensate the expected decline in gold exports will be critical to maintaining external debt sustainability.

Figure 1a. Mali: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2014–2034 1/

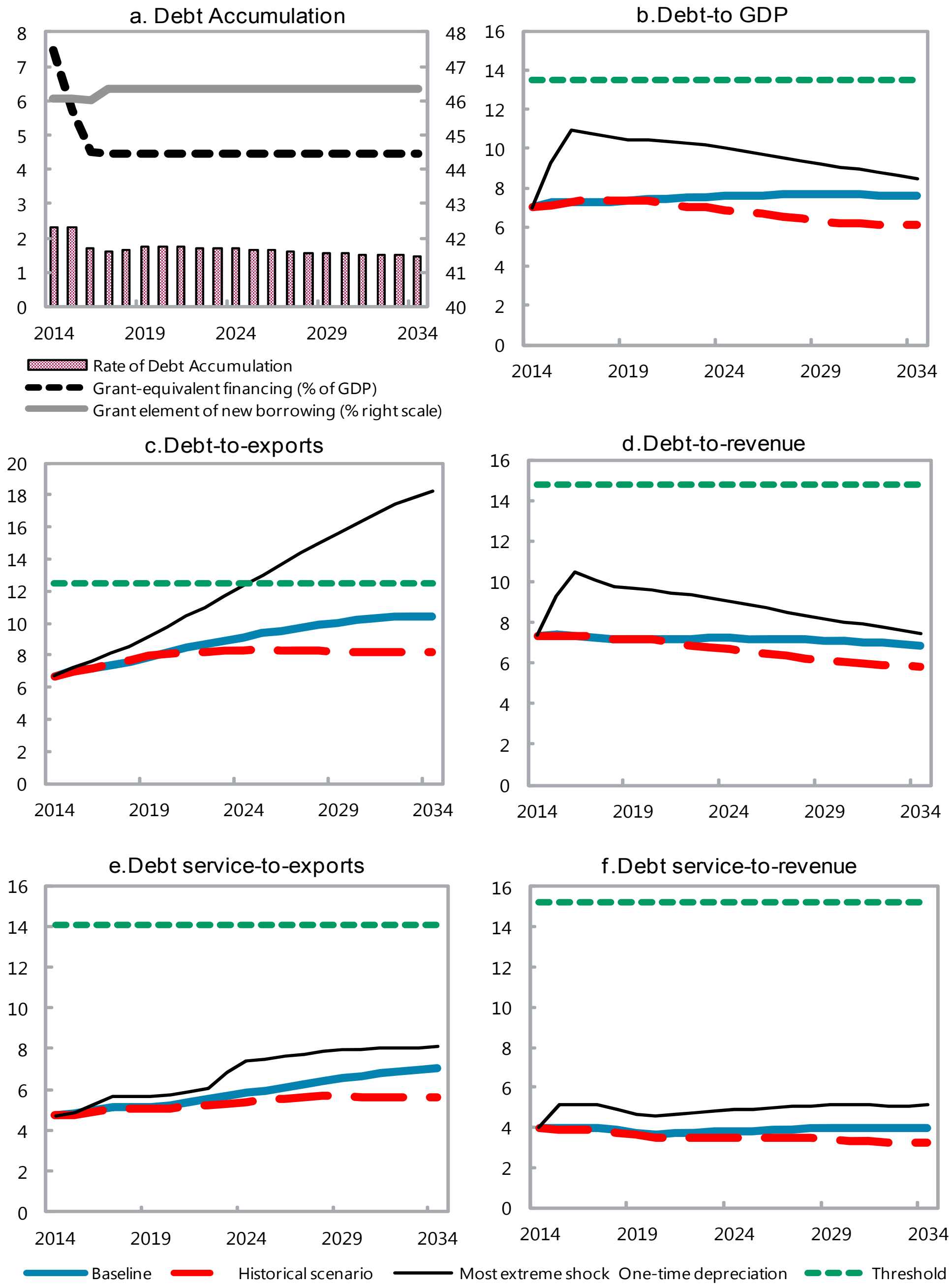


Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2024. In figure b. it corresponds to a Non-debt flows shock; in c. to a Terms shock; in d. to a Non-debt flows shock; in e. to a Non-debt flows shock and in figure f. to a One-time depreciation shock

2/ The decline in grant-equivalent financing in 2015 and 2016 reflects the return to more normal levels of concessional aid following the exceptionally high level of assistance related to the 2011-2012 crisis.

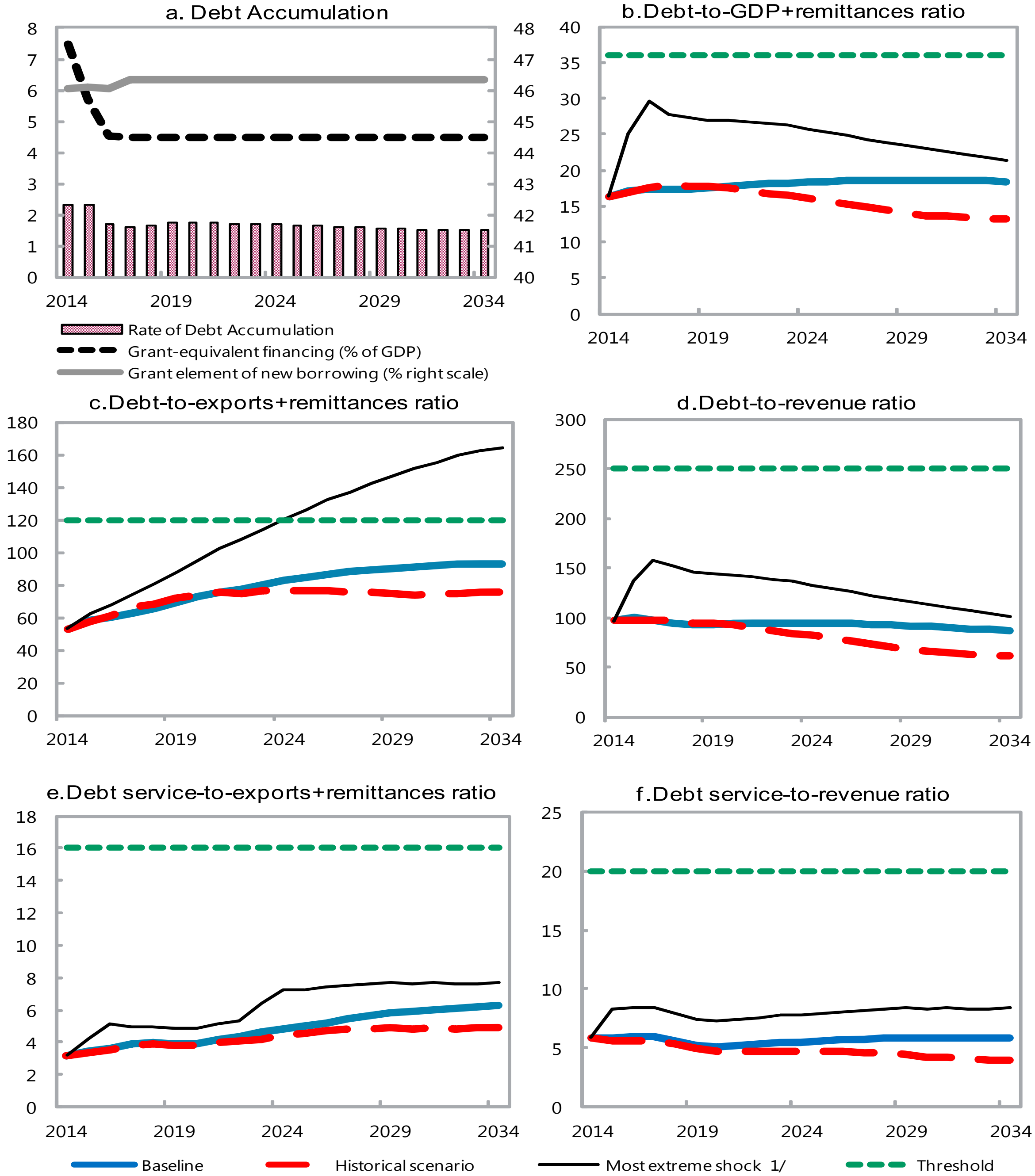
Figure 1b. Mali: Probability of Debt Distress of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2014–2034 1/



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 2024. In figure b. it corresponds to a Non-debt flows shock; in c. to a Terms shock; in d. to a Non-debt flows shock; in e. to a Non-debt flows shock and in figure f. to a One-time depreciation shock

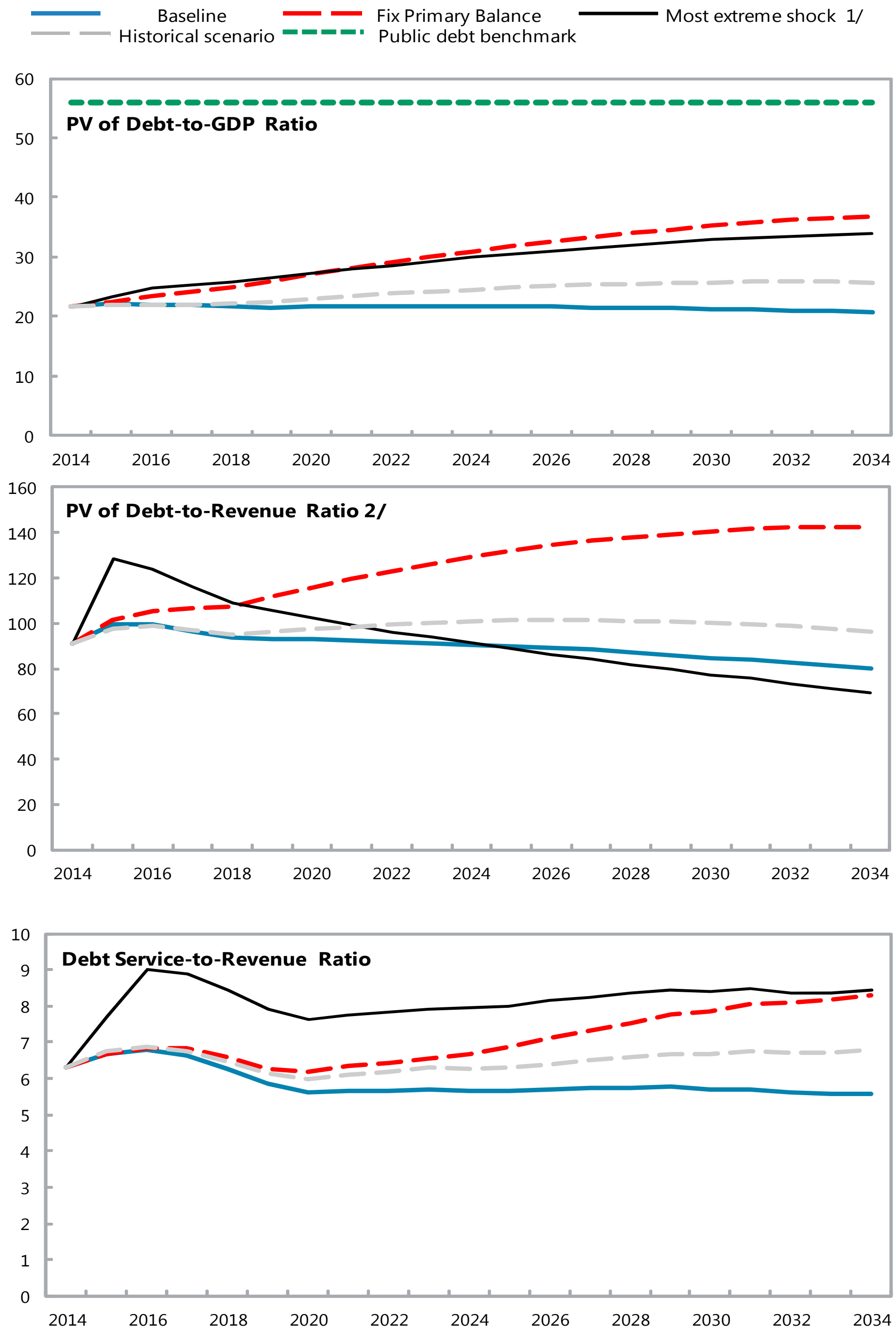
Figure 2. Mali: Indicators of Public and Publicly Guaranteed External Debt Including Remittances under Alternative Scenarios, 2014–2034 1/



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 2024. In figure b. it corresponds to a Non-debt flows shock; in c. to a Terms shock; in d. to a Non-debt flows shock; in e. to a Non-debt flows shock and in figure f. to a One-time depreciation shock

Figure 3. Mali: Indicators of Public Debt Under Alternative Scenarios, 2014–2034 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 2024.
2/ Revenues are defined inclusive of grants.

Table 1a. Mali: External Debt Sustainability Framework, Baseline Scenario, 2014–2034 1/

(In percent of GDP, unless otherwise indicated)

	Actual											Historical 6/ Average	Standard 6/ Deviation	Projections																		
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			2014	2015	2016	2017	2018	2019	2014-2019 Average	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2020-2034 Average
External debt (nominal) 1/	**47.7**	**45.0**	**50.9**	**18.9**	**17.0**	**22.2**	**21.1**	**26.8**	**24.4**	**25.5**	**25.7**			**28.4**	**30.1**	**30.5**	**30.6**	**30.8**	**31.1**		**33.0**	**33.3**	**33.6**	**33.8**	**34.0**	**34.1**	**34.3**	**34.4**	**34.4**	**34.4**	**34.4**	
of which: public and publicly guaranteed (PPG)	47.7	45.0	50.9	18.9	17.0	22.2	21.1	26.8	24.4	25.5	25.7			28.4	30.1	30.5	30.6	30.8	31.1		33.0	33.3	33.6	33.8	34.0	34.1	34.3	34.4	34.4	34.4	34.4	
Change in external debt	...	-2.7	5.9	-32.0	-1.9	5.1	-1.1	5.8	-2.4	1.0	0.2			2.8	1.7	0.3	0.2	0.2	0.3		0.3	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.0	0.0	-0.1	
Identified net debt-creating flows	...	-0.9	1.1	-2.8	3.1	6.9	-1.6	9.7	-2.2	-0.5	-0.1			3.0	2.2	1.3	1.4	2.6	2.5		3.1	3.3	3.3	3.3	3.4	3.3	3.4	3.0	2.9	3.0	2.9	
Non-interest current account deficit	**5.8**	**7.6**	**7.4**	**3.1**	**7.8**	**11.8**	**7.0**	**12.3**	**5.8**	**2.3**	**3.7**	**6.9**	**3.4**	**6.7**	**5.8**	**4.5**	**4.5**	**5.3**	**5.6**		**6.4**	**6.5**	**6.5**	**6.6**	**6.6**	**6.6**	**6.6**	**6.2**	**6.2**	**6.2**	**6.1**	6.4
Deficit in balance of goods and services	9.5	9.8	10.3	6.9	10.4	16.9	12.5	17.0	9.8	5.8	19.6			22.5	16.1	11.9	9.9	10.9	11.3		13.0	13.3	13.4	13.6	13.7	13.7	13.9	13.6	13.6	13.7	13.7	
Exports	27.0	24.3	24.5	29.9	27.4	28.7	26.1	26.0	26.2	32.1	28.9			25.4	24.0	23.1	21.7	20.6	19.3		16.0	15.6	15.2	14.8	14.5	14.3	14.1	13.8	13.6	13.5	13.4	
Imports	36.5	34.1	34.8	36.8	37.8	45.5	38.6	43.0	36.1	37.9	48.5			47.9	40.1	35.0	31.6	31.5	30.7		29.1	28.8	28.6	28.4	28.2	28.0	27.9	27.4	27.2	27.2	27.1	
Net current transfers (negative = inflow)	-7.0	-5.7	-6.0	-7.4	-8.2	-5.2	-5.4	-8.8	-8.0	-7.6	-20.9	-8.3	4.6	-19.8	-14.1	-11.0	-8.8	-8.8	-8.8		-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8
of which: official	-2.7	-2.0	-2.1	-2.7	-1.8	-1.2	-1.9	-2.1	-1.6	-0.5	-13.9			-12.9	-7.2	-4.0	-1.8	-1.8	-1.8		-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	
Other current account flows (negative = net inflow)	3.3	3.5	3.1	3.6	5.6	0.1	-0.1	4.2	4.0	4.1	4.9			4.0	3.8	3.7	3.4	3.2	3.0		2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	
Net FDI (negative = inflow)	**-3.1**	**-1.8**	**-2.7**	**-1.2**	**-2.3**	**-2.1**	**-8.4**	**-1.9**	**-5.2**	**-3.7**	**-2.6**	**-3.2**	**2.1**	**-2.6**	**-2.5**	**-2.1**	**-2.1**	**-1.7**	**-2.0**		**-2.3**	**-2.3**	**-2.3**	**-2.3**	**-2.3**	**-2.3**	**-2.3**	**-2.3**	**-2.3**	**-2.3**	**-2.3**	-2.3
Endogenous debt dynamics 2/	**...**	**-6.7**	**-3.6**	**-4.8**	**-2.4**	**-2.8**	**-0.2**	**-0.7**	**-2.8**	**0.9**	**-1.2**			**-1.1**	**-1.1**	**-1.0**	**-1.1**	**-1.1**	**-1.1**		**-1.1**	**-1.0**	**-1.0**	**-1.0**	**-1.0**	**-1.0**	**-1.0**	**-1.0**	**-1.0**	**-1.0**	**-1.0**	
Contribution from nominal interest rate	...	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.4	0.4	0.3			0.3	0.3	0.4	0.4	0.4	0.4		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Contribution from real GDP growth	...	-0.9	-2.5	-2.4	-0.7	-0.7	-1.0	-1.2	-0.6	0.0	-0.4			-1.4	-1.5	-1.4	-1.5	-1.5	-1.5		-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	
Contribution from price and exchange rate changes	...	-6.3	-1.6	-2.9	-2.0	-2.5	0.4	0.2	-2.5	0.6	-1.1			...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...	
Residual (3-4) 3/	**...**	**-1.7**	**4.8**	**-29.2**	**-5.0**	**-1.7**	**0.4**	**-3.9**	**-0.2**	**1.5**	**0.3**			**-0.2**	**-0.5**	**-1.0**	**-1.2**	**-2.4**	**-2.2**		**-2.8**	**-2.9**	**-3.0**	**-3.1**	**-3.1**	**-3.1**	**-3.2**	**-2.9**	**-2.9**	**-3.0**	**-3.0**	
of which: exceptional financing	...	-1.1	-1.0	-0.7	-0.3	-0.3	-0.3	-0.2	-0.3	-0.5	-0.2			-0.1	-0.4	-0.4	-0.3	-0.3	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PV of external debt 4/	...	...	...	...	...	...	...	...	...	...	16.1			17.7	18.5	18.7	18.7	18.7	18.8		19.8	19.9	20.0	20.1	20.1	20.1	20.1	20.1	20.0	19.9	19.8	
In percent of exports	...	...	...	...	...	...	...	...	...	...	55.7			69.5	77.2	80.8	86.1	91.1	97.5		123.4	127.8	131.6	135.3	138.3	140.8	143.2	145.4	147.5	148.0	148.2	
PV of PPG external debt	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**16.1**			**17.7**	**18.5**	**18.7**	**18.7**	**18.7**	**18.8**		**19.8**	**19.9**	**20.0**	**20.1**	**20.1**	**20.1**	**20.1**	**20.1**	**20.0**	**19.9**	**19.8**	
In percent of exports	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**55.7**			**69.5**	**77.2**	**80.8**	**86.1**	**91.1**	**97.5**		**123.4**	**127.8**	**131.6**	**135.3**	**138.3**	**140.8**	**143.2**	**145.4**	**147.5**	**148.0**	**148.2**	
In percent of government revenues	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**92.8**			**96.9**	**99.3**	**97.0**	**94.6**	**92.5**	**93.1**		**94.3**	**94.1**	**93.8**	**93.2**	**92.5**	**91.5**	**90.6**	**90.1**	**88.8**	**87.4**	**86.3**	
Debt service-to-exports ratio (in percent)	**7.9**	**8.2**	**8.0**	**111.5**	**4.5**	**3.7**	**5.1**	**3.9**	**4.9**	**3.4**	**3.9**			**4.2**	**4.6**	**4.9**	**5.4**	**5.5**	**5.5**		**7.2**	**7.5**	**8.0**	**8.3**	**8.7**	**9.1**	**9.3**	**9.6**	**9.7**	**9.9**	**10.1**	
PPG debt service-to-exports ratio (in percent)	**7.9**	**8.2**	**8.0**	**111.5**	**4.5**	**3.7**	**5.1**	**3.9**	**4.9**	**3.4**	**3.9**			**4.2**	**4.6**	**4.9**	**5.4**	**5.5**	**5.5**		**7.2**	**7.5**	**8.0**	**8.3**	**8.7**	**9.1**	**9.3**	**9.6**	**9.7**	**9.9**	**10.1**	
PPG debt service-to-revenue ratio (in percent)	**12.4**	**11.6**	**11.2**	**192.7**	**7.5**	**6.8**	**7.7**	**5.8**	**7.5**	**6.3**	**6.4**			**5.9**	**5.9**	**5.9**	**5.9**	**5.6**	**5.3**		**5.5**	**5.6**	**5.7**	**5.8**	**5.8**	**5.9**	**5.9**	**5.9**	**5.8**	**5.8**	**5.9**	
Total gross financing need (Billions of U.S. dollars)	...	...	...	...	0.5	0.9	0.0	1.1	0.2	0.0	0.3			0.6	0.6	0.5	0.5	0.8	0.8		1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.3	2.5	2.7	2.8	
Non-interest current account deficit that stabilizes debt ratio	...	10.3	1.5	35.1	9.7	6.6	8.1	6.5	8.2	1.3	3.5			3.9	4.1	4.2	4.3	5.2	5.3		6.1	6.2	6.3	6.4	6.3	6.4	6.4	6.1	6.2	6.2	6.2	
Key macroeconomic assumptions																																
Real GDP growth (in percent)	7.6	2.3	6.1	5.3	4.3	5.0	4.5	5.8	2.7	0.0	1.7	3.8	2.0	5.8	5.5	5.1	5.2	5.3	5.3	5.4	5.1	4.8	4.9	4.9	4.7	4.8	4.7	4.8	4.8	4.7	4.7	4.9
GDP deflator in US dollar terms (change in percent)	22.8	15.3	3.8	5.9	12.0	16.9	-2.0	-0.7	10.2	-2.3	4.5	6.4	7.0	2.6	0.9	3.0	3.1	3.1	3.1	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.8	3.0	3.1	3.2	2.8
Effective interest rate (percent) 5/	1.5	1.4	1.3	1.0	1.9	2.2	1.5	1.3	1.5	1.4	1.4	1.5	0.3	1.2	1.3	1.3	1.4	1.4	1.5	1.4	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.6
Growth of exports of G&S (US dollar terms, in percent)	6.8	6.1	11.3	35.9	6.8	28.4	-6.9	4.8	14.3	19.4	-4.2	11.6	13.5	-4.4	0.5	4.2	1.9	2.9	2.1	1.2	4.6	4.7	5.0	5.1	5.4	5.8	5.8	5.9	6.0	7.2	7.2	5.2
Growth of imports of G&S (US dollar terms, in percent)	35.6	10.2	12.6	17.7	19.9	47.9	-13.3	17.1	-5.0	2.6	36.1	14.6	18.1	7.2	-10.8	-5.7	-2.0	8.2	5.8	0.5	7.1	6.8	6.8	6.9	6.9	7.0	7.1	5.7	7.3	7.9	7.6	6.9
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	...	...	...	...	...	...	...	...	46.1	46.1	46.0	46.3	46.3	46.3	46.2	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3
Government revenues (excluding grants, in percent of GDP)	17.2	17.3	17.5	17.3	16.6	15.5	17.1	17.2	17.0	17.1	17.3			18.2	18.7	19.2	19.8	20.3	20.2		21.0	21.2	21.3	21.5	21.8	22.0	22.2	22.3	22.6	22.8	23.0	21.6
Aid flows (in Billions of US dollars) 7/	0.4	0.4	0.4	2.7	0.6	0.5	0.8	0.6	0.8	0.1	0.7			1.0	0.9	0.7	0.8	0.9	0.9		1.4	1.5	1.6	1.7	1.8	2.0	2.1	2.3	2.5	2.6	2.9	
of which: Grants	0.2	0.2	0.2	2.4	0.3	0.3	0.4	0.3	0.4	0.0	0.4			0.7	0.5	0.4	0.4	0.5	0.5		0.8	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	
of which: Concessional loans	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.3	0.3	0.0	0.3			0.4	0.4	0.3	0.3	0.4	0.4		0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.3	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...	...	...	...	...	...	...	...	...			7.5	5.7	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Grant-equivalent financing (in percent of external financing) 8/	...	...	...	...	...	...	...	...	...	...	...			75.7	69.9	70.9	71.4	71.4	71.4		71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
Memorandum items:																																
Nominal GDP (Billions of US dollars)	4.2	5.0	5.5	6.1	7.2	8.8	9.0	9.4	10.7	10.4	11.1			12.1	12.8	13.9	15.1	16.4	17.8		25.9	27.8	30.0	32.3	34.7	37.4	40.2	43.3	46.8	50.5	54.6	
Nominal dollar GDP growth	...	17.9	10.2	11.5	16.8	22.7	2.4	5.0	13.2	-2.3	6.4			8.6	6.4	8.3	8.5	8.6	8.5	8.1	7.9	7.6	7.7	7.7	7.5	7.6	7.6	7.8	7.9	7.9	8.1	7.8
PV of PPG external debt (in Billions of US dollars)											1.8			2.1	2.4	2.6	2.8	3.1	3.4		5.1	5.6	6.0	6.5	7.0	7.5	8.1	8.7	9.4	10.1	10.8	
(PVt-PVt-1)/GDPt-1 (in percent)														2.3	2.3	1.7	1.6	1.7	1.7	1.9	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.6
Gross workers' remittances (Billions of US dollars)	0.2	0.2	0.3	0.3	0.5	0.4	0.5	0.8	0.8	0.8	0.9			1.0	1.0	1.1	1.2	1.3	1.4		2.1	2.2	2.4	2.6	2.8	3.0	3.2	3.5	3.7	4.0	4.4	
PV of PPG external debt (in percent of GDP + remittances)									...	...	14.9			16.3	17.2	17.3	17.3	17.3	17.5		18.3	18.4	18.5	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.3	
PV of PPG external debt (in percent of exports + remittances)									...	...	43.6			52.8	57.9	60.0	62.9	65.6	68.9		82.3	84.4	86.2	87.8	89.2	90.2	91.2	92.0	92.8	92.8	92.7	
Debt service of PPG external debt (in percent of exports + remittances)									...	...	3.0			3.2	3.4	3.7	3.9	4.0	3.9		4.8	5.0	5.2	5.4	5.6	5.8	5.9	6.0	6.1	6.2	6.3	

Sources: Country authorities; and staff estimates and projections.

1/ Public sector external debt only.

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); project grants, changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes. The calculation of the residual assumes the capital account is a debt-creating flow, which is inappropriate in Mali's case since the capital account consists primarily of project grants (around 2% of GDP).

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

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

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

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

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

Table 1b. Mali: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2014–2034

(In percent)

	Projections							
	2014	2015	2016	2017	2018	2019	2024	2034
Debt-to-GDP ratio								
Baseline	18	19	19	19	19	19	20	20
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	18	18	19	19	19	19	17	14
A2. New public sector loans on less favorable terms in 2014-2034 2	18	20	21	22	23	24	29	35
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	18	19	20	20	20	20	21	21
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	18	19	20	20	20	20	21	20
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	18	19	20	20	20	20	21	21
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	18	26	30	30	29	29	28	23
B5. Combination of B1-B4 using one-half standard deviation shocks	18	23	26	26	26	26	25	22
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	18	26	27	27	27	27	28	28
Debt-to-exports ratio								
Baseline	69	77	81	86	91	98	123	148
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	69	76	81	89	93	98	107	104
A2. New public sector loans on less favorable terms in 2014-2034 2	69	83	91	102	112	124	181	263
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	69	77	81	86	91	98	124	149
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	69	81	95	101	106	113	141	165
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	69	77	81	86	91	98	124	149
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	69	107	132	138	143	151	173	172
B5. Combination of B1-B4 using one-half standard deviation shocks	69	92	105	110	115	122	145	155
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	69	77	81	86	91	98	124	149
Debt-to-revenue ratio								
Baseline	97	99	97	95	92	93	94	86
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	97	97	98	98	94	94	82	60
A2. New public sector loans on less favorable terms in 2014-2034 2	97	107	110	112	114	118	138	153
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	97	103	104	102	99	100	101	93
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	97	101	105	102	99	100	99	88
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	97	101	103	100	98	98	100	91
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	97	137	158	151	146	144	132	100
B5. Combination of B1-B4 using one-half standard deviation shocks	97	124	136	131	127	126	120	97
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	97	142	139	135	132	133	135	123

Table 1b. Mali: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2014–2034 (concluded)

(In percent)

Debt service-to-exports ratio								
Baseline	4	5	5	5	6	6	7	10
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	4	4	5	5	5	5	6	7
A2. New public sector loans on less favorable terms in 2014-2034 2	4	5	5	6	6	6	10	16
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	4	5	5	5	6	6	7	10
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	4	5	5	6	6	6	8	11
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	4	5	5	5	6	6	7	10
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	4	5	6	7	7	7	11	12
B5. Combination of B1-B4 using one-half standard deviation shocks	4	4	5	6	6	6	9	11
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	4	5	5	5	6	6	7	10
Debt service-to-revenue ratio								
Baseline	6	6	6	6	6	5	6	6
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	6	6	6	6	5	5	5	4
A2. New public sector loans on less favorable terms in 2014-2034 2	6	6	6	6	6	6	7	9
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	6	6	6	6	6	6	6	6
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	6	6	6	6	6	5	6	6
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	6	6	6	6	6	6	6	6
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	6	6	7	7	7	7	8	7
B5. Combination of B1-B4 using one-half standard deviation shocks	6	6	7	7	7	6	7	7
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	6	8	8	8	8	7	8	8
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	41	41	41	41	41	41	41	41

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.

Table 2a. Mali: Public Sector Debt Sustainability Framework, Baseline Scenario, 2014–2034

(In percent of GDP, unless otherwise indicated)

	Actual													Projections									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average 5/	Standard Deviation 5/	2014	2015	2016	2017	2018	2019	2014-19 Average	2024	2034	2020-34 Average
Public sector debt 1/	49.2	46.4	53.1	20.4	19.4	24.1	23.3	31.2	29.2	29.8	31.5			32.4	33.8	33.9	33.8	33.8	33.8		34.9	35.2	
of which: foreign-currency denominated	47.7	45.0	50.9	18.9	17.0	22.2	21.1	26.8	24.4	25.5	25.7			28.4	30.1	30.5	30.6	30.8	31.1		33.0	34.4	
Change in public sector debt	...	-2.8	6.7	-32.7	-1.0	4.7	-0.7	7.9	-2.0	0.6	1.7			0.9	1.4	0.1	-0.1	-0.1	0.1		0.1	-0.1	
Identified debt-creating flows		-5.6	3.0	-41.9	-0.2	-0.4	-3.5	2.5	1.7	-0.5	-0.5			3.0	1.4	0.0	0.0	0.0	0.0		0.1	0.0	
Primary deficit	0.6	1.9	2.5	-31.8	2.8	1.9	3.9	2.5	3.4	0.5	2.3	2.4	10.9	4.1	3.6	2.4	2.4	2.4	2.0	2.8	2.0	2.0	2.0
Revenue and grants	21.9	21.2	21.5	56.2	21.3	19.0	21.7	20.1	20.8	17.4	21.0			23.7	22.3	22.2	22.7	23.2	23.2		23.9	25.9	
of which: grants	4.7	3.9	4.0	38.9	4.7	3.4	4.6	2.9	3.8	0.2	3.6			5.4	3.6	2.9	2.9	2.9	2.9		2.9	2.9	
Primary (noninterest) expenditure	22.4	23.1	24.0	24.4	24.1	20.8	25.6	22.5	24.3	17.9	23.2			27.8	25.8	24.6	25.1	25.5	25.2		25.9	27.9	
Automatic debt dynamics		-6.4	1.8	-9.4	-2.6	-1.0	-2.8	0.3	-1.5	-0.9	-1.3			-0.8	-1.8	-2.0	-2.0	-2.1	-2.1		-1.9	-2.1	
Contribution from interest rate/growth differential	...	-1.7	-3.5	-3.7	-0.9	-1.0	-0.9	-1.2	-0.8	-0.1	-0.3			-1.7	-1.7	-1.7	-1.8	-1.8	-1.8		-32.7	-34.4	
of which: contribution from average real interest rate	...	-0.6	-0.8	-1.0	-0.1	-0.1	0.2	0.1	0.0	-0.1	0.2			0.1	0.0	0.0	-0.1	-0.1	-0.1		-31.0	-32.8	
of which: contribution from real GDP growth	...	-1.1	-2.7	-2.6	-0.8	-0.9	-1.0	-1.3	-0.8	0.0	-0.5			-1.7	-1.7	-1.6	-1.7	-1.7	-1.7		-1.7	-1.6	
Contribution from real exchange rate depreciation		-4.7	5.3	-5.7	-1.7	0.0	-2.0	1.5	-0.7	-0.8	-1.0			0.9	-0.2	-0.3	-0.3	-0.3	-0.3		...	...	
Other identified debt-creating flows		-1.1	-1.4	-0.7	-0.3	-1.3	-4.6	-0.2	-0.3	-0.1	-1.5			-0.4	-0.4	-0.4	-0.3	-0.3	0.0		0.0	0.0	
Privatization receipts (negative)		0.0	-0.3	0.0	0.0	-1.0	-4.3	0.0	0.0	0.0	-1.0			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	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)		-1.1	-1.0	-0.7	-0.3	-0.3	-0.3	-0.2	-0.3	-0.1	-0.5			-0.4	-0.4	-0.4	-0.3	-0.3	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	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes		2.8	3.7	9.2	-0.8	5.1	2.8	5.4	-3.7	1.1	2.2			-2.1	0.1	0.0	-0.1	0.0	0.1		0.0	-0.1	
Other Sustainability Indicators																							
PV of public sector debt			...	...	...	...	...	...	...	...	21.9			21.6	22.2	22.1	21.9	21.7	21.6		21.6	20.7	
of which: foreign-currency denominated			...	...	...	...	...	...	...	...	16.1			17.7	18.5	18.7	18.7	18.7	18.8		19.8	19.8	
of which: external		...	...	...	...	...	...	...	...	...	16.1			17.7	18.5	18.7	18.7	18.7	18.8		19.8	19.8	
PV of contingent liabilities (not included in public sector debt)		...	...	...	...	...	...	...	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	...	4.5	5.0	2.2	4.5	3.6	5.8	4.8	6.8	4.7	6.5			8.8	8.0	6.7	6.5	6.2	5.6		4.9	4.2	
PV of public sector debt-to-revenue and grants ratio (in percent)	0.0	0.0	...	...	...	...	...	...	...	...	104.4			91.3	99.7	99.6	96.4	93.5	93.1		90.6	80.0	
PV of public sector debt-to-revenue ratio (in percent)	0.0	0.0	...	...	...	...	...	...	...	...	126.3			118.6	119.0	114.8	110.7	107.0	106.6		103.2	90.2	
of which: external 3/		...	...	...	...	...	...	...	...	...	92.8			96.9	99.3	97.0	94.6	92.5	93.1		94.3	86.3	
Debt service-to-revenue and grants ratio (in percent) 4/		9.7	9.5	59.4	6.2	5.8	6.4	8.0	11.2	10.9	7.8			6.3	6.7	6.8	6.6	6.3	5.9		5.7	5.6	
Debt service-to-revenue ratio (in percent) 4/		11.9	11.6	192.9	7.9	7.1	8.2	9.3	13.8	11.1	9.4			8.2	8.0	7.8	7.6	7.2	6.7		6.5	6.3	
Primary deficit that stabilizes the debt-to-GDP ratio									5.5	-0.1	0.6			3.2	2.1	2.4	2.4	2.4	2.0		1.9	2.2	
Key macroeconomic and fiscal assumptions																							
Real GDP growth (in percent)	7.6	2.3	6.1	5.3	4.3	5.0	4.5	5.8	2.7	0.0	1.7	3.8	2.0	5.8	5.5	5.1	5.2	5.3	5.3	5.4	5.1	4.7	4.9
Average nominal interest rate on forex debt (in percent)		1.4	1.3	1.0	1.9	2.2	1.5	1.3	1.5	1.4	1.4	1.5	0.3	1.2	1.3	1.3	1.4	1.4	1.5	1.4	1.6	1.7	1.6
Average real interest rate on domestic debt (in percent)		-0.8	2.6	-3.3	3.4	-6.3	0.9	4.1	3.2	0.5	4.8	0.9	3.5	3.4	3.9	3.1	3.4	3.2	3.2	3.4	3.0	2.4	2.9
Real exchange rate depreciation (in percent, + indicates depreciation)		-10.2	12.7	-12.0	-9.3	0.3	-9.2	7.3	-2.6	-3.3	-4.0	-3.0	8.0	3.6	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	2.6	4.9	3.6	5.1	2.6	8.8	3.6	4.2	5.1	5.7	1.2	4.5	2.0	0.6	1.7	2.5	2.2	2.4	2.4	2.0	2.6	3.2	2.8
Growth of real primary spending (deflated by GDP deflator, in percent)		0.1	0.1	0.1	0.0	-0.1	0.3	-0.1	10.8	-26.2	32.1	1.7	14.2	26.6	-2.0	0.0	7.4	7.3	3.9	7.2	5.7	5.3	5.6
Grant element of new external borrowing (in percent)		...	...	...	...	...	...	...	...	...	...	...	...	46.1	46.1	46.0	46.3	46.3	46.3	46.2	46.3	46.3	...

Sources: Country authorities; and staff estimates and projections.

1/ Gross debt of central government

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. The historical average for the primary deficit, however, excludes 2006 (the year of MDRI debt relief and hence an unusually large primary surplus).

Table 2b. Mali: Sensitivity Analysis for Key Indicators of Public Debt, 2014–2034

	Projections							
	2014	2015	2016	2017	2018	2019	2024	2034
PV of Debt-to-GDP Ratio								
Baseline	22	22	22	22	22	22	22	21
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	22	22	22	22	22	23	25	26
A2. Primary balance is unchanged from 2014	22	23	23	24	25	26	31	37
A3. Permanently lower GDP growth 1/	22	22	22	22	22	23	25	32
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2015-2016	22	23	25	25	26	26	30	34
B2. Primary balance is at historical average minus one standard deviations in 2015-2016	22	22	23	22	22	22	22	21
B3. Combination of B1-B2 using one half standard deviation shocks	22	22	23	23	24	24	27	30
B4. One-time 30 percent real depreciation in 2015	22	29	27	26	25	24	22	18
B5. 10 percent of GDP increase in other debt-creating flows in 2015	22	28	28	27	27	26	26	23
PV of Debt-to-Revenue Ratio 2/								
Baseline	91	100	100	96	93	93	91	80
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	91	98	99	97	95	96	101	96
A2. Primary balance is unchanged from 2014	91	101	106	106	107	112	129	143
A3. Permanently lower GDP growth 1/	91	100	101	99	97	98	104	121
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2015-2016	91	104	111	111	111	113	124	130
B2. Primary balance is at historical average minus one standard deviations in 2015-2016	91	99	102	98	95	95	92	81
B3. Combination of B1-B2 using one half standard deviation shocks	91	100	103	102	101	103	111	114
B4. One-time 30 percent real depreciation in 2015	91	128	124	116	109	105	91	69
B5. 10 percent of GDP increase in other debt-creating flows in 2015	91	126	125	120	115	114	107	89
Debt Service-to-Revenue Ratio 2/								
Baseline	6	7	7	7	6	6	6	6
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	6	7	7	7	6	6	6	7
A2. Primary balance is unchanged from 2014	6	7	7	7	7	6	7	8
A3. Permanently lower GDP growth 1/	6	7	7	7	6	6	6	7
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2015-2016	6	7	7	7	7	7	7	8
B2. Primary balance is at historical average minus one standard deviations in 2015-2016	6	7	7	7	6	6	6	6
B3. Combination of B1-B2 using one half standard deviation shocks	6	7	7	7	7	6	6	7
B4. One-time 30 percent real depreciation in 2015	6	8	9	9	8	8	8	8
B5. 10 percent of GDP increase in other debt-creating flows in 2015	6	7	8	8	7	6	7	6

Sources: Country authorities; and staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.

2/ Revenues are defined inclusive of grants.

Table 3. Mali: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, including remittances, 2014–2034
(In percent)

	Projections							
	2014	2015	2016	2017	2018	2019	2024	2034
Debt-to-GDP+remittances ratio								
Baseline	16	17	17	17	17	17	18	18
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	16	17	17	18	18	18	16	13
A2. New public sector loans on less favorable terms in 2014-2034 2	16	18	20	20	21	22	27	33
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	16	18	18	18	19	19	20	20
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	16	18	19	19	19	19	19	19
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	16	17	18	18	18	18	19	19
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	16	25	30	28	27	27	26	21
B5. Combination of B1-B4 using one-half standard deviation shocks	16	22	25	24	24	24	23	21
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	16	24	24	24	24	24	25	25
Debt-to-exports+remittances ratio								
Baseline	53	58	60	63	66	69	82	93
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	53	57	61	66	68	72	76	75
A2. New public sector loans on less favorable terms in 2014-2034 2	53	62	68	74	80	88	120	164
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	53	58	60	63	66	69	83	93
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	53	60	69	72	75	78	92	100
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	53	58	60	63	66	69	83	93
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	53	98	118	101	103	107	116	108
B5. Combination of B1-B4 using one-half standard deviation shocks	53	81	89	81	83	87	97	97
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	53	58	60	63	66	69	83	93
Debt-to-revenue ratio								
Baseline	97	99	97	95	92	93	94	86
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	97	97	98	98	94	94	82	60
A2. New public sector loans on less favorable terms in 2014-2034 2	97	107	110	112	114	118	138	153
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	97	103	104	102	99	100	101	93
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	97	101	105	102	99	100	99	88
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	97	101	103	100	98	98	100	91
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	97	137	158	151	146	144	132	100
B5. Combination of B1-B4 using one-half standard deviation shocks	97	124	136	131	127	126	120	97
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	97	142	139	135	132	133	135	123

Table 3. Mali: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, including remittances, 2014–2034 (concluded)

(In percent)

Debt service-to-exports+remittances ratio

Baseline	3	3	4	4	4	4	5	6
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	3	3	4	4	4	4	4	5
A2. New public sector loans on less favorable terms in 2014-2034 2	3	3	4	4	4	4	6	10
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	3	3	4	4	4	4	5	6
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	3	3	4	4	4	4	5	7
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	3	3	4	4	4	4	5	6
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	3	4	5	5	5	5	7	8
B5. Combination of B1-B4 using one-half standard deviation shocks	3	4	4	4	4	4	6	7
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	3	3	4	4	4	4	5	6

Debt service-to-revenue ratio

Baseline	6	6	6	6	6	5	6	6
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2014-2034 1/	6	6	6	6	5	5	5	4
A2. New public sector loans on less favorable terms in 2014-2034 2	6	6	6	6	6	6	7	9
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2015-2016	6	6	6	6	6	6	6	6
B2. Export value growth at historical average minus one standard deviation in 2015-2016 3/	6	6	6	6	6	5	6	6
B3. US dollar GDP deflator at historical average minus one standard deviation in 2015-2016	6	6	6	6	6	6	6	6
B4. Net non-debt creating flows at historical average minus one standard deviation in 2015-2016 4/	6	6	7	7	7	7	8	7
B5. Combination of B1-B4 using one-half standard deviation shocks	6	6	7	7	7	6	7	7
B6. One-time 30 percent nominal depreciation relative to the baseline in 2015 5/	6	8	8	8	8	7	8	8
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	41	41	41	41	41	41	41	41

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.

Press Release No. 14/546
FOR IMMEDIATE RELEASE
December 1, 2014

International Monetary Fund
Washington, D.C. 20431 USA

IMF Executive Board Completes First and Second Reviews Under the Extended Credit Facility Arrangement for Mali, Approves US$11.7 Million Disbursement

The Executive Board of the International Monetary Fund (IMF) today completed the first and second reviews of Mali's performance under an economic program supported by a three-year Extended Credit Facility (ECF) arrangement. The Board's decision enables the immediate disbursement of SDR 8 million (about US$11.7 million), bringing total disbursements under the arrangement to SDR 14 million (about US$ 20.5 million).

The Executive Board approved the ECF arrangement for Mali on December 18, 2013 for an amount of SDR 30 million (about US$ 43.9 million or 32 percent of quota, see Press Release No. 13/524).

Following the Executive Board's discussion, Mr. Naoyuki Shinohara, Deputy Managing Director and Acting Chair, issued the following statement:

"The economic recovery is under way, but remains fragile, and prospects are clouded by a difficult security situation and the risk of an Ebola epidemic. Serious lapses in public financial management caused delays in the first review of the Fund-supported program and the provision of general budget support. In order to restore business, consumer, and donor confidence, it is essential to tighten the implementation of budget and procurement rules, building on the results of recent official audits.

"The 2015 budget puts public finances back on a sustainable path. It appropriately emphasizes revenue mobilization, priority spending for growth and human development, and limited recourse to domestic financing, leaving room for bank financing of the private sector.

"Further efforts are urgently needed to strengthen public financial management. Tax policy and administration reforms need to be accelerated to raise the tax yield. Tighter expenditure control, supported by improvements in Treasury management, will help prevent the accumulation of arrears. A conclusion of the audit of the outstanding domestic arrears and their rapid clearance will support the economic recovery.

“Reforms aimed at improving the business environment are essential to boost Mali’s medium-term growth prospects. Progress in strengthening the financial system, lightening the administrative burden for taxpayers, placing the electricity company’s finances on a sustainable footing, and combating corruption will be critical in the period ahead.”

Statement by Ngueto Tiraina Yambaye, Executive Director for Mali
December 1, 2014

1. My Malian authorities are thankful to the Board, Management, and staff for the valuable policy advice, as well as for the technical and financial assistance they receive from the Fund. Mali continues to confront difficult challenges in terms of development, security and national reconciliation while maintaining macroeconomic stability. In spite of the difficult environment, the authorities are making every effort to address the challenges facing the economy and to implement the measures envisaged under the ECF program. Progress is being made in a number of areas and weaknesses are being addressed. Most of the performance criteria and indicators at end-2013 and end-June 2014 under the program having been met.

2. Weaknesses in public finance management that became evident during the second quarter of 2014, and prevented the completion of the first review under the ECF, have been addressed. In this regard, the Malian authorities have conducted two audits on the acquisition of the presidential plane and a military contract to determine their compliance with budgetary and procurement rules. The results of these audits, which have been published, have led to the amendment or cancellation of several military contracts. The authorities are committed to clearly establish responsibilities and apply the rule of law. All extra budgetary spending related to these transactions have been incorporated in new supplementary budgets which were submitted to the National Assembly. The last prior action for the first and second reviews was completed on November 21, 2014. My authorities believe that these efforts reflect their strong commitment to the economic program supported by the ECF.

Recent Economic Developments and Performance under the ECF

3. For this year, the economy is expected to return to a normal growth path with a projected increase in real GDP of 5.8 percent, compared to 1.7 percent in 2013. The slow growth in 2013 was due to the contraction of the agricultural sector (excluding rice) by 26 percent on account of less favorable rainfalls. For 2014, only the manufacturing sector is expected to slow down as a result of the sluggish business environment. Average inflation was negative in 2013 (-0.6 percent) and is expected to remain low at 1 percent in 2014. The external current account deficit (including grants) increased and reached 4 percent of GDP in 2013 as a result of the decline in gold prices and the increase of imports concomitantly with the economic recovery. This deficit was almost entirely financed by net capital inflows in the form of foreign aid and FDI. In 2014, the current account deficit (including grants) is projected to increase to 7 percent of GDP for the same reasons as in 2013, but the flow of foreign aid and FDI should exceed the current account deficit, leading to a slight surplus of the overall balance. Money supply should continue to increase in 2014 fueled by the expansion of credit to the economy and the accumulation of foreign assets by the banking sector. The banking sector continues to be affected by the damages and losses experienced by banks in the north and the 2012

recession. In 2013, non- performing loans increased and represented 19.3 percent of total credit. The financial stability of the microfinance sector also deteriorated. The share of non-performing loans has almost doubled since 2011 rising from 7.7 percent to 13.2 percent in 2013.

4. With regards to the performance under the ECF program, the overall assessment continues to be satisfactory. All performance criteria (PCs) and indicative targets at end-December 2013 and end-June 2014 were met except for the floor on gross tax revenue. The shortfall in tax revenue in 2013 was largely due to the negative impact of the decline in gold prices on the profits of mining corporations in 2012. Also, the social unrest which took place in the tax administration was also a major explanatory factor. The authorities have adjusted public expenditures to account for the underperformance in tax revenue and that has allowed limiting domestic bank financing below the ceiling established in the program. The PC on gross tax revenue at end-June 2014 was not met since it could not be revised because of the suspension of the first review of the ECF program. In light of the on-going measures and those planned to be implemented to meet the targets for tax receipts in 2014, the authorities are requesting waivers for the performance criteria related to tax revenue at end-December 2013 and end-June 2014.

5. As regards external debt, the authorities, after consultations with the Fund, contracted an external loan to finance the hydroelectric dam of Taoussa. As the grant element of the loan (29.7 percent) is slightly lower than required under the program and given the strategic importance of the project for Mali's energy sector, the authorities are requesting a waiver for the continuous performance criterion on new external loans contracted or guaranteed by the government under non-concessional terms.

6. Regarding structural benchmarks, four have been fully implemented and one partially. The partial implementation was achieved because the report of the Tax Directorate on the tax audits on importers whose reported turnover appear abnormally low was not submitted to the Council of Ministers on the scheduled date. The reason is that the report did not include the beneficiaries of public procurement in the audits. The Tax Directorate is in the process of integrating this aspect in its analysis which will allow a better crosscheck and verification of tax declarations.

7. Overall, program performance continues to be satisfactory and my authorities are requesting the Board's support in completing the first and second reviews under the ECF Arrangement. They are also requesting the Board's approval regarding the granting of waivers and the modification of performance criteria.

Economic and Financial policies for 2015

8. The authorities' economic and financial policies will aim at supporting growth through a prudent fiscal policy based on the priorities of the growth and poverty reduction strategy paper (CSCRP) for the period 2012-17. Although the international environment remains uncertain, the economic prospects of Mali appear favorable due to the gradual improvement of the security situation and the significant resumption of

foreign aid. Growth should be maintained at around 5.5 percent in 2015 and in the medium term.

Fiscal Policy and Reforms

9. On the fiscal front, my authorities are mindful that the resumption of foreign aid can only ease fiscal constraints in the short term, but that they need to create fiscal space to finance development expenditures which will require increased mobilization of domestic resources, and improvement in the quality of spending. The authorities will implement a prudent fiscal policy in line with debt sustainability while giving priority to expenditures in the social sectors, improvement in the management of public finances both on the revenue and expenditures sides.

10. The authorities intend to pursue the reforms aimed at improving public financial management in compliance with their commitments in the framework of the West African monetary union (WAMU). On the revenue side, they will aim at increasing the ratio of tax revenues to GDP by at least 0.5 percent a year through fiscal reforms aimed at broadening the tax base. The reforms initiated at the Tax, Customs and Government property administrations to enhance revenue collection will be pursued to this effect.

11. The authorities will also continue their efforts to gradually reduce exemptions notably by establishing a central file of fiscal and customs exemptions. This will allow determining the stock of exemptions granted by type of taxes, legal reference, and beneficiaries as a basis for their reduction. The control of discretionary exemptions will be pursued and starting with the 2016 budget and the extent possible, the gradual exemptions under the Tax, Customs, Investment, Mining, petroleum and real estate codes will be pursued.

12. The authorities are also committed to stop the erosion of fiscal revenue on petroleum products, notably by calculating the retail price structure on the basis of actual market value. In this regard, they will continue to implement the new petroleum product price adjustment mechanism introduced in June 2014. Supporting measures to minimize the adverse social effects of the new mechanism will be developed and a communication campaign will be launched to inform the general public on the new measures.

13. The efforts aimed at simplifying the fiscal legislation will also be pursued with the objective of reducing the administrative burden for taxpayers and making it easier for tax agencies to collect taxes. Most notably, the reforms aimed at improving the performance of the Value Added Tax (VAT) which accounts for 40 percent of fiscal revenues will remain a priority. The authorities will also continue to improve the effectiveness of the tax, customs and government lands administrations by implementing multidisciplinary verifications to enhance fiscal control and the identification of taxpayers.

14. On the expenditure side, the authorities will continue their efforts to improve the regulatory framework for public financial management in the context of regional

directives and regulations. In this regard, they will continue to incorporate the WAMU directives into the Malian laws, notably those related to the transparency code, budget laws, public accounting, and the government chart of accounts and the flow of funds table. The authorities will also step up their efforts to improve the preparation, execution and control of the budget. In this regard, progress has been made in establishing the single Treasury account at the regional central bank (BCEAO) and to monitor the net government position (NGP) in the banking system. The implementation of the national internal control strategy (2012-15) will continue in order to strengthen internal control structures, notably by developing the capacities of the accounting section of the Supreme Court.

External debt and Structural Reforms

15. The authorities will continue to meet their external financing needs in line with the preservation of debt sustainability. They will have recourse principally to grants and highly concessional loans. However, should concessional financing be limited, the authorities will consult staff during program reviews if there is a need to reconsider this commitment in light of the needs to finance critical investment projects for the Malian economy. In order to improve debt management, the authorities have established a national debt committee which will examine all debt or publicly guaranteed contracts and publish a yearly debt strategy document to be annexed to the budget.

16. Structural reforms will be steadfastly pursued. In this regard, my Malian authorities are committed to modernize the business environment for private sector development and competitiveness. To this effect, they will continue to promote the stability and development of the financial sector, reform the electricity sector and improve economic governance. The authorities will also continue to implement strong measures to combat corruption, notably the submission to the National Assembly of an amendment to the law on unlawful enrichment, and apply the law on the annual financial reporting of senior officials to the Supreme Court.

Conclusion

17. My Malian authorities remain committed to the objectives of the ECF program and will continue to implement the measures envisaged. They are also committed to achieving strong economic growth, preserve macroeconomic stability and improve public financial management as well as the business environment. In view of Mali’s efforts to improve economic governance and the overall satisfactory performance under the ECF arrangement, I would appreciate Directors’ support for the completion of the first and second reviews under the ECF and favorable consideration of the waivers requested by the authorities.