INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL MONETARY FUND

KENYA

Joint World Bank-IMF Debt Sustainability Analysis

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Prepared Jointly by the staffs of the International Development Association (IDA)

and the International Monetary Fund (IMF)

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Joint Bank-Fund Debt Su	stainability Analysis
Risk of external debt distress	High
Overall risk of debt distress	High
Granularity in the risk rating	Sustainable
Application of judgment	No

Kenya's debt is sustainable. While overall and external ratings for risk of debt distress remain high, debt dynamics will be bolstered by the fiscal consolidation envisaged under the IMF supported program.¹ High deficits—from the past and generated by the current shock – combined with the sharp slowdown in export and economic growth in 2020 caused by the pandemic, have resulted in near-term deterioration of solvency and liquidity debt indicators that is only partly offset by the ongoing recovery. Kenya's debt indicators will improve as fiscal consolidation progresses and exports and output recover from the global shock, although improvement is particularly gradual for indicators in terms of exports. Sustained fiscal consolidation would stabilize debt towards the end of the program and bring it to more prudent levels over the medium term while securing resources to support social spending. Kenya has enjoyed strong access to international capital markets, and staff projections assume limited reliance on market financing over the coming three years beyond the roll-over of existing Eurobonds. The DSA suggests that Kenya is susceptible to export and

¹ The DSA analysis reflects a debt carrying capacity of Medium considering Kenya's Composite Indicator Index of 3.04, based on the IMF's 2021 October World Economic Outlook and the 2020 World Bank Country Policy and Institutional Assessment (CPIA).

exchange rate shocks; more prolonged and protracted shocks to the economy would also present downside risks to the debt outlook.

PUBLIC DEBT COVERAGE

1. For the purposes of this analysis, the perimeter of public debt covers the debt of the central government, Social Security Fund, central bank debt taken on behalf of the government, and government guaranteed debt (Text Table 1). Debt data include both external and domestic obligations and guarantees:

- The external DSA covers the external debt of the central government and the central bank, including publicly guaranteed debt, as well as of the private sector.
- The public DSA covers both external and domestic debt incurred or guaranteed by the central government. It does not cover the entire public sector, such as extra-budgetary units and county governments.² Debt coverage excludes legacy debt of the predevolution county governments,³ estimated at Ksh 53.8 billion (0.5 percent of 2020 GDP). In comparison to peers, Kenya maintains a high standard of debt transparency. The external public debt register includes granular data disclosure.⁴ The DSA uses a currency-based definition of external debt. There is no significant difference between a currency-based and residency-based definition of external debt, as nonresidents' direct participation in the domestic debt market is small, at about one percent of total outstanding government securities.

2. The DSA includes a combined contingent liabilities stress test aimed at capturing the public sector's exposure to SOEs, PPPs, and a financial market shock. In particular, the stress test incorporates the following shocks (Text Table 1):

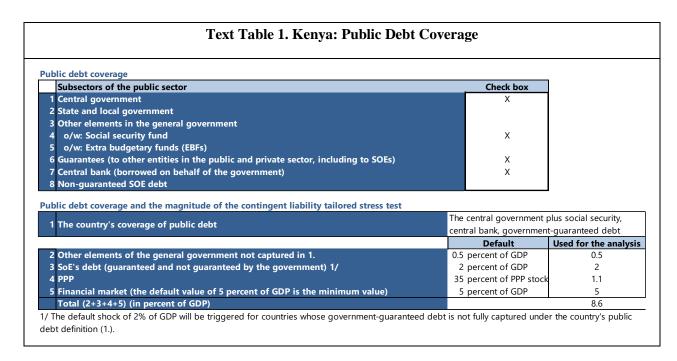
- 3.1 percent of GDP to capture non-guaranteed debt of state-owned enterprises (SOEs) and Public Private Partnerships (PPPs). This includes non-guaranteed debt of the 18 SOEs, considered to pose the highest fiscal risk, equal to KSh.105 billion (1 percent of GDP; see paragraph 3). Guaranteed SOE debt and amounts borrowed directly by the Kenyan government and on-lent to SOEs⁵ are included in the public debt stock (see above) and are, therefore, not included in the calibration of the contingent liabilities stress test;
- 0.5 percent of GDP to cover legacy debt of the pre-devolution county governments (see above);
- 5 percent of GDP for a financial market shock—a value that exceeds the existing stock of financial sector NPLs of about 4 percent of GDP.

² County governments have not been allowed to borrow without central government guarantee since 2010 and borrowing requires National Treasury (NT) authorization, while extra-budgetary units face no such constraint.

³ A new Constitution was approved by referendum in 2010, devolving substantial powers to 47 new county governments.

⁴ Debt statistics bulletins with PPG coverage and debt management strategies are regularly published. The Budget Policy Statement publishes contingent liabilities.

⁵ This includes the external debt associated with the Standard Gauge Railway (SGR).



3. Kenyan authorities are working on expanding the coverage of public debt in regular reports to include non-guaranteed debt of the public sector (including arrears) by October 2022. The authorities' efforts in this area are supported by a Policy and Performance Action (PPA) under the IDA Sustainable Development Finance Policy (SDFP). The Annual Public Debt Management Report for FY 2020/21 took an important step, by including non-guaranteed debt of 18 public entities considered to pose the highest fiscal risk as per the financial evaluations conducted earlier this year. Of these 18 SOEs, 9 were found to have non-guaranteed debt totaling KSh.105 billion (1 percent of GDP). Next fiscal year's debt report is expected to extend the coverage to counties and the remaining SOEs.

BACKGROUND ON DEBT

4. Kenya's overall public debt has increased in recent years. Gross public debt increased from 44.4 percent of GDP at end-2015 to 67.4 percent of GDP at end-2020 (Table 1), reflecting high deficits, partly driven by past spending on large infrastructure projects, and in 2020 by the COVID-19 global shock. About half of Kenya's public debt is owed to external creditors.

5. Most of Kenya's external public debt remains on concessional terms. Nominal PPG external debt at end-2020 amounted to 35 percent of GDP, about five percentage points higher than at end-2019 (Text Table 2 and Table 1):

• Kenya has received important support on very favorable terms from multilateral institutions. At end-2020, multilateral creditors accounted for about 40 percent of external debt, while debt from bilateral creditors represented close to 33 percent (Text Table 2 in next page). Of Kenya's bilateral debt, about 63 percent is owed to non-Paris Club

members, mainly loans from China to finance construction of the Standard Gauge Railway (SGR) project.

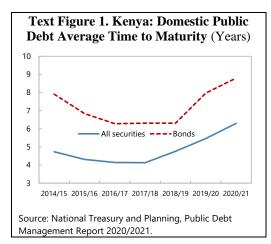
		Debt Stock (end of per	od)			Debt Ser	vice		
		2020	,	2020	2021	2022	2020	2021	2022
-	(In US\$)	(Percent total debt)	(Percent GDP)		(In US\$)		(Perc	cent GDI)
Total	66,495	100.0	67.4	3,319	3,153	3,708	3.3	2.9	3.2
External	34,491	51.9	35.0	2,616	2,396	3,039	2.6	2.2	2.
Multilateral creditors	13,695	20.6	13.5	359	504	517	0.4	0.5	0.
IMF	1,017	1.5	1.0	-	-	-	-	-	
World Bank	9,278	14.0	9.2	-	-	-	-	-	
African Development Bank	2,919	4.4	2.9	-	-	-	-	-	
European Economic Community (incl. EIB)	196	0.3	0.2	-	-	-	-	-	
International Fund For Agricultural Development	196	0.3	0.2	-	-	-	-	-	
Other Multilaterals	90	0.1	0.1	-	-	-	-	-	
o/w: Arab Bank For Economic Development In Africa	38	0.1	0.0	-	-	-	-	-	
Nordic Development Fund	28	0.0	0.0	-	-	-	-	-	
Bilateral Creditors	11,278	17.0	11.1	804	585	1,124	0.8	0.5	1
Paris Club	4,138	6.2	4.1	222	136	315	0.2	0.1	0
o/w: Japan	1,522	2.3	1.5	-	-	-	-	-	
France (incl. AFD)	825	1.2	0.8	-	-	-	-	-	
Non-Paris Club	7,141	10.7	7.1	582	449	809	0.6	0.4	0
o/w: EXIM China	7,004	10.5	6.9	-	-	-	-	-	
EXIM India	69	0.1	0.1	-	-	-	-	-	
Bonds	6,100	9.2	6.0	452	452	520	0.4	0.4	0
Commercial creditors	2,826	4.3	2.8	1,333	774	800	1.3	0.7	0
o/w: Trade and Development Bank	2,421	3.6	2.4	-	-	-	-	-	
China Development Bank	378	0.6	0.4	-	-	-	-	-	
Standard Bank Ltd UK	17	0.0	0.0	-	-	-	-	-	
Other international creditors	591	0.9	0.6	48.4	78.2	78.0	0.0	0.0	0
o/w: Intesa SanPaolo	360	0.5	0.4	-	-	-	-	_	
ING Bank Germany	64	0.1	0.1	-	-	-	-	-	
Domestic	32,005	48.1	32.4	703	757	668	0.7	0.7	0.
Held by residents, total	31,685	47.6	31.3	-	-	-	-	-	
Held by non-residents, total	320	0.5	0.3	-	-	-	-	-	
T-Bills	7,851	11.8	7.8	-	-	-	-	-	
Bonds	23,498	35.3	23.2	-	-	-	-	-	
Loans		-	-	-	-	-	-	-	
Aemo items: 2/									
Collateralized debt	n.a.	n.a.	n.a.			_	-		
o/w: Related	n.a.	n.a.	n.a.			_	-		
o/w: Unrelated	n.a.	n.a.	n.a.			_	-		
Contingent liabilities	n.a.	n.a.	n.a.			_	-		
o/w: Public guarantees	n.a.	n.a.	n.a.	_	_	_	-	_	
o/w: Other explicit contingent liabilities	n.a.	n.a.	n.a.	-	-	-	-	-	
Nominal GDP (at average Ksh/\$ rate)	101,233	11.a.	11.a.	-	-	-	-	-	

2/ Capacity constraints limit data availability. Data is expected to become available at the time of the next review of the IMF EFF/ECF arrangements.

• The share of external commercial debt decreased through June 2021, as the authorities prioritized concessional borrowing during the pandemic after several years of reliable access to global financial markets. Based on end-2020 data, commercial debt (mainly Eurobonds, loans and export credits) accounted for about 28 percent of external public debt—modestly.

• above its share at end-2015. Eurobonds accounted for 64 percent of commercial debt (US\$6.1 billion),⁶ while syndicated loans represented 30 percent (about \$2.8 billion).⁷

6. Kenya's domestic public debt reached 32.4 percent of GDP at end-2020 (Text Table 2 and Table 2). Domestic debt is issued mostly in the form of Treasury bonds (77 percent of the total stock) and Treasury bills. The 91-day, 182-day, and 364-day average interest rates were 7.0 percent, 7.4 percent and 8.2 percent respectively in October 2021. The average time to maturity for government domestic bonds, excluding T-bills, increased from 6.3 years in June 2019 to 8.6 years in June 2021, as the authorities successfully implemented their strategy to lengthen the maturity profile of domestic debt (Text Figure 1). This has



helped alleviate short-term rollover risks. About half of government domestic debt securities are held by commercial banks, followed by pension funds.

7. Published data on private external debt is available through 2018 and is extrapolated going forward with the net private external debt BOP flows. The source of data on private external debt is the International Investment Position (IIP) data published in the IMF Statistics Department IIP database.⁸ Compared with the last DSA, the 2020 ratio of total private external debt to GDP is 1.7 percentage points higher, reflecting improved data coverage.

UNDERLYING ASSUMPTIONS

8. Revisions by the Kenya National Bureau of Statistics (KNBS) of the historical GDP series in September 2021 called for revisiting several assumptions underpinning the DSA. Under KNBS' revised methodology, the level of nominal GDP is higher (e.g., by 5.3 percent in 2019), reflecting better coverage of the economy, while the breakdown of growth into real and price components shows that the 2010-19 real growth was on average 0.8 percent lower than previously estimated (5.0 vs 5.8 percent). This has led to a downward revision of the growth potential of the economy and a lower average real growth rate over the entire projection period (Text Table 3). As a result, while the level of nominal GDP is initially higher than in the last DSA published in April 2021,⁹ in the long run nominal GDP is below previously-projected levels. This affects all ratios to GDP that enter in the DSA framework. At the same time, it corresponds with

⁶ In June 2021, Kenya successfully issued a new US\$1 billion Eurobond.

⁷ Syndicated loans amounting to Euro 305.4 million claimed by a syndicate of Italian commercial banks in relation to Arror, Kimwarer, and Itare dams projects are disputed and subject to on-going arbitration/court proceeding. These syndicated loans are included in the stock of public debt, but not in the debt service schedule, as budget provisions for their servicing are suspended until the matter is determined.

⁸ See <u>https://data.imf.org/regular.aspx?key=61468209</u>.

⁹ IMF Country Report No. 21/072.

slower growth of imports in the long run, helping improve the non-interest current account balance. Assumptions on the underlying primary fiscal deficit and its main components, as well as export performance, remain broadly in line with previous projections but now incorporate the baseline costs associated with SOE restructuring and expansion of the authorities' COVID-19 vaccination program, as well as modest additional emergency spending for drought and security (see ¶13 for more information on SOE-related spending).

	2021	2022	2023	2024	2025	2026	Long-term 1/
Nominal GDP (Ksh billion)							
Current DSA	11,975	13,328	14,790	16,388	18,163	20,133	50,993
Previous DSA (April 2021)	11,767	13,011	14,498	16,165	18,025	20,098	53,261
Real GDP (growth)							
Current DSA	5.9	5.8	5.5	5.5	5.5	5.5	5.6
Previous DSA (April 2021)	7.6	5.7	6.1	6.1	6.1	6.1	6.0
Revenue and grants (percent of GDP)							
Current DSA	16.0	16.6	17.5	18.0	18.4	18.8	19.5
Previous DSA (April 2021)	16.5	17.0	17.9	18.2	18.6	18.9	19.7
Primary fiscal deficit (percent of GDP)							
Current DSA	-3.6	-2.3	-0.5	0.3	0.9	1.3	1.0
Previous DSA (April 2021)	-3.7	-2.0	-0.4	0.3	0.9	1.3	1.0
Non-interest current account (percent of G	DP)						
Current DSA	-3.9	-3.9	-4.0	-3.9	-3.9	-3.8	-3.4
Previous DSA (April 2021)	-3.5	-3.6	-3.6	-3.8	-3.7	-3.7	-3.6
Exports of goods and services (growth)							
Current DSA	13.3	17.9	13.3	11.9	10.8	8.9	9.6
Previous DSA (April 2021)	20.7	12.0	12.5	11.9	11.1	8.7	9.5

1/ Average 2027-41.

9. Under the baseline scenario, solid growth is expected over the medium term (Text Table 4). Kenya's strong economic growth in the decade prior to the pandemic was supported by increased public spending aimed at narrowing the large infrastructure gap and implementing devolution. While this growth was accompanied by a substantial reduction in poverty, debt vulnerabilities have mounted. Kenya now faces the challenge to reorient its economy towards sustainable, private-sector-led growth, while implementing fiscal consolidation and strengthening debt management capacity. Despite a modest contraction in 2020 driven by the global COVID-19 shock, medium-term growth prospects remain favorable. The authorities' COVID-19 vaccination program has accelerated on increased availability of vaccines, with a goal of vaccinating 10 million people by end-2021 and to fully vaccinate all adults (26 million people) by end-2022. In 2021, the recovery is being driven by manufacturing and services, particularly transportation and education, activities that have rebounded from the lockdowns implemented to address the health crisis in 2020. Estimated growth for 2021 is significantly affected by base effects driven by the school closures and reopening (0.5 percentage points). In 2022, growth will

be supported by the ongoing recovery of tourism. Over the medium to long term, annual trend growth of 5.5 percent, about 0.5 percentage points above the pre-pandemic average, is expected on the basis of robust investment and productivity growth, supported by ongoing reforms to open markets and support credit to the private sector, as well as a broadly favorable demographic backdrop (growing working-age population and falling, though still high, dependency ratio). Medium-term growth is supported by the reform agenda under the IMF 2021 EFF/ECF program, which should underpin a healthy private investment rate, as well as the favorable prospects for external demand propelling exports. The authorities' policy and institutional reforms, supported by the World Bank, should expand the role of markets and foster sustained, private sector-led growth, including measures to make the domestic debt capital market more transparent and liquid, make the land market more transparent and functional (by upgrading valuation regulations and information), and move to competitive auction-based clean energy investment. Inflation is expected to return to the middle of the authorities' target range in the medium term.

	2010	2020	2021	2022	2023	2024	2025	2026
	2019	2020			Proje			
Real GDP growth (percent)	5.0	-0.3	5.9	5.8	5.5	5.5	5.5	5.5
CPI inflation, average (percent)	5.2	5.2	6.4	5.8	4.8	5.0	5.0	5.0
Overall fiscal balance (percent of GDP) ¹		-7.6	-8.2	-8.2	-5.8	-4.2	-3.7	-2.7
Primary balance (percent of GDP) ¹	-3.4	-3.4	-4.0	-3.4	-1.2	0.2	0.5	1.3
Current account balance (percent of GDP)	-5.5	-4.6	-5.2	-5.1	-5.1	-5.0	-5.0	-5.0
Exports of goods and services (US\$ billion)	11.5	9.8	11.1	13.1	14.8	16.6	18.4	20.0
Exports of goods and services (growth; percent)	-0.6	-14.8	13.3	17.9	13.3	11.9	10.8	8.9
Gross international reserves (US\$ billion)	9.1	8.3	10.8	9.0	9.8	10.7	11.6	12.5
Gross international reserves (months of imports)	6.1	4.7	5.2	4.6	4.2	4.2	4.2	4.2

10. The fiscal deficit reached 8.2 percent of GDP in 2020/21 on the impact of the COVID-19 shock (Text Table 4). Tax revenues declined to 12.6 percent of GDP in 2020/21—reflecting the economic slowdown and policy measures in response to the shock. The drop in tax revenue would have been more pronounced had the authorities not also implemented measures to broaden the tax base, including removal of several tax exemptions, ¹⁰ demonstrating their strong commitment to undertaking adjustment. Under-execution of planned spending held the primary deficit to 4.0 percent of GDP in FY20/21, well below the target of 4.5 percent. Efforts to narrow the deficit prior to the pandemic shock had been mainly achieved through spending cuts to both current outlays and development spending. With continued strong adjustment under the IMF 2021 EFF/ECF program—which reflects the authorities' goals to increase tax revenues and control expenditures, so as to anchor debt sustainability—Kenya's primary deficit would narrow in 2023 below its average debt-stabilizing level over the medium-term, estimated at 1.3 percent of GDP.¹¹ Over the medium term, the overall deficit is expected to decline and stay below 4 percent of GDP,

¹⁰ Kenya's revenue collection remains in line with the regional average.

¹¹ For more details see Section A "Supporting the COVID-19 Response While Reducing Medium-Term Debt Vulnerabilities" in the Staff Report for the 2nd Reviews of Kenya's IMF EFF/ECF Arrangements (forthcoming).

with on average zero primary balance (Table 2).¹² The authorities are assumed to continue pursuing a strategy of limiting reliance on external commercial borrowing in the coming years to reduce debt-related vulnerabilities (Text Table 5). In 2021, 64 percent of external public financing is expected to come in the form of concessional and semi-concessional borrowing, including from the IMF and the World Bank. Financing from commercial lenders is estimated at US\$2.2 billion, reflecting the successful placement of US\$1 billion Eurobond in June 2021—amid strong demand that saw the yield fall below the initial guidance to 6.3 percent—and the likely shift of the previously-planned Eurobond for FY2021/22 to this calendar year.

11. Under the 2021 general allocation of SDRs, Kenya received the equivalent of US\$740 million (or 0.7 percent of GDP). The authorities have indicated plans to retain half the SDR allocation in reserves and on-lend up to half to substitute foregone fiscal financing. The baseline projection assumes that half of the allocation (US\$370 million) is on-lent by the Central Bank of Kenya to the government in the form of 30-year domestic claim with a bullet maturity carrying an interest rate equal to the Ksh equivalent of the average SDR rate over 2021–51. In the DSA, the domestic financing need is reduced by the domestic-currency equivalent of the face value of the claim (Ksh41.4 billion), whereas the claim enters in the calculation of the PV of total public debt with its present value, which reflects a grant element of 47 percent. This reduces the PV of total public debt by 0.35 percent of GDP in 2021.

12. Relief under the G-20 Debt Service Suspension Initiative (DSSI) has helped reduce external financing needs in 2021. Relief in the first half of 2021 amounted to 0.39 percent of GDP, with an additional 0.08 percent of GDP anticipated in the second half of 2021 for a total of USD 514 million.¹³

13. As part of the restructuring of Kenya Airways (KQ), the Government of Kenya expects to take over the responsibility for full repayment of up to USD 827.4 million of loans to KQ. Out of the total amount, USD 750 million is guaranteed by the Government of Kenya (GoK), with the guarantee already included in the end-2020 stock of public debt. For the purposes of this analysis, the restructuring is assumed to result in a replacement of the full amount of KQ-related guarantees with the full amount of the KQ loans subject to the operation in the DSA debt perimeter, including additional non-guaranteed debt in the amount of USD 77.4 million. The analysis assumes that the GoK will service the debt based on the original amortization schedule of KQ's loan agreements. This approach would avoid the risk of acceleration of guaranteed loans, which contain cross-default clauses to past-due debts owed by KQ to other creditors. To prevent any meaningful deviation in their goal of decisively improving the Exchequer's debt profile under their adjustment program, the authorities plan to undertake offsetting expenditure cuts for half of

¹² This would lower Kenya's debt below the proposed level under the authorities' new debt anchor of 55 percent of GDP in present value terms.

¹³ For January-June 2021, the Government obtained debt suspension of US\$425 million. For July-December 2021, the Government of Kenya made a request to all its bilateral creditors for debt service suspension estimated at US\$379 million. Anticipated relief of around US\$89 million is now lower due to non-participation by some creditors.

the amount of extraordinary SOE support (up to one percent of GDP in such support), and to fully offset amounts beyond this level.¹⁴

14. The current account deficit amounted to 4.5 percent of GDP in 2020—around one percentage point lower than in 2019. It narrowed during the pandemic, as positive trends in the trade and primary income accounts offset the negative impact of the global shock on international travel and transportation receipts. The trade deficit narrowed on the back of resilient goods exports, weaker demand for imports, and lower energy and commodity prices. Favorable weather patterns boosted horticulture and tea exports, offsetting demand-side price pressures. The surplus on the income account increased, driven by stronger remittances and a drop in FDI-related outflows. Over the medium term, staff projects a decompression and stabilization of the current account deficit at around 5 percent of GDP. Capital goods imports are expected to gradually increase reflecting improvements in both investor sentiment and the business climate. Exports of goods and services are projected to reach 13.4 percent of GDP in 2026, broadly the same share as observed in 2016.¹⁵ Export growth will be supported by Kenya's improving business environment, large potential in the agricultural sector and the government's Big 4 development agenda and Economic Recovery Strategy with their emphasis on boosting exports.¹⁶ Services are projected to gradually increase over the medium term, as the tourism sector returns to normal after the COVID-19 shock. Remittances are also projected to gradually increase. Under the baseline the current account deficit is expected to be financed by a diversified set of sources, including FDI and financial and non-financial corporate borrowing.

15. As part of a continuing commitment to reduce debt-related vulnerabilities, Kenya is expected to continue to rely on concessional development financing, while tapping international financial markets to roll over maturing Eurobonds and optimize the debt service profile. The authorities' external borrowing program, set out in Text Table 5, reflects the authorities' commitments under the IMF 2021 EFF/ECF arrangements. These include an overall ceiling on the present value of newly contracted or guaranteed external public debt, which is also an SDFP PPA. In addition to concessional development financing, the external borrowing program provides space for the authorities' intentions to pursue debt management operations, if market conditions are favorable. Potential debt management operations are not reflected in the DSA baseline. Looking ahead, Kenya is expected to continue to tap global capital markets to roll over maturing Eurobonds, with the next Eurobond repayment falling due in June 2024.

16. The realism tools flag some optimism compared to historical performance, reflecting a structural break with past trends based on the policies underpinning the authorities'

¹⁴ Planned offsets for FY21/22 amounts were identified in the context of the 2nd Review of the IMF EFF/ECF arrangements.

¹⁵ See the External Sector Assessment in the accompanying Article IV consultation Staff Report for a discussion on export performance and longer-term competitiveness challenges.

¹⁶ Kenya's long-term development objectives were laid out in Vision 2030, which aims at transforming Kenya into an industrialized middle-income country providing a high quality of life to all its citizens. The 3rd Medium Term Plan (MTP III), which covers 2018–22 groups reforms in four broad areas: (i) food security; (ii) affordable housing; (iii) universal health care; and (iv) manufacturing and job creation, including via boosting exports. The Economic Recovery Strategy is designed to mitigate the adverse socio-economic effects of the pandemic and facilitate opening up of the economy, accelerate economic recovery and attainment of higher and sustained economic growth.

ambitious reform program (Figure 4). While protecting social spending, the baseline scenario assumes an improvement of the fiscal primary balance of 3.3 percentage points of GDP over three years in 2021–23, which falls in the top quartile of the distribution for LICs. Staff is of the view that this is realistic and in line with the authorities' plan for fiscal consolidation under the program as reflected in the approved FY21/22 budget, their careful management of expenditures to achieve fiscal targets in the face of unanticipated pressures, and their medium-term plans. The authorities' commitment to fiscal consolidation, including actions taken during the pandemic to broaden the tax revenue base and identify offsets to compensate for COVID-related expenditures, provide assurances that the fiscal adjustment under the program is achievable. The global and domestic recovery from the COVID shock substantiate the near-term growth trajectory during planned fiscal consolidation. Export growth is projected to be higher than the recent past, which is justified as exports recover from Kenya's early 2019 drought and the 2020 global shock. By 2026, exports of goods and services are projected to return to a similar level as the share of GDP observed in 2016.

Text Table 5. Kenya: Summary Table of Projected External Borrowing Program from July 1, 2021 to December 31, 2022

PPG external debt 1/	Volume of r from Jul to Dec 31	1, 2021	PV of new debt from Jul 2021 to Dec 31, 2022 (program purposes)			
	USD million	Percent	USD million	Percent		
By sources of debt financing	12,700.8	100	9,904.9	100		
Concessional debt, of which	6,303.3	50	3,553.8	36		
Multilateral debt	3,461.1	27	1,963.4	20		
Bilateral debt	2,842.1	22	1,590.5	16		
Other	0.0	0	0.0	0		
Non-concessional debt, of which	6,397.6	50	6,351.1	64		
Semi-concessional 2/	193.2	2	146.7	1		
Commercial terms	6,204.4	49	6,204.4	63		
By Creditor Type	12,700.8	100	9,904.9	100		
Multilateral, of which	3,461.1	27	1,963.4	20		
World Bank	2,595.1	20	1,484.1	15		
Bilateral - Paris Club	1,159.5	9	684.1	7		
Bilateral - Non-Paris Club	1,682.6	13	906.3	9		
Other, of which	6,397.6	50	6,351.1	64		
For debt management operations 3/	5,000.0	39	5,000.0	50		
Uses of debt financing	12,700.8	100	9,904.9	100		
Infrastructure	3,735.3	29	2,611.8	26		
Social Spending	2,026.6	16	1,141.4	12		
Budget Financing	1,006.8	8	615.7	6		
Other, of which	5,932.2	46.7	5,536.0	55.9		
For debt management operations 3/	5,000.0	39	5,000.0	50		

Notes:

1/ Contracting and guaranteeing of new debt. The present value of debt is calculated using the terms of individual loans and applying the 5 percent program discount rate. For commercial debt, the present value is defined as the nominal/face value.

- 2/ Including the assumption of non-guaranteed debt of Kenyan Airways as part of its restructuring plan in FY21/22. Loan obligations between the National Government of Kenya (GoK) and the creditors of Kenya Airlines that replace guarantees previously provided by GoK to the same lenders are not included in the borrowing program.
- 3/ Planned potential borrowing for debt management operations to improve the debt profile (in terms of PV and debt service profile). See Technical Memorandum of Understanding (TMU) for EFF/ECF Arrangements for definition of debt management operations meeting this standard. Debt management operations are not reflected in the DSA baseline.

COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

17. Kenya's debt carrying capacity is assessed as Medium (Text Table 6). The debt carrying capacity determines the applicable thresholds for the PPG external and total public debt sustainability indicators used in the assessment.¹⁷ It is informed by the value for Kenya of the Composite Indicator (CI) Index of 3.04,¹⁸ which incorporates data from the IMF's 2021 October World Economic Outlook (WEO) macroeconomic projections and the 2020 World Bank's Country Policy and Institutional Assessment (CPIA). The previous value of the CI Index, based on the IMF's April 2021 WEO, exceeded the threshold for a Strong rating. According to the DSA methodology, reverting to the pre-pandemic assessment of Kenya's debt-carrying capacity of Strong would have required a second consecutive Strong signal based on the published October 2021 WEO forecast vintage. Results from the latter show, however, that the CI Index falls again below the 3.05 threshold, and hence will not trigger an upward revision of the assessment from the current rating of Medium.¹⁹

18. Besides the six standardized stress tests, there are two tailored stress tests:

- One tailored stress test combines contingent liabilities of a one-time shock on debt (equivalent to 8.6 percent of GDP; Text Table 1) to capture a scenario reflecting both contingent liabilities from SOEs (equal to the indicated standard level of 2 percent of GDP), contingent liabilities from PPPs (equal to the indicated level of 35 percent of the existing PPP stock, or 1.1 percent of GDP) and a need for bank recapitalization (equal to the indicated standard level of 5 percent of GDP).
- The second tailored stress test is a market financing shock which is applied to countries with market access, such as Kenya. The scenario assesses rollover risks resulting from a deterioration in global risk sentiment, temporary nominal depreciation, and shortening of maturities of new external commercial borrowing.

¹⁷ See Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries, Section V.

¹⁸ The CI captures the impact of various factors through a weighted average of an institutional indicator, real GDP growth, remittances, international reserves, and world growth. All inputs are in the form of 10-year averages across 5 years of historical data and 5 years of projection.

¹⁹ The downward revision of the CI score compared to April 2021 is driven by the GDP rebasing that has resulted in a downward revision of the real GDP growth both historically and in projections (the latter on account of the lower estimate of growth potential), combined with the upward revision of the nominal GDP (reflecting the level effect of the improved coverage of the economy). These changes affect the centered 10-year averages of real GDP growth and the ratio of remittances to GDP that enter in the CI score calculation. The upward revision in world economic growth is insufficient to compensate for the impact of the Kenya GDP revisions.

lebt Carrying Capacity a	nd Thresholds			
puntry	Kenya			
Debt Carrying Capacity	Medium			
Final	Classification based on current vintage	Classification based on the previous vintage	Classification based on the two previous vintage]
Medium	Medium 3.04	Strong 3.05	Medium 3.01	
Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution components
CPIA Real growth rate (in percent)	0.385 2.719	3.70 4.67	1.43 0.13	4
Import coverage of reserves (in percent) nport coverage of reserves^2 (in	4.052	42.67	1.73	57
percent)	-3.990	18.21	-0.73	-24
Remittances (in percent) World economic growth (in	2.022	3.04 3.14	0.06	2
percent) CI Score	13.320	3.14	3.04	100%
				100%
CI rating Applicable	e thresholds		Medium	
APPLICABLE EXTERNAL de	ebt burden thresholds	APPLICABL	E lic debt benchmark	
		P)/ of total p	ublic debt in	

EXTERNAL DEBT SUSTAINABILITY ANALYSIS

19. External debt burden indicators in terms of exports breach thresholds under the baseline, giving rise to a mechanical high-risk signal (Table 1, Table 3, and Figure 1). Based on the debt-carrying capacity analysis, ²⁰ the PV of PPG external debt-to-exports solvency indicator remains above threshold (180 percent) during 2021–27, while the debt service-to-exports liquidity indicator exceeds its threshold (15 percent) throughout the 10-year projection period. The solvency indicator gradually declines as exports recover; the long-term decline in the liquidity indicator is interrupted by Eurobond repayments in 2024, 2028 and 2031. Similar trends were observed in the April 2021 DSA.

20. The PV of PPG external debt as a share of GDP remains firmly below the 40 percent indicative threshold throughout the projection period (Table 1 and Figure 1). Reflecting fiscal consolidation efforts and a borrowing mix that favors concessional borrowing, this solvency indicator is expected to decline from 28.2 percent in 2021 to 17 percent in 2041. It also remains

²⁰ Breaches of the sustainability thresholds would have been much less pronounced and persistent under the pre-COVID-19 strong assessment of debt carrying capacity.

below the threshold under the most extreme shock—a one-time depreciation. The external debt service-to-revenue ratio exceeds its threshold in 2024, reflecting the maturity of the Eurobond in that year. If market conditions are favorable, the authorities are considering debt management operations to further improve the debt service profile.

21. Standard stress test results highlight the sensitivity of debt indicators to exports (Figure 1 and Table 1). Specifically, under the most extreme shock scenario (shock to export growth), the PV of debt-to-exports and the debt service-to-exports ratios breach the threshold over the entire medium-term projection period. Under the most extreme scenario, the debt service-to-revenue ratio can potentially breach the threshold also in 2028.

22. Market financing liquidity risks are low (Figure 5). Kenya's EMBI spread has fallen from 727 basis points in 2020Q1 to 499.5 basis points at end-October and is below the threshold (570 basis points). Gross financing needs have also declined, from 14 percent of GDP at the time of the previous DSA to 12 percent of GDP currently, staying below the threshold (14 percent of GDP) that indicates high risk. The part of the 2021 general allocation of SDRs to Kenya that is not transferred to the budget, and hence is not included in the DSA baseline—equivalent to US\$370 million (0.3 percent of GDP)—could serve as an additional safety buffer. Fiscal consolidation efforts under the EFF/ECF program would help keep gross financing needs below the threshold. As is the case for emerging and frontier economies, financing risks could be affected by global liquidity conditions. If global market conditions were to unexpectedly tighten, financing risks for Kenya may increase. The shift in the deficit financing mix towards domestic resources calls for monitoring, although the recent success in extending the maturity profile of domestic debt mitigates some domestic refinancing risk.

PUBLIC DEBT SUSTAINABILITY ANALYSIS

23. The PV of total public debt-to-GDP ratio remains above the 55 percent benchmark for a country rated at medium debt-carrying capacity—until 2025 (Figure 2 and Table 2), giving rise to a mechanical high-risk signal. Public sector debt is projected to modestly increase from 60.3 percent of GDP (PV terms) in 2020 to 62.2 percent in 2022, followed by a gradual decline. Supported by fiscal consolidation under the program, including revenue mobilization measures, the PV of public debt-to-revenue ratio would initially increase from 363 percent in 2020 to 376 percent in 2021, before gradually declining to 210 percent in 2031 and to 91.1 percent in 2041.

24. The stress scenarios indicate that the PV of debt-to-GDP ratio would remain above the indicative benchmark for most of the projection period (Figure 2 and Table 4). Under the most extreme shock scenario (shock to GDP growth), the PV of the public debt-to-GDP ratio would breach the 55 percent benchmark for a country with medium debt-carrying capacity during the entire projection period.

RISK RATING AND VULNERABILITIES

25. Kenya's risk of external and overall debt distress remains high in the context of the ongoing global COVID-19 shock. The shock led to a sharp temporary decline in export and GDP growth and triggered a strong fiscal response, interrupting planned consolidation. Consequently, the mechanical signal from debt indicators worsened, particularly those expressed in terms of exports. Risks associated with SOEs are being closely monitored under the Fund-supported program, following the financial evaluations of the largest SOEs facing financial risks, and the authorities are leveraging those insights as they move to address the weaknesses in the most troubled firms. Kenya's external and overall public debt vulnerabilities also reflect high past deficits, partly due to large infrastructure projects. The mechanical signals indicate sustained breaches of solvency and liquidity indicators under the baseline scenario ----the PV of external debt-to-exports and external debt service-to-exports ratios as well as the PV of overall public debtto-GDP. The larger breach of liquidity indicators in 2024 under the baseline is mainly attributed to a Eurobond repayment; staff projects that Kenya should be able to roll over maturing Eurobonds, given its historical record of strong global market access and commitment to fiscal consolidation under the program. The DSA suggests that Kenya is susceptible to export and exchange rate depreciation shocks. The political calendar is a source of uncertainty as upcoming general elections could pressure budget execution and reform implementation.

26. Kenya's debt remains sustainable. Several factors are mitigating the risks, supporting the analysis:

- Decisive actions already undertaken in 2020 and 2021 to limit the pandemic-induced increase in the deficit and to broaden the tax base;
- The multi-year fiscal consolidation under the IMF supported program which aims to decisively reduce deficits and increase tax revenue;
- The consistently strong performance of remittances, which supports external sustainability, paired with a more favorable outlook for exports;
- A favorable overall debt profile and generally smooth amortization profile, which authorities plan to further optimize, if market conditions are favorable;
- Close attention to evaluating risks at SOEs and the commitment under the EFF/ECF program to limit the impact on the deficit of any fiscal support (e.g., via offsets);
- Ongoing efforts to strengthen fiscal sustainability under the SDFP by rationalizing public investments on the basis of rigorous criteria.

27. Fiscal consolidation under Kenya's IMF-supported program would achieve and surpass the debt-stabilizing primary balance. Debt would begin declining as a share of GDP starting in 2023. Indicators measured against exports will also gradually improve with the recovery of exports, supported by the post-pandemic global recovery and reforms under the EFF/ECF program to enhance competitiveness. Given the magnitude of mechanical threshold

breaches under the baseline, consolidation efforts would need to be sustained over the mediumterm to restore fiscal space and reduce debt-related risks. Of note:

- While the PV of total public debt-to-GDP ratio remains above the indicative threshold (55 percent), the authorities' commitment to fiscal consolidation under the program safeguards debt sustainability. Important actions have already been taken to permanently broaden the tax revenue base, alongside expenditure savings to limit expansion of the deficit from the COVID-19 shock. The multiyear fiscal consolidation plan highlighted in the 2021 Budget Policy Statement (BPS) and substantiated by the FY21/22 Budget is premised on a more conservative approach to revenue projections and a commitment to additional policy steps to increase tax revenues and control expenditures under the EFF/ECF program with the specific objective of anchoring debt sustainability.
- Kenya's PV of external debt as a share of GDP is well below the 40 percent indicative threshold and will gradually decline over time. Kenya's external debt indicators are expected to gradually improve as fiscal consolidation progresses, exports recover after the global shock dissipates, and Kenya makes progress to unlock its substantial export potential.
- Kenya's borrowing plan relies on a balanced mix of commercial and concessional financing that contributes to reducing debt risks, supported by limits on the government's external borrowing under the EFF/ECF program and PPAs under the SDFP, which also support steps to improve debt transparency.
- In addition, in connection with Kenya's good prospects for capital market access at favorable terms, debt management operations (not reflected under the DSA baseline) that seek to refinance syndicated loans and the 2024 Eurobond with long-dated debt instruments could offer a meaningful possibility to further improve the external debt profile.

28. Debt sustainability is also supported by the stable and strong remittances, Kenya's generally smooth debt service profile and the authorities' commitment to insulate the public sector balance sheet from SOE-related contingent liabilities. While the protracted breaches of most debt burden indicators are a source of concern, along with SOE-related contingent liabilities, there are mitigating factors that help support the debt sustainability assessment. The relatively smooth debt service profile—except for the 2024 Eurobond maturity—is on a clear declining trajectory over the projection period, signaling a strengthening in debt servicing capacity. The authorities' commitment to absorb potential fiscal costs associated with materialization of SOE-related contingent liabilities with a limited impact on the programmed fiscal envelope will help avoid further deterioration in the public sector balance sheet.²¹ Stable and strong remittances, projected to reach 32 percent of exports of goods and services in 2021, would also continue to be an important source for foreign currency receipts going forward.

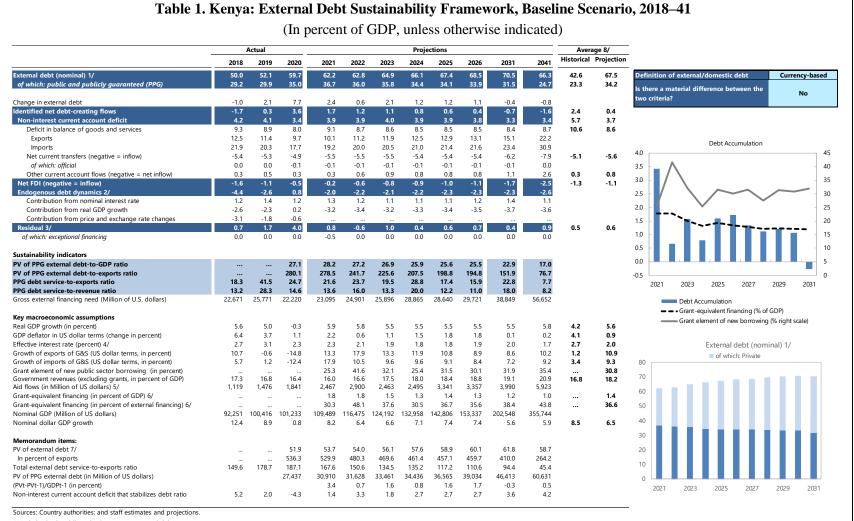
²¹ For more details, see discussion in paragraph 13 above.

29. The debt profile also calls for a strong debt management framework and its effective implementation. The authorities' active plans for managing their portfolio risks, including through refinancing maturities coming due on better terms to improve the overall debt profile, are a source of resiliency. In this context, the authorities are encouraged to further strengthen their debt management capacity to manage and prepare for large repayments of commercial borrowing. As part of this strategy, the authorities' plans to refinance loans at a longer maturity to limit refinancing risks is welcome.²² At the same time, concessional borrowing should continue to play an important role in financing investment projects due to its lower cost and longer maturity profile, while non-concessional borrowing should be utilized to finance those projects that are critical for the authorities' development strategy and have high social and economic returns. Looking ahead, efficient investment in infrastructure will raise growth and export potential, both of which will support Kenya's external debt sustainability. Delivering on fiscal consolidation, while seeking to preserve social and development spending, would further reduce risks. The authorities are also encouraged to expand the coverage of public debt to include county governments and nonguaranteed debts of SOEs and extra budgetary units and continue improving public debt management and revenue administration.

AUTHORITIES' VIEWS

30. The authorities broadly shared Fund staff's assessment, emphasizing that reducing debt vulnerabilities is a key priority to support Kenya's developmental agenda. They highlighted the success in extending the maturity of domestic debt and the need to pursue a financing strategy that balances domestic and external financing, utilizes concessional financing where available, and accesses private capital markets judiciously. The authorities reiterated their commitment to expand the coverage of public debt in regular reports to include non-guaranteed public sector debts (including arrears). They saw the publication of such information for 18 public entities, considered to pose the highest fiscal risk, in the Public Debt Management Report for FY 2020/21 as an important milestone in this direction. The authorities expressed confidence that the new, national debt ceiling in present value terms, expected to be adopted in 2022, will serve as a credible anchor of their medium-term fiscal policies. They noted that they are actively seeking debt management operations to lower the costs of debt and refinancing risks, especially by seeking to refinance syndicated loans and the 2024 Eurobond with long-dated debt instruments.

²² If market conditions are favorable, the authorities are considering debt management operations



1/ Includes both public and private sector external debt.

2/ Derived as [r - g - p(1+g)]/(1+g+p+gp) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and p = growth rate of GDP deflator in U.S. dollar terms.

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

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

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

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

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

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

		Actual					Proje	ctions				Aver	age 6/
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2031	2041	Historical	Projection
Public sector debt 1/	56.4	58.6	67.4	69.5	70.4	69.6	67.4	64.4	61.2	48.8	26.5	47.9	61.0
of which: external debt	29.2	29.9	35.0	36.7	36.0	35.8	34.4	34.1	33.9	31.5	24.7	23.3	34.2
Change in public sector debt	2.6	2.2	8.8	2.1	0.9	-0.8	-2.2	-2.9	-3.3	-2.5	-1.5		
Identified debt-creating flows	2.2	2.5	7.5	1.4	-0.1	-1.7	-2.6	-3.0	-3.3	-2.8	-2.0	2.6	-2.2
Primary deficit	3.2	3.4	3.8	3.6	2.2	0.5	-0.3	-0.9	-1.3	-1.0	-0.5	3.4	-0.1
Revenue and grants	17.5	17.0	16.6	16.4	17.1	17.8	18.3	18.7	19.1	19.4	21.2	17.3	18.5
of which: grants	0.3	0.2	0.2	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3		
Primary (noninterest) expenditure	20.7	20.4	20.4	20.0	19.3	18.3	17.9	17.8	17.8	18.4	20.7	20.7	18.4
Automatic debt dynamics	-1.0	-0.9	3.7	-2.2	-2.4	-2.2	-2.2	-2.1	-2.0	-1.9	-1.5		
Contribution from interest rate/growth differential	-0.4	-0.2	2.8	-2.2	-2.4	-2.2	-2.2	-2.1	-2.0	-1.9	-1.5		
of which: contribution from average real interest rate	2.5	2.5	2.6	1.5	1.4	1.5	1.4	1.4	1.4	0.8	0.0		
of which: contribution from real GDP growth	-2.9	-2.7	0.2	-3.7	-3.8	-3.7	-3.6	-3.5	-3.4	-2.7	-1.5		
Contribution from real exchange rate depreciation	-0.6	-0.8	0.9										
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	0.4	-0.3	1.3	0.7	1.0	0.9	0.4	0.1	0.0	0.4	0.5	0.2	0.5
Sustainability indicators													
PV of public debt-to-GDP ratio 2/			60.3	61.7	62.2	61.2	59.2	56.3	53.2	40.7	19.3		
PV of public debt-to-revenue and grants ratio			362.8	375.5	364.5	343.7	323.9	300.8	277.9	209.8	91.1		
Debt service-to-revenue and grants ratio 3/	44.7	62.0	53.7	51.8	58.2	56.0	58.1	46.8	39.8	41.4	12.4		
Gross financing need 4/	11.0	14.0	12.7	12.1	12.2	10.5	10.3	7.8	6.3	7.0	2.2		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	5.6	5.0	-0.3	5.9	5.8	5.5	5.5	5.5	5.5	5.5	5.8	4.2	5.6
Average nominal interest rate on external debt (in percent)	3.3	3.9	3.2	3.3	2.6	2.3	2.0	2.1	2.1	2.6	1.9	2.6	2.4
Average real interest rate on domestic debt (in percent)	7.0	6.6	6.5	4.6	4.6	4.7	4.7	4.7	4.7	3.9	2.8	4.1	4.5
Real exchange rate depreciation (in percent, + indicates depreciation)	-3.1	-3.2	3.5									-2.1	
Inflation rate (GDP deflator, in percent)	4.2	4.6	5.2	5.2	5.2	5.2	5.0	5.0	5.0	5.1	5.2	7.1	5.1
Growth of real primary spending (deflated by GDP deflator, in percent)	1.0	3.3	-0.5	4.1	1.9	0.1	3.4	4.7	5.8	6.0	8.0	4.7	4.6
Primary deficit that stabilizes the debt-to-GDP ratio 5/	0.6	1.3	-5.0	1.5	1.4	1.3	1.9	2.0	2.0	1.5	1.0	-1.0	1.6
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Table 2. Kenya: Public Sector Debt Sustainability Framework, Baseline Scenario, 2018–41

(In percent of GDP, unless otherwise indicated)

Sources: Country authorities; and staff estimates and projections.

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

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

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

4/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period and other debt creating/reducing flows.

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

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

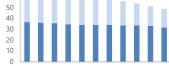


Currency-

based

Definition of external/domestic

debt



2027

2029

2031

2021 2023 2025

Table 3. Kenya: Sensitivity Analysis for Key Indicators of Public and Publicly-
Guaranteed External Debt, 2021–31 (In percent)

					Proj	ections	1/				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	PV o	of debt-1	to GDP i	ratio							
Baseline	28	27	27	26	26	25	25	25	25	24	2
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	28	27	28	28	28	29	30	31	32	33	3
B. Bound Tests											
B1. Real GDP growth	28	29	30	29	28	28	28	27	27	27	2
B2. Primary balance	28	28	30	29	29	29	28	28	28	28	2
B3. Exports	28	29	32	31	31	31	30	30	30	29	2
B4. Other flows 3/ B5. Depreciation	28 28	28 34	29 30	28 29	28 29	28 29	27 29	27 28	27 28	26 28	2
B6. Combination of B1-B5	28	34	32	31	31	30	30	30	20	20	2
C. Tailored Tests											
C1. Combined contingent liabilities	28	30	30	29	29	29	29	29	29	29	2
C2. Natural disaster	n.a.	n.a.	n.a.	n.a							
C3. Commodity price	28	27	27	26	26	25	25	25	25	24	23
C4. Market Financing	28	30	30	29	29	29	28	28	28	27	2
Threshold	40	40	40	40	40	40	40	40	40	40	4(
	PV of	debt-to	-export	s ratio							
Baseline	278	242	226	207	199	195	187	180	174	167	152
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	278	245	233	222	221	225	225	224	225	225	219
B. Bound Tests	278	242	226	207	199	195	187	190	174	167	152
B1. Real GDP growth B2. Primary balance	278 278	242 248	226	207	223	218	187 210	180 202	174 196	167 189	154
B3. Exports	278	330	421	388	371	362	348	333	321	305	27
B4. Other flows 3/	278	252	245	225	215	211	203	194	187	179	163
B5. Depreciation	278	242	201	185	177	174	168	161	156	151	13
B6. Combination of B1-B5	278	322	242	318	305	298	287	275	265	253	23
C. Tailored Tests											
C1. Combined contingent liabilities C2. Natural disaster	278	268	254	235	225	221	213	206	201	195	180
C3. Commodity price	n.a. 278	n.a. 242	n.a. 226	n.a. 207	n.a. 199	n.a. 195	n.a. 187	n.a. 180	n.a. 174	n.a. 167	n.a 152
C4. Market Financing	278	242	226	208	199	196	188	181	173	166	15
Threshold	180	180	180	180	180	180	180	180	180	180	18
					100	100	100		100	100	
		ervice-to									
Baseline	22	24	20	29	17	16	16	19	15	16	23
A. Alternative Scenarios A1. Key variables at their historical averages in 2021-2031 2/	22	23	19	28	17	16	16	19	16	16	22
R I. Key variables at their historical averages in 2021-2031 2/	22	25	15	20		10	10	15	10	10	24
B. Bound Tests											
B1. Real GDP growth	22	24	20	29	17	16	16	19	15	16	23
B2. Primary balance B3. Exports	22 22	24 30	20 31	30 47	19 29	17 27	17 27	20 32	17 27	18 29	24 40
B4. Other flows 3/	22	24	20	29	18	16	17	20	16	17	24
B5. Depreciation	22	24	20	28	17	15	15	19	15	14	21
B6. Combination of B1-B5	22	29	29	42	26	23	24	28	24	24	34
C. Tailored Tests											
C1. Combined contingent liabilities	22	24	20	30	18	17	17	20	16	17	24
C2. Natural disaster	n.a.	n.a.	n.a.	n.a							
C3. Commodity price C4. Market Financing	22 22	24 24	20 20	29 29	17 19	16 17	16 17	19 20	15 23	16 15	23
Threshold											
Inreshold	15	15	15	15	15	15	15	15	15	15	15
	Debt se	ervice-to	o-revenu	ue ratio							
Baseline	14	16	13	20	12	11	11	14	12	12	18
A. Alternative Scenarios A1. Key variables at their historical averages in 2021-2031 2/	14	16	13	19	12	11	11	14	12	13	17
B. Bound Tests											
B1. Real GDP growth	14	17	15	22	13	12	13	15	13	14	2
B2. Primary balance	14	16	14	21	13	12	12	15	13	14	1
B3. Exports	14	16	14	21	13	12	12	15	13	15	2
B4. Other flows 3/	14	16	14	20	13	11	12	14	12	13	19
B5. Depreciation B6. Combination of B1-B5	14 14	20 17	17 15	25 23	15 14	13 13	14 13	17 16	14 14	14 15	2 ⁻ 2 ⁻
	14	17	15	25	14	15	15	10	14	15	2
C. Tailored Tests	14	16	14	21	13	12	12	15	12	13	1
C1. Combined contingent liabilities C2. Natural disaster	14 n.a.	16 n.a.	14 n.a.	21 n.a.	13 n.a.	12 n.a.	12 n.a.	15 n.a.	12 n.a.	13 n.a.	n.a
			13	20	12	11	11	14	12	12	11
C3. Commodity price	14	16	15								
	14	16	13	20	13	12	12	15	17	12	1

17 A bold value indicates a breach of the threshold.
27 Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
3/ Includes official and private transfers and FDI.

Table 4. Kenya: Sensitivity Analysis for Key Indicators of Public Debt, 2021–31 (In percent)

					Proj	ections 1	/				
_	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	PV	of Debt-1	o-GDP R	atio							
Baseline	62	62	61	59	56	53	51	48	46	43	4
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	62	63	64	65	65	66	66	67	68	68	69
B. Bound Tests											
B1. Real GDP growth	62	66	70	69	67	65	64	63	62	60	59
B2. Primary balance	62	64	67	65	62	59	56	53	51	48	4
B3. Exports	62	64	66	64	61	58	55	53	50	47	4
B4. Other flows 3/	62	63	64	61	59	55	53	50	48	45	4
B5. Depreciation	62	66	63	59	55	51	47	44	41	37	3
B6. Combination of B1-B5	62	62	66	64	61	58	55	53	50	48	4
C. Tailored Tests											
C1. Combined contingent liabilities	62	70	69	66	63	60	57	55	52	49	4
C2. Natural disaster	n.a.	n.a									
C3. Commodity price	62	63	64	63	62	60	59	58	57	56	5
C4. Market Financing	62	62	61	59	56	53	51	48	46	43	4
TOTAL public debt benchmark	55	55	55	55	55	55	55	55	55	55	5
	PV of	Debt-to	Revenue	Ratio							
Baseline	375	364	344	324	301	278	264	251	237	224	210
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	375	369	361	356	349	344	347	350	352	353	353
B. Bound Tests											
B1. Real GDP growth	375	387	391	377	359	342	334	328	320	313	304
B2. Primary balance	375	374	377	356	331	307	292	279	264	250	235
B3. Exports	375	376	373	352	327	303	289	275	261	245	230
B4. Other flows 3/	375	370	357	336	312	289	275	262	248	233	218
B5. Depreciation	375	386	354	325	295	267	248	202	240	193	175
B6. Combination of B1-B5	375	365	368	348	324	301	248	229	260	246	232
C. Tailored Tests											
C1. Combined contingent liabilities	375	409	385	363	338	313	299	285	270	255	24
C2. Natural disaster											
	n.a. 375	n.a. 370	n.a. 358	n.a. 346	n.a. 330	n.a. 314	n.a. 308	n.a. 302	n.a. 296	n.a. 289	n.a 282
C3. Commodity price	375	364	344	340	301	278	265	251	230	209	202
C4. Market Financing					301	270	205	231	251	225	203
- "		ervice-to			17	10	26	20	26	26	
Baseline	52	58	56	58	47	40	36	38	36	36	41
A. Alternative Scenarios A1. Key variables at their historical averages in 2021-2031 2/	52	58	56	60	51	45	43	45	45	48	55
	52	50	50	00	51	-15	-15	-15	-15	-10	5.
B. Bound Tests											
B1. Real GDP growth	52	61	62	66	54	47	43	46	45	47	54
B2. Primary balance	52	58	58	63	49	42	38	41	40	41	4
B3. Exports	52	58	56	59	48	41	37	38	37	38	43
B4. Other flows 3/	52	58	56	59	47	40	36	38	37	37	42
B5. Depreciation	52	56	56	60	47	40	36	39	36	36	43
B6. Combination of B1-B5	52	57	57	62	49	42	38	40	39	40	4
C. Tailored Tests			<i></i>	C -			~~				
C1. Combined contingent liabilities	52	58	64	61	49	42	38	43	42	42	44
C2. Natural disaster	n.a.	n.a									
C3. Commodity price	52	58	57	60	49	43	40	42	42	43	50
C4. Market Financing	52	58	56	58	48	41	37	38	42	36	4

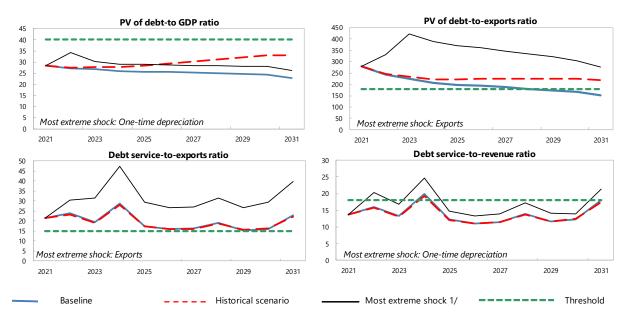
Sources: Country authorities; and staff estimates and projections.

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

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

3/ Includes official and private transfers and FDI.

Figure 1. Kenya: Indicators of Public and Publicity Guaranteed External Debt Under Alternatives Scenarios, 2021–31



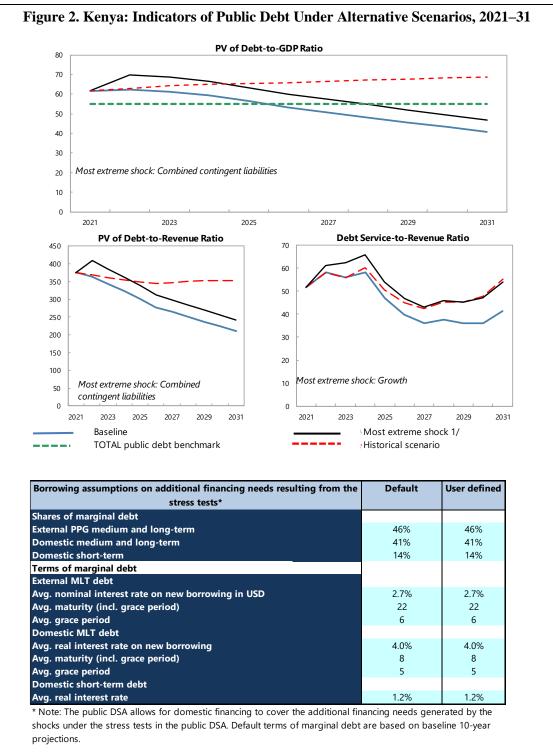
Customization of	Default Set	tings	Borrowing assumptions on additional financing needs resulting from the stress						
	Size	Interactions		Default	User defined				
			Shares of marginal debt						
			External PPG MLT debt	100%					
Tailored Stress			Terms of marginal debt						
Combined CL	No		Avg. nominal interest rate on new borrowing in USD	2.7%	2.7%				
Natural disaster	n.a.	n.a.	USD Discount rate	5.0%	5.0%				
Commodity price	No	No	Avg. maturity (incl. grace period)	22	22				
Market financing	No	No	Avg. grace period	6	6				

Note: "Yes" indicates any change to the size or

interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply. * Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2031. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2031. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

