

KENYA

JOINT WORLD BANK-IMF DEBT SUSTAINABILITY ANALYSIS

Approved by:

Asad Alam and Marcello Estevão (IDA) Catherine Pattillo and Eugenio Cerutti (IMF) Prepared by the staff of the International Development Association (IDA) and the International Monetary Fund (IMF)

KENYA: JOINT BANK-FUND DEBT SUSTAINABILITY 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 are being bolstered by the fiscal consolidation under the IMF supported program.¹ High deficits in the past, combined with export and output losses in 2020 caused by the pandemic, have resulted in near-term deterioration of solvency and liquidity debt indicators. Market pressures in the wake of the Russian invasion of Ukraine and the monetary tightening in advanced countries have limited access to commercial borrowing in 2022. Compared to the last DSA assessment,² the outlook for present value of external debt-to-exports has improved, due to the stronger than anticipated fiscal outturn in FY2021/22 and planned rationalization of capital spending in FY2022/23, reflected in lower-than-previously anticipated external financing, as well as the faster recovery of tourism and the boost to exports from higher export prices in 2022. These positive trends are partly offset by the impact of the projected higher nominal interest rates on the present value of debt, reflecting the higher cost of external loans with floating interest rates and of new external commercial and domestic debt. Kenya's debt indicators will improve as fiscal consolidation progresses and exports and output recover from global shocks, although the improvement remains gradual for the external debt service-toexports ratio. Sustained fiscal consolidation would stabilize debt next year and bring it to more prudent levels over the medium term, while protecting social spending. The DSA suggests that Kenya is susceptible to export and exchange rate shocks; more prolonged and protracted shocks to the economy would also present downside risks to the debt outlook.

¹ The DSA analysis reflects a debt carrying capacity of Medium considering Kenya's Composite Indicator Index of 3.02, based on the IMF's October 2022 *World Economic Outlook* and the 2021 World Bank Country Policy and Institutional Assessment (CPIA).

² See <u>IMF Country Report No. 021/275</u> published in December 2021.

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.³ Debt coverage excludes legacy debt of the pre-devolution county governments,⁴ estimated at Ksh 53.8 billion (0.5 percent of GDP), which is included in a stress scenario.
- 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 below one percent of total outstanding government securities (Text Table 2).

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 reported non-guaranteed debt of state-owned enterprises (SOEs) and extra-budgetary units and Public Private Partnerships (PPPs). Survey of 26 state-owned entities (out of a total of around 260), including 18 entities considered to pose the highest fiscal risk, showed that 19 had non-guaranteed loan obligations (excluding vis-à-vis the government), including overdrafts, equal to KSh.99.3 billion (0.8 percent of GDP) at end-June 2022. Out of this sum, 77 percent was denominated in U.S. dollars and 4.4 percent was owed by extra-budgetary units. None of the loans were reported to be in arrears. Given that the surveyed entities include all of the ones considered to pose the highest fiscal risk and that the total amount of reported non-guaranteed loan obligations is below one percent of GDP, the standard calibration of 2 percent for non-guaranteed SOE debt is retained in the stress test;⁵
- 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 nonperforming loans of about 4 percent of GDP.

³ 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.

⁴ A new Constitution was approved by referendum in 2010, devolving substantial powers to 47 new county governments.

⁵ Guaranteed State-owned enterprise (SOE) debt and amounts borrowed directly by the Kenyan government and on-lent to SOEs are included in the public debt stock (see above) and thus not included in the calibration of the contingent liabilities stress test.

Subsectors of the public sector		Check box
1 Central government 2 State and local government		Х
 3 Other elements in the general government 4 o/w: Social security fund 5 o/w: Extra budgetary funds (EBFs) 6 Guarantees (to other entities in the public and private sector, including to 7 Central bank (borrowed on behalf of the government) 8 Non-guaranteed SOE debt 	SOEs)	x x x
Public Debt Coverage and the Magnitude of the Continge	nt Liability Tailored	Stress Test
The country's coverage of public debt	The central governme central bank, governme	
•	Default	Used for the anal
2 Other elements of the general government not captured in 1.	0.5 percent of GDP	0.5
SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	2
4 PPP	35 percent of PPP sto	ock 1.1
	5 percent of GDP	5
Financial market (the default value of 5 percent of GDP is the minimum value)		

3. Kenya maintains a high standard of debt transparency. Debt statistics bulletins with public and publicly guaranteed (PPG) coverage and medium-term debt management strategies are regularly published, and the Budget Policy Statement and Annual Public Debt Management Report include information about contingent liabilities. Moreover, the external public debt register provides loan-level data. The authorities are working on expanding the reporting of State-owned entities (including SOEs and extrabudgetary units) to cover all 260 entities and automate data collection by linking to existing electronic reporting system. The authorities' efforts in this area were supported by a Policy and Performance Action (PPA) under the IDA Sustainable Development Finance Policy (SDFP).⁶

BACKGROUND ON DEBT

4. Kenya's overall public debt has increased in recent years. Gross public debt increased from 45.7 percent of GDP at end-2015 to 67.8 percent of GDP at end-2021 (Table 1), reflecting legacy high deficits, partly driven by spending on large infrastructure projects, and in 2020–21 by the impact of the COVID-19 global shock. External public debt amounts to about half of Kenya's overall public debt (Text Table 2).

5. Most of Kenya's external public debt remains on concessional terms. Nominal PPG external debt at end-2021 amounted to 34.5 percent of GDP, corresponding to 27.4 percent of GDP in present value terms (Text Table 2 and Table 1):

• Kenya has benefited from sizeable support from multilateral institutions. At end-2021, multilateral creditors accounted for about 43 percent of external debt, while debt from bilateral creditors

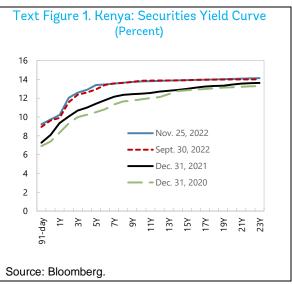
⁶ The PPA on debt transparency was achieved with the publication of the outstanding debt of the 18 entities posing the largest fiscal risks in the FY2020/21 Annual Public Debt Management Report.

represented close to 31 percent (Text Table 2). Of Kenya's bilateral debt, about 64 percent is owed to non-Paris Club members, mainly loans from China.

- The share of commercial debt in total external debt decreased in 2021, as the authorities prioritized concessional borrowing during the pandemic after several years of reliable access to global financial markets. Commercial debt (mainly Eurobonds, loans and export credits) accounted for about 27 percent of external public debt. Eurobonds accounted for 72 percent of commercial debt (US\$7.1 billion), while loans represented 28 percent (about US\$2.7 billion).⁷
- Kenya has not contracted any collateralized external debt. Guarantees by the central government on debt contracted by other entities amount to US\$ 1.4 billion and are included in the stock of PPG debt.

6. Kenya's domestic public debt reached 33.3 percent of GDP at end-2021 (Text Table 2 and Table 2). Since end-2020, the yield curve has shifted up and flattened, reflecting the increase in near-term inflationary pressures and related policy adjustments by the Central Bank of Kenya (CBK), heightened uncertainty in the run-up to the August 2022 elections, and the greater reliance on domestic issuance in the last quarter of the FY2021/22 (Text Figure 1). The successful implementation of authorities' strategy

to lengthen the maturity profile of domestic debt has resulted in a significant decline in the share of Treasury bills in the domestic debt stock (from 35 percent at the end of FY2018/19 to 18.7 percent at the end of FY2021/22) and a notable increase in the average time to maturity of government domestic bonds, excluding T-bills (from 6.3 years at the end of FY2018/19 to 9.1 years at end-June 2022). This has helped alleviate short-term rollover risks, enabling the local market to absorb pressures in 2022. About half of government domestic debt securities are held by pension funds, followed by commercial banks with 47 percent share. Starting <u>in</u> the last quarter of the FY2021/22, domestic debt issuance has taken place mainly at the short-end of



the maturity spectrum in an environment of heightened uncertainty in the run-up to the August 2022 elections and rising inflation.

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. The debt service schedule associated with these loans is not included in the DSA baseline, as budget provisions for their servicing are suspended until the matter is determined, but the outstanding amount on these loans is kept in the stock of public debt, following authorities' approach for reporting PPG debt in national publications (more conservative than prescribed in the LIC DSA Guidance Note).

	De	ebt Stock (end of per	iod)			Debt Ser	vice		
		2021		2021	2022	2023	2021	2022	2023
	(In US\$ mln)	(Percent total debt)	(Percent GDP)	(In	US\$ mln)	(Per	cent GD	νP)
Total	72,522	100.0	67.8	9,813	10,553	9,051	8.9	9.0	7.
External	36,882	50.9	34.5	2,266	3,087	3,058	2.1	2.6	2.
Multilateral creditors	15,750	21.7	14.3	504	556	558	0.5	0.5	0
IMF	1,833	2.5	1.7	-	-	-	-	-	
World Bank	10,226	14.1	9.3	-	-	-	-	-	
African Development Bank	3,199	4.4	2.9	-	-	-	-	-	
European Economic Community (incl. EIB)	197	0.3	0.2	-	-	-	-	-	
International Fund For Agricultural Development	212	0.3	0.2	-	-	-	-	-	
Other Multilaterals	84	0.1	0.1	-	-	-	-	-	
o/w: Arab Bank For Economic Development In Africa	39	0.1	0.0	-	-	-	-	-	
Nordic Development Fund	25	0.0	0.0	-	-	-	-	-	
Bilateral Creditors	11,337	15.6	10.3	585	1,184	1,336	0.5	1.0	1
Paris Club	4,117	5.7	3.7	136	390	457	0.1	0.3	0
o/w: Japan	1,446	2.0	1.3	-	-	-	-	-	
France (incl. AFD)	806	1.1	0.7	-	-	-	-	-	
Non-Paris Club	7,220	10.0	6.5	449	794	878	0.4	0.7	C
o/w: EXIM China	7,071	9.8	6.4	-	-	-	-	-	
EXIM India	65	0.1	0.1	-	-	-	-	-	
Bonds	7,100	9.8	6.4	452	519.8	514.5	0.4	0.4	0
Commercial creditors	2,196	3.0	2.0	774	802	623	0.7	0.7	0
o/w: Trade and Development Bank	1,894	2.6	1.7	-	-	-	-	-	
China Development Bank	283	0.4	0.3	-	-	-	-	-	
Other international creditors	499	0.7	0.5	78	26	26	0.1	0.0	0
o/w: Intesa SanPaolo	294	0.4	0.3	-	-	-	-	-	
ING Bank Germany	57	0.1	0.1	-	-	-	-	-	
Domestic	35,640	49.1	33.3	7,546	7,466	5,993	6.8	6.4	5
Held by residents, total	35,360	48.8	32.0	-	-	-	-	-	
Held by non-residents, total	280	0.4	0.3	-	-	-	-	-	
T-Bills	6,434	8.9	5.8	-	-	-	-	-	
Bonds	28,657	39.5	25.9	-	-	-	-	-	
Loans	544	0.7	0.5	-	-	-	-	-	
Memo items:									
Collateralized debt	0	0.0	0.0	-	-	-	-	-	
o/w: Related	0	0.0	0.0	-	-	-	-	-	
o/w: Unrelated	0	0.0	0.0	-	-	-	-	-	
Contingent liabilities	1,429	2.0	1.3	-	-	-	-	-	
o/w: Public guarantees ²	1,429	2.0	1.3	-	-	-		-	
o/w: Other explicit contingent liabilities ^{3, 4}	n.a.	n.a.	n.a.	-	-	-	-	-	
Nominal GDP (at average Ksh/\$ rate)	110,519	-	-						

Text Table 2. Kenya: Decomposition of Public Debt and Debt Service by Creditor, 2021–23¹

Sources: Kenyan authorities; and IMF staff calculations.

¹As reported by Country authorities according to their classification of creditors, including by official and commercial. Debt coverage is the same as in the DSA. ²Loan guarantees are included in the perimeter of debt covered by the DSA.

³ Includes other-one off guarantees not included in publicly guaranteed debt (e.g. credit lines) and other explicit contingent liabilities not elsewhere classified (e.g. potential legal claims, payments resulting from PPP arrangements).

⁴ Capacity constraints limit data availability on other explicit liabilities not elsewhere classified. Data is expected to become available at the time of the next review of the IMF EFF/ECF arrangements.

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 pre-2019 data on private external debt is the International Investment Position (IIP) data on "Other sectors", which includes both the private sector and market profit institutions that are controlled or financed by government (financial and nonfinancial public corporations, published in the IMF's IIP database. BOP data on net private external debt flows through end-2021 point to a steady upward trend in the stock of private debt as a share of GDP, which is also maintained in projections.

UNDERLYING ASSUMPTIONS

8. The analysis incorporates near-term forecast revisions, while the medium- and long-term outlooks remain broadly unchanged compared to the last full assessment. The baseline projections are subject to heightened uncertainty in the global environment (see ¶29 for details). On the negative side, disruptions to global trade and finance from the war on Ukraine are having a sizeable impact on Kenya's near-term prospects. While Kenya's direct trade and tourism exposures to Russia and Ukraine are relatively small, slowing global demand and spikes in international energy, food, and fertilizer prices are widening the current account deficit, and putting pressure on inflation and the exchange rate, eroding households' purchasing power. In addition, the protracted run-to-safety in international financial markets during 2022 in an environment of global monetary tightening has limited the availability and raised the cost of external commercial financing, prompting a compression of the overall fiscal deficit in FY2021/22 to 6.2 percent of GDP (versus the forecast of 8.2 percent of GDP in the last DSA). On the positive side, exports growth has been supported by the faster than anticipated recovery of tourism in the first half of 2022 and the higher global prices of agricultural commodities and manufacturing goods, reflecting global developments, despite the deterioration in the global growth outlook.

9. GDP growth has been revised down on the adverse impact from the war on Ukraine in 2022– 23 and continued drought, but it is expected to recover to its potential over the medium term:

- The economy carried strong momentum into early 2022. However, the decline of households' purchasing power due to the spike in food prices and rising domestic fuel prices since the start of the war on Ukraine, continued drought, and the under-execution and rationalization of public capital expenditures are expected to slow real GDP growth to 5.3 and 5.1 percent in 2022 and 2023, respectively. However, nominal GDP in local currency is projected to be slightly higher than in the last DSA over the medium term, reflecting the base effect from the strong 2021 outturn and the forecasted higher inflation in 2022–23.
- Medium-to long-term real GDP growth projections are broadly unchanged at around 5.5 percent, on the back of the projected robust productivity growth, supported by an ambitious structural reform agenda, policies to reinforce credit to the private sector, as well as favorable demographic trends. The reform agenda of the new administration aims at boosting agricultural transformation and inclusive growth; enabling the micro, small and medium enterprise (MSME) economy as a private sector growth driver; improving housing and healthcare; promoting the digital superhighway; and supporting the creative economy. Over the medium term, growth is backstopped by the crowding-in effect of fiscal consolidation (i.e., lowering public financing needs would reduce demand-side pressures on domestic interest rates and free up financing for private investment), which is based on growth-friendly domestic revenue mobilization and spending rationalization measures to anchor debt sustainability.

10. The adjustment in the primary fiscal balance is expected to remain on track with commitments under the Fund-supported program (Text Table 4):

• The FY2021/22 primary fiscal deficit was 1.9 percent of GDP smaller than budgeted, reflecting better than expected tax collection, strong demonstrated commitment to fiscal consolidation in an

election year, and constrained domestic and external financing against a backdrop of rising inflation, largely-closed international market access, reflecting the deterioration in investor sentiment toward frontier markets and heightened country-specific risks in the run-up to the August 2022 elections and transition to the new administration. This resulted in a much stronger fiscal outturn than intended, though about 0.6 percent of the FY2021/22 GDP in committed but undisbursed expenditure (mainly related to transfers to counties, fuel subsidies, and SOE support) will carry over to FY2022/23.⁸

- Beyond the carryover (see above), additional unbudgeted expenditure needs (1.3 percent of GDP) have emerged in FY2022/23, reflecting emergency spending authorized under the constitutional provision of Article 223 (0.4 percent of GDP), and needs associated with decisions to pause adjustment of domestic fuel prices early in July and August and with policy priorities of the new administration and the ongoing drought emergency (0.9 percent of GDP).⁹ The authorities have identified a combined set of measures (1.7 percent of projected FY2022/23 GDP) to offset the budgetary impact of such pressures (i.e., expenditure cuts and recognition of some additional tax revenues), while reflecting the difficult financing conditions. As a result, staff's baseline now projects that the FY2022/23 fiscal deficit will be lower than the level targeted by the FY2022/23 approved budget.
- With continued strong adjustment under the IMF-supported EFF/ECF program—which reflects the authorities' goals to increase tax revenues and control expenditures while avoiding nominal cuts in social spending (Text Table 3), so as to anchor debt sustainability—Kenya's primary deficit is expected to narrow in FY2023/24 below its average debt-stabilizing level over the medium term, currently estimated at 1 percent of GDP (Table 2). This will require a comprehensive package of new tax measures amounting to 0.9 percent of GDP—aligned with the priorities of Kenya's Medium-Term Revenue Strategy—combined with further efficiency gains in tax and customs administration, as well as ongoing reductions in non-priority primary spending. Going forward, the overall deficit is expected to durably decline to below 4 percent of GDP (Text Table 5), reflecting continued efforts to strengthen tax compliance and streamline recurrent expenditures—particularly for wages and transfers to public sector entities—while improving public investment management and budgetary controls.

⁸ The stock of pending bills accumulated by Ministries Departments and Agencies (MDAs) reached Ksh84 billion at end-June 2022.

⁹ With the September price adjustment, subsidies for gasoline were eliminated, while prices for diesel and kerosene were brought into closer alignment with global prices. Domestic fuel prices were further adjusted in line with developments in international markets in October and November.

	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21	FY22/23
			(Ksh. M	illions)		
Social spending	256,253	305,275	345,956	380,051	407,905	434,585
Social protection	15,489	18,329	26,669	25,554	26,031	26,194
Education	219,010	269,534	295,555	314,027	337,524	359,130
Health	21,754	17,412	23,732	40,470	44,350	49,260
Memo item			(Percent	of GDP)		
Social spending	3.2	3.4	3.5	3.6	3.6	3.4

Note: Fiscal year GDP is estimated as average of its values in the calendar years it spans.

	2022	2023	2024	2025	2026	2027	Long-term 1/
Nominal GDP (Ksh billion)							
Current DSA	13,650	15,453	17,237	19,087	21,137	23,387	57,822
Previous DSA (December 2021)	13,328	14,790	16,388	18,163	20,133	22,302	50,993
Real GDP (growth)							
Current DSA	5.3	5.1	5.5	5.5	5.5	5.5	5.5
Previous DSA (December 2021)	5.8	5.5	5.5	5.5	5.5	5.5	5.6
Revenue and grants (percent of GDP)							
Current DSA	17.5	17.6	17.9	18.0	17.9	18.1	19.4
Previous DSA (December 2021)	17.1	17.8	18.3	18.7	19.1	19.2	20.0
Primary fiscal balance (percent of GDP)							
Current DSA	-1.4	-0.3	0.5	0.8	0.8	0.9	1.0
Previous DSA (December 2021)	-2.2	-0.5	0.3	0.9	1.3	1.1	1.0
Non-interest current account (percent of GDP)							
Current DSA	-4.3	-3.6	-3.6	-3.4	-3.3	-3.4	-3.0
Previous DSA (December 2021)	-3.9	-4.0	-3.9	-3.9	-3.8	-3.6	-3.4
Exports of goods and services (growth)							
Current DSA	18.9	9.9	10.1	10.2	8.9	8.3	9.6
Previous DSA (December 2021)	17.9	13.3	11.9	10.8	8.9	9.4	9.6

1/ Average 2028-42 for current DSA and 2027-41 for the previous one.

11. The narrower fiscal deficit and lower actual and projected external financing in FY2021/22 and FY2022/23 bring down the path of nominal public debt in the DSA baseline. The under-execution of external project financing amounted to over US\$700 million in FY2021/22, and a previously-planned EUR1 billion (around US\$1.1 billion) Eurobond issuance (Text Table 5) did not take place. In addition, the planned rationalization of capital spending in the FY2022/23 Supplementary Budget, which is under preparation, will lower external financing needs by around US\$1 billion. As the authorities' borrowing plan for FY2022/23 does not include the unrealized Eurobond issuance, the latter is not included in the DSA baseline. The actual and projected lower external project financing in FY2022/23 are expected to be binding. These changes in financing assumptions result in a more favorable path of debt burden metrics than in the last DSA assessment.

12. To support economic recovery, the CBK has lent the equivalent of three-quarters of the 2021 US\$740 million general allocation of SDRs to the government in local currency to meet financing needs in FY2021/22 and FY2022/23. Plans to use the remainder of the allocation to meet additional financing needs in FY2022/23 are reflected in the DSA baseline. In the DSA, the amounts lent enter in the calculation of the present value (PV) of total public debt with their present value, which reflects a grant element of 39.4 percent.

	2021	2022	2023	2024	2025	2026	2027
	2021			Proje	ctions		
Real GDP growth (percent)	7.5	5.3	5.1	5.5	5.5	5.5	5.5
CPI inflation, average (percent)	6.1	7.7	7.8	5.7	5.0	5.0	4.9
Overall fiscal balance (percent of GDP) ¹	-8.2	-6.2	-5.8	-4.4	-3.9	-3.8	-3.8
Primary balance (percent of GDP) ¹	-4.0	-1.3	-1.1	0.3	0.7	0.8	0.9
Current account balance (percent of GDP)	-5.2	-5.7	-5.4	-5.3	-5.1	-5.0	-5.0
Exports of goods and services (US\$ billion)	11.8	14.1	15.5	17.0	18.8	20.4	22.1
Exports of goods and services (growth; percent)	21.8	18.9	9.9	10.1	10.2	8.9	8.3
Gross international reserves (US\$ billion)	9.5	8.1	7.0	8.1	9.2	9.9	11.0

13. Debt service relief under the G-20 Debt Service Suspension Initiative (DSSI) reduced external financing needs in 2021, while its repayment will have the opposite effect over 2022–28. In 2021, total relief under the DSSI amounted to US\$504 million or 0.46 percent of GDP.

14. As part of the restructuring of Kenya Airways (KQ), the Government of Kenya has begun servicing the guaranteed portion of KQ external debts, which the company can no longer service, while discussions on novation of a part of this guaranteed stock is ongoing. The sum of the principal of these obligations and the remaining government guarantee on other KQ external loans (US\$688 million as of November 2022) is lower than the US\$750 million government guarantee of KQ debts included in the stock of external PPG debt at end-2021. As a result, the operation will lower the nominal stock of external PPG debt, but raise its present value, due to the assumption of the associated interest payments by the government and shorter repayment period than previously assumed.

15. The current account deficit is expected to widen to 5.7 percent of GDP in 2022, before converging to 5 percent over the medium term:

- The disruption of global trade and finance from the war on Ukraine is expected to widen the current account deficit in 2022. While Kenya's direct exposure to Russia and Ukraine is relatively small, the external trade balance has weakened, due to sharp increases in international import prices of commodities with relatively inelastic demand, such as oil derivatives, cereals, and fertilizers. This is only partially being offset by higher prices for Kenya's main agricultural exports (tea, horticulture, and coffee) and consumer and intermediate goods exports in 2022, reflecting global developments.
- Over the medium term, the current account balance is expected to strengthen on the back of further fiscal consolidation, supported by robust goods exports and tourism receipts and a flexible

exchange rate, and by the gradual normalization of global commodity and financial market conditions.¹⁰ Export growth stands to benefit from Kenya's improving business environment, leveraging on existing trade and investment agreements,¹¹ and the new administration's policy priorities to increase the share of manufacturing (including agro-processing) and services (including tourism and financial sector) in the economy. In addition, export growth will be supported by policies to enhance agricultural productivity, including focus on farmer-led irrigation, efforts to modernize Kenya's food systems, and greater value chain integration. Services are projected to gradually increase over the medium term, as the tourism sector realizes its full potential. Remittances are also projected to remain robust over the medium term. The private sector current account deficit is expected to be financed by a diversified set of sources, including foreign direct investment (FDI) and financial and non-financial corporate borrowing.

16. As part of a continuing commitment to reduce external debt-related vulnerabilities, the public sector gross financing needs will be met with a balanced mix of external and domestic financing.¹² For external financing, Kenya is expected to continue to primarily rely on concessional development loans. The authorities' external borrowing program, set out in Text Table 6, is in line with the authorities' commitments under the IMF-supported EFF/ECF program. These include an overall ceiling on the present value of newly contracted or guaranteed external public debt, which is also a performance and policy action (PPA) under the World Bank's Sustainable Development Finance Policy (SDFP).¹³ The cumulative external borrowing program through end-December 2023 is consistent with planned drawings of concessional and non-concessional loans in FY2022/23 and FY2023/24. The borrowing program continues to provide space for the US\$1.1 billion external commercial financing, which did not take place in FY2021/22, and US\$5 billion for debt management operations,¹⁴ both of which have been put on hold in light of the current challenging market conditions for frontier markets and are not reflected in the DSA

¹⁰ Over the medium term, the non-interest current-account deficit, which nets out interest outflows from the overall deficit, is somewhat narrower than in the last DSA, reflecting the impact of the global tightening of financial conditions primarily on the private external interest bill. The impact of the higher projected interest rates on the overall current account deficit is more muted, due to the positive impact on interest income from private sector's sizeable external assets.

¹¹ Kenya is a member of the East African Community Customs Union and the African Continental Free Trade Area. It has signed an Economic Partnership Agreement (EPA) with the UK and has started bilateral implementation of European Union-East African Community EPA. In 2022, Kenya and the United States engaged in Strategic Trade and Investment Partnership that aims, *inter alia*, to increase investment, promote sustainable and inclusive economic growth, and support African regional economic integration.

¹² The 2022 Medium-Term Debt Management Strategy targets a ratio of gross domestic to external financing of three to one. However, a significant share of gross domestic financing is for rollover of short-term debt that is issued and matures within the same financial year. In the DSA, the share of external in total gross financing is around 50 percent in 2022–25, as the rollover of short-term debt that is issued, matures, and is rolled over within each year is not included in the calculation of the public sector gross financing need.

¹³ One FY2022 PPA sought to improve debt management by ensuring that the government limits the present value of new external borrowing to US\$5.6 billion in FY2021/22, except if this limit is adjusted by the World Bank to a) reflect any material change of circumstances or b) in coordination with the IMF, in particular in line with adjustments in the IMF Debt Limit Policy. The PPA was observed by a wide margin.

¹⁴ The authorities are actively exploring market-based commercial debt options to reduce rollover risks stemming from maturing commercial debts.

baseline. Looking ahead, Kenya is expected to continue to tap global capital markets to roll over maturing external commercial financing, with the next Eurobond maturity falling due in June 2024.

Public and Publicly Guaranteed (PPG) External Debt ¹	Volume of I from Jul to Dec 3	1, 2021		ebt from Jul 1 ec 31, 2023 Purposes)
	US\$ million	Percent	US\$ million	Percent
By sources of debt financing	17,654	100	13,340	100
Concessional debt, of which	10,156	58	5,950	45
Multilateral debt	4,508	26	2,593	19
Bilateral debt	3,107	18	1,765	13
Other	2,511	14	1,574	12
Non-concessional debt, of which	7,498	42	7,389	55
Semi-concessional	379	2	270	2
Commercial terms	7,120	40	7,120	53
By Creditor Type	17,654	100	13,340	100
Multilateral, of which	4,693	27	2,716	20
World Bank	3,894	22	2,231	17
Bilateral - Paris Club	1,146	6	679	5
Bilateral - Non-Paris Club	1,962	11	1,086	8
Other, of which	9,853	56	8,858	66
For debt management operations ²	5,000	28	5,000	37
Uses of debt financing	17,654	100	13,340	100
Infrastructure	4,693	27	3,591	27
Social Spending	5,661	32	3,356	25
Budget Financing	1,368	8	856	6
Other, of which	5,932	33.6	5,536	42
For debt management operations ²	5,000	28	5,000	37

^{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/} Planned potential borrowing for debt management operations to improve the debt profile (in terms of PV and debt service profile). Debt management operations are not reflected in the DSA baseline.

17. The realism tools flag some optimism compared to historical performance, reflecting a structural break with past trends based on the policies underpinning the authorities' 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 2022–24, 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 execution of the FY2021/22 budget, their careful management of expenditures to achieve fiscal targets in the face of unanticipated pressures in FY2022/23, and their medium-term plans to strengthen tax revenues and streamline recurrent expenditures—particularly for wages and transfers to public sector entities—while improving public investment management and budgetary controls. The authorities' commitment to fiscal consolidation, including actions taken during the pandemic to broaden the tax revenue base—which have delivered resilience by creating fiscal space to cover unanticipated needs resulting from the war on Ukraine

(e.g., gradual approach to adjusting domestic fuel prices during 2022)—and planned actions to identify offsets to compensate for expenditure pressures in FY2022/23, while reducing the primary balance below budgeted levels, provide assurances that the fiscal adjustment under the program is achievable. The return of real GDP growth to its long-term potential, following the strong recovery from the COVID–19 shock in 2021, explains the near-term growth trajectory during planned fiscal consolidation. Export growth is projected to be higher than in the recent past, as exports of goods and services recover from the 2020 global shock and by 2029 return to a similar share of GDP as observed in 2015.

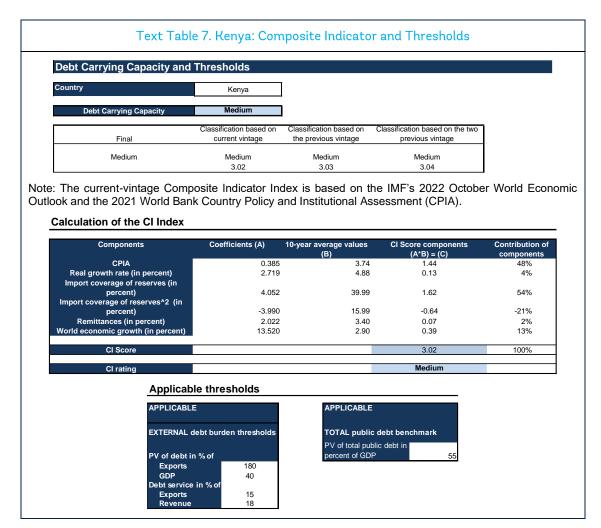
COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

18. Kenya's debt carrying capacity is assessed as Medium (Text Table 7). The debt carrying capacity determines the applicable thresholds for the PPG external and total public debt sustainability indicators used in the assessment. It is informed by the value for Kenya of the Composite Indicator (CI) Index of 3.02,¹⁵ which incorporates data from the IMF's October 2022 *World Economic Outlook* (WEO) macroeconomic projections and the 2021 World Bank's Country Policy and Institutional Assessment (CPIA). The marginally lower CI score relative to the last published DSA is on account of the weaker outlook for global growth and slightly lower projected path of import coverage of reserves, which are partly offset by upward revisions in real growth, the ratio of remittances to GDP, and improvement in the CPIA score.

19. Besides the six standardized stress tests, the analysis includes two tailored stress tests.

The combined contingent liabilities stress test is described in paragraph 2 above. The market financing shock is applied to countries with market access, such as Kenya. It assesses rollover risks resulting from a deterioration in global risk sentiment, temporary nominal depreciation, and shortening of maturities of new external commercial borrowing.

¹⁵ 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.



EXTERNAL DEBT SUSTAINABILITY ANALYSIS

20. 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 debtcarrying capacity analysis, the PV of PPG external debt-to-exports solvency indicator remains above the threshold (180 percent) through 2025, while the debt service-to-exports liquidity indicator exceeds its threshold (15 percent) until 2030. The solvency indicator gradually declines as exports recover; the long-term decline in the liquidity indicator is interrupted by Eurobond repayments in 2024 and 2028 and the rollover of external bank loans coming due in 2025. Compared to the last DSA assessment, the outlook for the PV of external debt-to-exports has improved, due to the stronger-than-anticipated fiscal outturn in FY2021/22 and planned rationalization of capital spending in FY2022/23, reflected in lower-than-previously anticipated external financing, the faster recovery of tourism, and the boost to exports from higher export prices in 2022 linked to global developments. These positive trends are partly offset by the impact of projected higher nominal interest rates on the PV of debt, reflecting the higher cost of external loans with floating interest rates and of new external commercial and domestic debt. 21. The PV of PPG external debt as a share of GDP remains well 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 27 percent in 2021 to 18 percent in 2042. The external debt service-to-revenue ratio exceeds its threshold in 2024, reflecting the maturing Eurobond in that year.

22. 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 involving one-time depreciation, the debt service-to-revenue ratio can potentially breach the threshold in 2023–26 and in 2028.

23. The market financing pressures module ranks market liquidity risks as moderate (Figure 5). Kenya's EMBI spread has widened above the threshold of 570 basis points (641 basis points as of November 14, 2022, having come down from the highs reached prior to the elections). On the plus side, gross financing needs are below the threshold (14 percent of GDP) that indicates high risk. Fiscal consolidation efforts under the IMF-supported EFF/ECF program would help keep gross financing needs below the threshold. As is the case for other emerging and frontier economies, financing risks are affected by global liquidity conditions. Persistent deterioration in global market conditions would exacerbate financing risks for Kenya. The shift in the deficit financing mix toward domestic resources calls for monitoring, given the elevated levels of domestic interest rates.

PUBLIC DEBT SUSTAINABILITY ANALYSIS

24. 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 peak in 2021–22 (going from 61.6 percent of GDP (PV terms) in 2021 to 61.7 percent in 2022), followed by a steady decline. Supported by fiscal consolidation under the program, including revenue mobilization measures, the PV of public debt-to-revenue ratio would gradually decline from 369 percent in 2021 to 115 percent in 2042.

25. Stress tests indicate that the PV of debt-to-GDP ratio is likely to remain above its indicative benchmark for most of the projection period under these scenarios (Figure 2 and Table 4). This is also the case in the historical scenario, in which key variables are kept at their historical averages, underscoring the importance of the authorities' ambitious reform agenda to reorient the economy to private-sector and export-oriented growth drivers to durably reduce debt-related vulnerabilities. Under the most extreme shock scenario (combined contingent liabilities shock), the PV of the public debt-to-GDP ratio would breach the 55 percent benchmark for a country with medium debt-carrying capacity through 2029.

RISK RATING AND VULNERABILITIES

26. Kenya's overall and external public debts are sustainable but remain at high risk of debt distress. The mechanical risk signals indicate sustained breaches of sustainability thresholds by 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 debt-to-GDP ratio. A number of additional considerations mitigate the mechanical risk signals, supporting the analysis:

- The decisive actions already undertaken in 2020-21 to limit the increase in the deficit from global shocks (pandemic, war on Ukraine) and to broaden the tax base;
- The multi-year fiscal consolidation under the IMF supported EFF/ECF 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 generally smooth external debt service profile on a clear declining trajectory as share of exports and public revenues, which authorities plan to further optimize if market conditions are favorable;
- Close attention to evaluating risks at SOEs and the commitment under the IMF-supported 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.
- Looking ahead, efficient investment in infrastructure will raise growth and export potential, both of which will support Kenya's external debt sustainability.

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 and reforms under the IMF-supported 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 medium term 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 and the war on Ukraine. The multiyear fiscal consolidation plan highlighted in the 2022 Budget Policy Statement (BPS) and substantiated by the FY2022/23 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. The authorities are in the process of preparing a Supplementary FY2022/23 Budget aligned with the objectives of the IMF-supported EFF/ECF program.
- 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 shocks dissipate, 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.

28. Debt sustainability is also supported by 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, there are mitigating factors that help support the debt sustainability assessment. The relatively smooth debt service profile—except for maturing Eurobonds and external bank loans in 2024, 2025, and 2028—is on a clear declining trajectory over the projection period, signaling a strengthening in debt servicing capacity. The authorities' commitment to absorb the 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. Stable and strong remittances, amounting to 32 percent of exports of goods and services in 2021, would also continue to be an important source for foreign currency receipts going forward.

29. The assessment is subject to heightened uncertainty in the global environment and a narrow scope for deviations from the domestic reform agenda underpinning the baseline. Kenya is exposed to heightened risks to the global outlook through international trade and financing channels. Intensification of global spillovers from the war on Ukraine could drive persistent investor concerns about the prospects of frontier economies and increase the cost of financing. Faster-than-projected tightening of monetary policy in major economies could further tighten financing conditions and result in decline in demand for Kenya exports from the main trading partners. Domestic government bond holdings by pension funds and commercial banks expose the economy to feedback between sovereign and financial sector risks, while the need to rollover maturing external commercial debt exposes the country to risks from a liquidity squeeze. Delays in the implementation of structural reforms, or shocks to the global demand for commodities, could lead to a growth in exports that is lower than the one expected in the baseline. Even with the strong commitment by authorities to fiscal consolidation, there is a risk for slippages especially in the long run. Finally, crowding-in effect of the fiscal consolidation into private sector growth might take longer to materialize.

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. At the same time, they stressed the indispensable role of sustainable debt financing in meeting the infrastructure needs of Kenya's vibrant economy. The authorities highlighted their determination to continue to extend the maturity of domestic debt and pursue a financing strategy that balances domestic and external financing, relies primarily on concessional financing, and accesses international capital markets judiciously. The authorities reiterated their strong commitment to debt transparency. The authorities expressed confidence that passage of the new, national debt ceiling in present value terms, which is expected to be a priority for the new parliament, 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 maturing commercial debt with long-dated debt instruments.

			<u></u>	n perce		<u> </u>								
		Actual					Proje	ections				Avera	-	
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections	
xternal debt (nominal) 1/	52.6	60.0	60.3	61.5	62.9	65.1	66.5	67.3	68.7	70.3	66.7	46.5	67.5	Definition of external/domestic debt Currency-base
of which: public and publicly guaranteed (PPG)	30.3	35.4	34.5	35.0	34.4	33.6	33.1	32.6	32.7	31.8	24.0	26.0	33.0	Is there a material difference between the
hange in external debt	2.6	7.4	0.3	1.2	1.4	2.2	1.4	0.8	1.4	-0.2	-0.7			two criteria?
dentified net debt-creating flows	0.8	3.9	-0.1	2.1	1.5	1.1	0.6	0.5	0.3	-1.2	-1.9	2.1	0.3	
Non-interest current account deficit	4.0	3.6	4.0	4.3	3.6	3.6	3.4	3.3	3.4	2.8	3.1	5.5	3.4	
Deficit in balance of goods and services	8.9	7.9	9.1	9.6	9.1	8.9	8.6	8.5	8.6	7.4	6.8	10.1	8.5	
Exports	11.4	9.6	10.7	12.0	12.8	13.3	13.7	14.0	14.2	16.9	25.7			
Imports	20.3	17.6	19.8	21.6	22.0	22.2	22.3	22.5	22.9	24.3	32.4			Debt Accumulation
Net current transfers (negative = inflow)	-5.3	-4.9	-5.5	-5.8	-5.9	-5.9	-5.9	-6.0	-6.1	-6.2	-6.5	-5.1	-6.0	1.6
of which: official	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0		0.0	
Other current account flows (negative = net inflow)	0.0	0.6	0.5	0.4	0.1	0.5	0.7	0.1	0.9	1.5	2.8	0.5	0.9	1.4
Net FDI (negative = inflow)	-0.4	-0.6	0.0	-0.6	-0.8	-0.9	-1.1	-1.2	-1.3	-2.0	-2.9	-0.9	-1.3	12
Endogenous debt dynamics 2/	-0.4 -2.8	-0.6 0.8	-4.0	-0.6 -1.6	-0.8 -1.3	-0.9 -1.5	-1.1	-1.2	-1.3	-2.0	-2.9	-0.9	-1.5	
Contribution from nominal interest rate	-2.8	1.2	-4.0	-1.6	-1.3	-1.5	-1.6	-1.7	- 1.9	-2.0	-2.2			
	-2.4	0.1	-4.1	-3.0		-3.3	-3.3	-3.4	-3.5	-3.7	-3.5			
Contribution from real GDP growth	-2.4 -1.7	-0.4	-4.1 -1.1	-3.0	-3.1	-3.3	-5.5	-3.4	-3.5	-3.7	-3.5			0.8
Contribution from price and exchange rate changes														
Residual 3/ of which: exceptional financing	1.8	3.6 0.0	0.3 -0.5	-0.8 0.0	-0.1 0.0	1.0 0.0	0.8 0.0	0.3	1.1 0.0	1.0 0.0	1.2 0.0	1.0	0.7	0.6
ustainability indicators V of PPG external debt-to-GDP ratio			27.4	26.6	26.8	26.1	25.6	25.1	25.0	24.2	17.7			0.4 -
V of PPG external debt-to-exports ratio			256.1	221.5	208.6	195.9	186.5	179.8	175.4	143.4	68.8			0.0
PG debt service-to-exports ratio	35.0	25.8	23.5	22.6	20.5	29.6	21.2	19.2	15.8	14.5	7.3			2022 2024 2026 2028 2030 2032
PG debt service-to-revenue ratio	23.8	15.1	15.3	15.7	15.2	22.3	16.5	15.2	12.6	13.3	9.0			2022 2024 2026 2028 2030 2032
Gross external financing need (Million of U.S. dollars)	24,024	22,467	23,437	25,575	26,016	28,701	28,551	29,626	30,403	36,776	56,928			Debt Accumulation
			., .	.,	.,	., .	-,							
Key macroeconomic assumptions														 Grant-equivalent financing (% of GDP)
eal GDP growth (in percent)	5.1	-0.3	7.5	5.3	5.1	5.5	5.5	5.5	5.5	5.5	5.6	4.4	5.4	Grant element of new borrowing (% right scale)
DP deflator in US dollar terms (change in percent)	3.5	0.9	1.8	0.6	-2.2	0.6	1.3	1.6	0.7	-0.1	-0.2	4.4	0.2	
ffective interest rate (percent) 4/	2.6	2.2	2.1	2.4	3.0	3.0	2.8	2.7	2.5	2.5	2.2	2.3	2.6	External debt (nominal) 1/
irowth of exports of G&S (US dollar terms, in percent)	-0.8	-15.4	2.1	2.4 18.9	9.9	10.1	2.8 10.2	8.9	8.3	2.5	10.0	2.3	2.6	
														of which: Private
irowth of imports of G&S (US dollar terms, in percent)	1.2	-13.2	23.3	16.0	4.3	7.4	7.5	7.7	8.0	7.4	8.8	3.6	7.7	80
irant element of new public sector borrowing (in percent)				26.8	28.5	22.1	24.4	24.2	25.3	28.2	31.6		25.2	70
Sovernment revenues (excluding grants, in percent of GDP)	16.8	16.4	16.5	17.3	17.4	17.6	17.7	17.6	17.8	18.4	20.7	16.9	17.9	
id flows (in Million of US dollars) 5/	1,476	1,841	1,785	2,133	2,300	2,749	3,103	3,114	3,195	3,923	5,576			60
Grant-equivalent financing (in percent of GDP) 6/				1.0	1.1	1.3	1.2	1.1	1.1	1.0	0.8		1.1	
arant-equivalent financing (in percent of external financing) 6/				31.8	33.8	26.7	29.6	29.9	31.5	35.3	41.4		31.0	50
Iominal GDP (Million of US dollars)	100,328	100,931	110,519	117,068	120,322	127,770	136,548	146,277	155,325	201,910	341,482			40
ominal dollar GDP growth	8.8	0.6	9.5	5.9	2.8	6.2	6.9	7.1	6.2	5.4	5.4	9.2	5.6	
1emorandum items:														30
V of external debt 7/			53.2	53.1	55.3	57.6	59.0	59.8	61.0	62.7	60.3			20
In percent of exports			496.9	442.0	430.3	432.1	429.5	428.3	428.1	370.9	235.1			
otal external debt service-to-exports ratio	 170.3	 188.3	496.9 160.0	442.0 141.2	430.5	134.8	429.5	428.5	426.1	79.7	41.6			10
	170.3	100.3												
V of PPG external debt (in Million of US dollars)			30,279	31,148 0.8	32,247 0.9	33,352 0.9	34,979 1.3	36,723 1.3	38,816 1.4	48,939 0.8	60,316 0.3			
PVt-PVt-1)/GDPt-1 (in percent)														2022 2024 2026 2028 2030 2032

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

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

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

4/ 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.

Change in public sector debt 2.6 8.9 -0.1 0.7 -1.6 -2.1 -1.9 -1.9 -1.8 -2.3 Privary and fidt Privary defidit Privar			Actual					Proje	tions				Avera	age 6/		
of which externed debt 903 35.4 24.5 95.0 24.4 33.6 33.1 32.6 32.7 911 24.0 26.0 33.0 34.0 34.0 35.0 <th< th=""><th></th><th>2019</th><th>2020</th><th>2021</th><th>2022</th><th>2023</th><th>2024</th><th>2025</th><th>2026</th><th>2027</th><th>2032</th><th>2042</th><th>Historical</th><th>Projections</th><th></th><th></th></th<>		2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections		
Compain jubilities set or debt 2.5 8.9 0.1 2.7 1.6 -2.1 1.9 -1.9 -1.5 -1.5 -2.4 2.3 2.6 2.3 2.6 2.3 0.6 0.8 0.3 <td>Public sector debt 1/</td> <td>59.1</td> <td>68.0</td> <td>67.8</td> <td>68.6</td> <td>67.0</td> <td>64.9</td> <td>63.0</td> <td>61.1</td> <td>59.6</td> <td>51.0</td> <td>30.0</td> <td>52.0</td> <td>59.7</td> <td></td> <td></td>	Public sector debt 1/	59.1	68.0	67.8	68.6	67.0	64.9	63.0	61.1	59.6	51.0	30.0	52.0	59.7		
Unter-Wind debc-reasing flows 2.3 7.8 0.0 2.4 -2.3 -2.2 -2.0 -2.1 -2.5 2.6 -3.3 5.6 -0.4 0.8 0.0 0.0 17.0 <td< td=""><td>of which: external debt</td><td>30.3</td><td>35.4</td><td>34.5</td><td>35.0</td><td>34.4</td><td>33.6</td><td>33.1</td><td>32.6</td><td>32.7</td><td>31.8</td><td>24.0</td><td>26.0</td><td>33.0</td><td>Definition of external/domestic debt</td><td>Currency-ba</td></td<>	of which: external debt	30.3	35.4	34.5	35.0	34.4	33.6	33.1	32.6	32.7	31.8	24.0	26.0	33.0	Definition of external/domestic debt	Currency-ba
Udentified debt creating flows 2.3 7.6 0.0 -2.4 -2.3 2.2 2.0 -2.1 2.1 2.2 2.6 -2.3 3.5 -0.6 Primary definition 170 16.7 17.5 17.6 17.9 17.0 </td <td>Change in public sector debt</td> <td>2.6</td> <td>8.9</td> <td>-0.1</td> <td>0.7</td> <td>-1.6</td> <td>-2.1</td> <td>-1.9</td> <td>-1.9</td> <td>-1.5</td> <td>-1.8</td> <td>-2.3</td> <td></td> <td></td> <td></td> <td></td>	Change in public sector debt	2.6	8.9	-0.1	0.7	-1.6	-2.1	-1.9	-1.9	-1.5	-1.8	-2.3				
Primary deficit 3.4 3.8 2.7 1.4 0.3 -0.5 -0.8 -0.0 -0.9 -1.3 3.5 -0.6 Revene and grants of whick grants 0.2 0.2 0.2 0.3 0.2 0.2 0.3	Identified debt-creating flows	2.3	7.8	0.6	-2.4	-2.3	-2.2	-2.0	-2.1	-2.1	-2.4	-2.8	2.6	-2.3		No
of whick going 0.2 0.2 0.2 0.3	Primary deficit	3.4	3.8	2.7	1.4	0.3	-0.5	-0.8	-0.8	-0.9	-0.9	-1.3	3.5	-0.6	between the two criteria?	
Primary formationer(s) equadationer(s) equadat	Revenue and grants	17.0	16.7	16.7	17.5	17.6	17.9	18.0	17.9	18.1	18.7	21.0	17.3	18.2	-	
Automatic debt dynamics -1.2 4.0 -2.1 -3.7 -2.6 -1.6 -1.2 -1.2 -1.1 -1.4 Contribution from interest rate growth differential -0.4 2.8 -3.0 -3.7 -2.6 -1.6 -1.2	of which: grants	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3			Public sector debt 1/	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Primary (noninterest) expenditure	20.4	20.4	19.4	18.8	18.0	17.4	17.2	17.1	17.2	17.8	19.7	20.8	17.6		
of which: contribution from one-age real interest rate 2.4 2.6 17 -0.3 0.7 1.9 2.2 2.1 1.9 1.2 0.2 of which: contribution from real GDP growth -2.7 0.0 1.4.8 3.3 -3.3 -3.4 -3.3 -3.2 -2.8 -1.7 Other identified debt-creating flows 0.0 0	Automatic debt dynamics	-1.2	4.0	-2.1	-3.7	-2.6	-1.6	-1.2	-1.2	-1.2	-1.5	-1.4			of which: local-currency denomi	inated
of whick: contribution from dering read interest rate 2.4 2.6 1.7 -33 0.7 1.9 1.2 0.2 of whick: contribution from real exchange rate depreciation -0.8 1.2 0.9 -3 -3.3 -3.3 -3.4 -3.3 -3.2 -2.8 -1.7 Contribution from real exchange rate depreciation -0.8 1.2 0.9 -0 0.0	Contribution from interest rate/growth differential	-0.4	2.8	-3.0	-3.7	-2.6	-1.6	-1.2	-1.2	-1.2	-1.5	-1.4				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	of which: contribution from average real interest rate	2.4	2.6	1.7	-0.3	0.7	1.9	2.2	2.1	1.9	1.2	0.2			of which: foreign-currency deno	minated
Other identified debt-creating flows 0.0	of which: contribution from real GDP growth	-2.7	0.1	-4.8	-3.4	-3.3	-3.5	-3.4	-3.3	-3.2	-2.8	-1.7			80	
Cother identified delt-creating flows: 0.0	Contribution from real exchange rate depreciation	-0.8	1.2	0.9											70	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	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		
Recognition of contingent labilities (e.g., bank recapitalization) 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				
Debt relief (H)PC and other) 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				
Other debt creating or reducing flow (please spectry) 0.0 <td>Debt relief (HIPC and other)</td> <td>0.0</td> <td></td> <td></td> <td></td> <td></td>	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				
Residual 0.4 1.1 -0.7 3.1 0.7 0.1 0.7 0.5 0.5 0.7	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				
Sustainability indicators PV of public debt-to-GDP ratio 2/ 368.7 353.1 340.4 322.5 310.9 301.0 289.6 235.3 114.9 PV of public debt-to-revenue and grants ratio 368.7 52.9 54.0 52.5 44.0 24.1 2022 2024 2026 2028 2030 2 Debt service-to-revenue and grants ratio 368.7 52.0 57.0 62.7 54.5 49.9 43.9 39.1 17.0 2022 2024 2026 2028 2030 2 Gross financing need 4/ 13.2 10.5 10.5 10.4 10.7 90 8.1 7.1 6.4 5.4 Key macroeconomic and fiscal assumptions Real GDP growth (in percent)	Residual	0.4	1.1	-0.7	3.1	0.7	0.1	0.1	0.1	0.7	0.6	0.5	0.7	0.7		
m m	Sustainability indicators														0	
Debt service-to-revenue and grants ratio 3/ 57.4 54.1 55.9 52.0 57.0 62.7 54.5 49.9 43.9 39.1 17.0 Gross financing need 4/ 13.2 12.8 12.1 10.5 10.4 10.7 9.0 8.1 7.1 6.4 2.3 Key macroeconomic and fiscal assumptions Real GDP growth (in percent) 5.1 -0.3 7.5 5.3 5.5 5.5 5.5 5.5 5.5 5.6 4.4 5.4 Average end inhiterest rate on domestic debt (in percent) 3.9 3.3 3.2 3.0 3.1 3.0 3.2 2.5 2.7 3.1 Average end inhiterest rate on domestic debt (in percent) 7.0 6.7 6.26 5.1 6.1 6.0 3.9 3.2 2.7 3.1 Average end interest rate on domestic debt (in percent) 7.0 6.7 6.26 5.1 6.1 6.0 5.9 4.4 1.8 4.8 4.9 Real exchange rate depreciation (in percent, + indicates depreciation) -2.9 3.9 2.8 7.7 5.7 5.0 <td< td=""><td>PV of public debt-to-GDP ratio 2/</td><td></td><td></td><td>61.6</td><td>61.7</td><td>60.0</td><td>57.8</td><td>55.9</td><td>54.0</td><td>52.5</td><td>44.0</td><td>24.1</td><td></td><td></td><td>2022 2024 2026 2028</td><td>2030 2</td></td<>	PV of public debt-to-GDP ratio 2/			61.6	61.7	60.0	57.8	55.9	54.0	52.5	44.0	24.1			2022 2024 2026 2028	2030 2
Gross financing need 4/ 13.2 12.8 12.1 10.5 10.4 10.7 9.0 8.1 7.1 6.4 2.3 Key macroeconomic and fiscal assumptions Real GDP growth (in percent) 5.1 -0.3 7.5 5.3 5.1 5.5 5.5 5.5 5.5 5.6 4.4 5.4 Average nominal interest rate on external debt (in percent) 3.9 3.5 3.1 3.3 3.2 3.0 3.1 3.1 3.0 3.2 2.5 2.7 3.1 Average real interest rate on domestic debt (in percent) 7.0 6.7 6.8 2.6 2.6 5.1 6.1 6.0 5.9 4.4 1.8 4.8 4.9 Real exchange rate depreciation (in percent, + indicates depreciation) -2.9 3.9 2.8	PV of public debt-to-revenue and grants ratio			368.7	353.1	340.4	322.5	310.9	301.0	289.6	235.3	114.9				
Key macroeconomical fiscal assumptions Real GDP growth (in percent) 5.1 -0.3 7.5 5.3 5.1 5.5 5.5 5.5 5.6 4.4 5.4 Average nominal interest rate on external debt (in percent) 3.9 3.5 3.1 3.3 3.2 3.0 3.1 3.1 3.0 3.2 2.5 2.7 3.1 Average nominal interest rate on domestic debt (in percent) 7.0 6.7 6.8 2.6 2.6 5.1 6.1 6.0 5.9 4.4 1.8 4.8 4.9 Real exchange rate depreciation (in percent, + indicates depreciation) -2.9 3.9 2.8 <td>Debt service-to-revenue and grants ratio 3/</td> <td>57.4</td> <td>54.1</td> <td>55.9</td> <td>52.0</td> <td>57.0</td> <td>62.7</td> <td>54.5</td> <td>49.9</td> <td>43.9</td> <td>39.1</td> <td>17.0</td> <td></td> <td></td> <td></td> <td></td>	Debt service-to-revenue and grants ratio 3/	57.4	54.1	55.9	52.0	57.0	62.7	54.5	49.9	43.9	39.1	17.0				
Real GDP growth (in percent) 5.1 -0.3 7.5 5.3 5.1 5.5 5.5 5.5 5.6 4.4 5.4 Average nominal interest rate on external debt (in percent) 3.9 3.5 3.1 3.3 3.2 3.0 3.1 3.1 3.0 3.2 2.5 2.7 3.1 Average real interest rate on domestic debt (in percent) 7.0 6.7 6.8 2.6 5.1 6.1 6.0 5.9 4.4 1.8 4.8 4.9 Real exchange rate depreciation (in percent, + indicates depreciation) -2.9 3.9 2.8 <td>Gross financing need 4/</td> <td>13.2</td> <td>12.8</td> <td>12.1</td> <td>10.5</td> <td>10.4</td> <td>10.7</td> <td>9.0</td> <td>8.1</td> <td>7.1</td> <td>6.4</td> <td>2.3</td> <td></td> <td></td> <td></td> <td></td>	Gross financing need 4/	13.2	12.8	12.1	10.5	10.4	10.7	9.0	8.1	7.1	6.4	2.3				
Average nominal interest rate on external debt (in percent) 3.9 3.5 3.1 3.3 3.2 3.0 3.1 3.1 3.0 3.2 2.5 2.7 3.1 Average real interest rate on domestic debt (in percent) 7.0 6.7 6.8 2.6 2.6 5.1 6.1 6.0 5.9 4.4 1.8 4.8 4.9 Real exchange rate depreciation (in percent, + indicates depreciation) -2.9 3.9 2.8	Key macroeconomic and fiscal assumptions															
Average real interest rate on domestic debt (in percent) 7.0 6.7 6.8 2.6 2.6 5.1 6.1 6.0 5.9 4.4 1.8 4.8 4.9 Real exchange rate depreciation (in percent, + indicates depreciation) -2.9 3.9 2.8	Real GDP growth (in percent)	5.1	-0.3	7.5	5.3	5.1	5.5	5.5	5.5	5.5	5.5	5.6	4.4	5.4		
Real exchange rate depreciation (in percent, + indicates depreciation) -2.9 3.9 2.8	Average nominal interest rate on external debt (in percent)	3.9	3.5	3.1	3.3	3.2	3.0	3.1	3.1	3.0	3.2	2.5	2.7	3.1		
nflation rate (GDP deflator, in percent) 4.3 4.9 5.0 7.2 7.7 5.7 5.0 5.0 4.9 4.9 4.8 6.6 5.4 Growth of real primary spending (deflated by GDP deflator, in percent) 3.7 -0.2 2.1 2.1 0.2 2.1 4.3 5.0 6.3 6.3 6.8 5.2 4.6 Yrimary deficit that stabilizes the debt-to-GDP ratio 5/ 0.8 -5.1 2.8 0.6 1.9 1.5 1.1 1.1 0.6 0.9 1.0 -0.5 1.0	Average real interest rate on domestic debt (in percent)	7.0	6.7	6.8	2.6	2.6	5.1	6.1	6.0	5.9	4.4	1.8	4.8	4.9		
Growth of real primary spending (deflated by GDP deflator, in percent) 3.7 -0.2 2.1 0.2 2.1 4.3 5.0 6.3 6.3 6.8 5.2 4.6 Primary deficit that stabilizes the debt-to-GDP ratio 5/ 0.8 -5.1 2.8 0.6 1.9 1.5 1.1 1.1 0.6 0.9 1.0 -0.5 1.0	Real exchange rate depreciation (in percent, + indicates depreciation)	-2.9	3.9	2.8									-1.5			
Primary deficit that stabilizes the debt-to-GDP ratio 5/ 0.8 -5.1 2.8 0.6 1.9 1.5 1.1 1.1 0.6 0.9 1.0 -0.5 1.0	nflation rate (GDP deflator, in percent)	4.3	4.9	5.0	7.2	7.7	5.7	5.0	5.0	4.9	4.9	4.8	6.6	5.4		
	Growth of real primary spending (deflated by GDP deflator, in percent)	3.7	-0.2	2.1	2.1	0.2	2.1	4.3	5.0	6.3	6.3	6.8	5.2	4.6		
													-0.5	1.0		

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.

Table 3. Kenya: Sensitivity Analysis for Key Indicators of Public and Publicly-Guaranteed External Debt, 2022–32 (In percent)

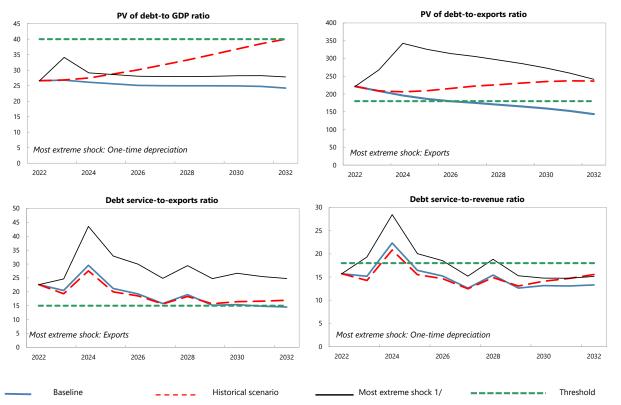
					Proj	ections 1	/				
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	203
	PV	of debt-t	o GDP ra	ntio							
aseline	27	27	26	26	25	25	25	25	25	25	2
. Alternative Scenarios											
1. Key variables at their historical averages in 2022-2032 2/	27	27	27	29	30	32	33	35	37	39	4
. Bound Tests											
1. Real GDP growth	27	28	29	28	27	27	27	27	27	27	2
2. Primary balance	27	28	31	30	30	30	30	30	30	30	â
3. Exports	27	29	32	31	31	31	30	30	30	29	
4. Other flows 3/	27 27	28 34	29 29	29 29	28 28	28 28	28 28	28 28	27 28	27 28	
5. Depreciation 6. Combination of B1-B5	27	31	31	31	30	30	28 30	30	30	20	
. Tailored Tests											
1. Combined contingent liabilities	27	30	30	29	29	29	29	29	29	29	:
2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n
3. Commodity price	27	27	26	26	25	25	25	25	25	25	;
4. Market Financing	27	30	29	29	28	28	28	28	28	27	i
hreshold	40	40	40	40	40	40	40	40	40	40	
	PV of	debt-to	-exports	ratio							
aseline	221	209	196	186	180	175	170	165	159	153	14
A Alternative Scenarios 1. Key variables at their historical averages in 2022-2032 2/	221	209	206	209	216	222	226	231	235	237	23
,											-
Bound Tests											
1. Real GDP growth	221	209	196	186	180	175	170	165	159	153	1.
2. Primary balance 3. Exports	221 221	219 268	230 343	220 326	213 314	208 306	202 296	197 286	191 273	183 259	1 24
4. Other flows 3/	221	208	219	208	201	196	189	183	176	167	1
5. Depreciation	221	209	172	163	158	154	149	145	142	137	1
6. Combination of B1-B5	221	260	216	266	257	251	243	235	226	215	20
. Tailored Tests											
1. Combined contingent liabilities	221	233	222	213	206	201	196	192	188	181	13
2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n
3. Commodity price	221	209	196	186	180	175	170	165	159	153	1-
4. Market Financing	221	209	196	187	181	177	172	164	158	150	14
hreshold	180	180	180	180	180	180	180	180	180	180	18
	Debt s	ervice-to	o-exports	a ratio							
aseline	23	21	30	21	19	16	19	15	15	15	1
A Alternative Scenarios											
1. Key variables at their historical averages in 2022-2032 2/	23	19	28	20	19	16	18	16	16	17	1
Bound Tests		-		-							
1. Real GDP growth 2. Primary balance	23 23	21 21	30 30	21 23	19 21	16 18	19 21	15 17	15 18	15 17	1
3. Exports	23	25	44	33	30	25	29	25	27	26	2
4. Other flows 3/	23	21	30	22	20	17	20	16	17	16	1
5. Depreciation	23	21	30	20	18	15	18	14	14	13	
6. Combination of B1-B5	23	23	39	29	26	22	26	22	22	21	2
. Tailored Tests											
1. Combined contingent liabilities	23	21	30	22	20	17	20	16	16	16	
2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n
3. Commodity price	23	21	30	21	19	16	19	15	15	15	
4. Market Financing	23	21	30	24	18	17	20	26	20	14	
hreshold	15	15	15	15	15	15	15	15	15	15	
	Debt s	ervice-to	-revenue	e ratio							
aseline	16	15	22	16	15	13	15	13	13	13	
A Alternative Scenarios											
1. Key variables at their historical averages in 2022-2032 2/	16	14	21	16	15	12	15	13	14	15	
Bound Tests			~ *	*0			47				
1. Real GDP growth 2. Primary balance	16 16	16 15	24 23	18 18	17 17	14 14	17 17	14 14	14 15	14 15	
3. Exports	16	15	23	18	17	14	17	14	16	16	
	16	15	23	17	16	13	16	14	15	14	
	16	19	28	20	19	15	19	15	15	15	
4. Other flows 3/		16	25	19	17	15	18	15	16	16	
4. Other flows 3/ 5. Depreciation	16	10									
4. Other flows 3/ 5. Depreciation 6. Combination of B1-B5	16	10									
4. Other flows 3/ 5. Depreciation 6. Combination of B1-B5 . Tailored Tests 1. Combined contingent liabilities	16 16	15	23	17	16	13	16	13	14	14	
4. Other flows 3/ 5. Depreciation 6. Combination of B1-B5 5. Tailored Tests 1. Combined contingent liabilities 2. Natural disaster	16 n.a.	15 n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	п
4. Other flows 3/ 5. Depreciation 6. Combination of 81-85 . Tailored Tests 1. Combined contingent liabilities 2. Natural disaster 3. Commodity price	16 n.a. 16	15 n.a. 15	n.a. 22	n.a. 16	n.a. 15	n.a. 13	n.a. 15	n.a. 13	n.a. 13	n.a. 13	п
4. Other flows 3/ 5. Depreciation 6. Combination of B1-B5 . Tailored Tests	16 n.a.	15 n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	

Table 4. Kenya: Sensitivity Analysis for Key Indicators of Public Debt, 2022–32 (In percent)

						jections 1					
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	203
	PV	of Debt-t	o-GDP Ra	itio							
Baseline	62	60	58	56	54	52	51	49	47	46	4
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	62	64	66	67	69	70	72	74	75	77	7
3. Bound Tests											
31. Real GDP growth	62	63	65	65	64	64	64	63	63	62	6
32. Primary balance	62	64	67	65	63	61	59	58	56	54	5
33. Exports	62	62	63	61	59	58	56	54	52	50	4
34. Other flows 3/	62	62	61	59	57	55	54	52	50	48	4
35. Depreciation	62	63	59	56	53	50	47	45	42	40	3
36. Combination of B1-B5	62	62	65	63	61	59	58	56	54	52	5
. Tailored Tests											
1. Combined contingent liabilities	62	68	66	64	62	60	58	56	55	53	5
2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.
3. Commodity price	62	61	59	58	57	57	56	56	56	55	5
24. Market Financing	62	60	58	56	54	53	51	49	47	45	4
OTAL public debt benchmark	55	55	55	55	55	55	55	55	55	55	!
	PV of	Debt-to-	Revenue	Ratio							
aseline	353	340	322	311	301	290	277	266	256	245	23
A Alternative Scenarios											
1. Key variables at their historical averages in 2022-2032 2/	355	364	366	373	382	389	393	400	407	412	41
8. Bound Tests											
11. Real GDP growth	355	359	365	360	357	352	346	341	338	334	33
32. Primary balance	355	361	374	361	350	338	324	312	301	290	27
33. Exports	353	351	353	341	330	318	305	293	281	269	25
34. Other flows 3/	353	350	340	328	318	306	293	281	270	258	24
35. Depreciation	355	359	331	312	295	277	259	243	228	213	19
36. Combination of B1-B5	355	351	362	350	339	327	313	302	291	280	26
. Tailored Tests											
1. Combined contingent liabilities	355	387	367	354	344	331	317	305	295	283	27
2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a
23. Commodity price	355	346	331	323	318	312	306	303	300	297	29
4. Market Financing	353	340	323	311	302	291	278	265	254	243	23
	Debt S	Service-to	-Revenue	Ratio							
aseline	52	57	63	55	50	44	43	40	40	39	3
A Alternative Scenarios											
1. Key variables at their historical averages in 2022-2032 2/	52	58	66	60	56	50	51	50	52	53	5
B. Bound Tests											
31. Real GDP growth	52	59	69	62	57	51	51	49	50	51	5
32. Primary balance	52	57	67	62	55	48	49	47	48	48	4
3. Exports	52	57	63	56	51	45	44	41	43	42	4
34. Other flows 3/	52	57	63	55	51	44	44	41	41	41	4
35. Depreciation	52	55	65	55	51	44	44	40	40	39	3
6. Combination of B1-B5	52	56	64	61	53	47	46	45	45	44	4
. Tailored Tests											
C1. Combined contingent liabilities	52	57	72	59	53	47	49	46	46	46	4
2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.
C3. Commodity price	52	57	63	55	51	45	45	43	45	45	4
commonly price	52	57		57	49	45	44	48	44	39	3

3/ Includes official and private transfers and FDI.





Customization of Defa	ult Setti	ngs
	Size	Interactions
Tailored Stress		
Combined CL	No	
Natural disaster	n.a.	n.a.
Commodity price	No	No
Market financing	No	No

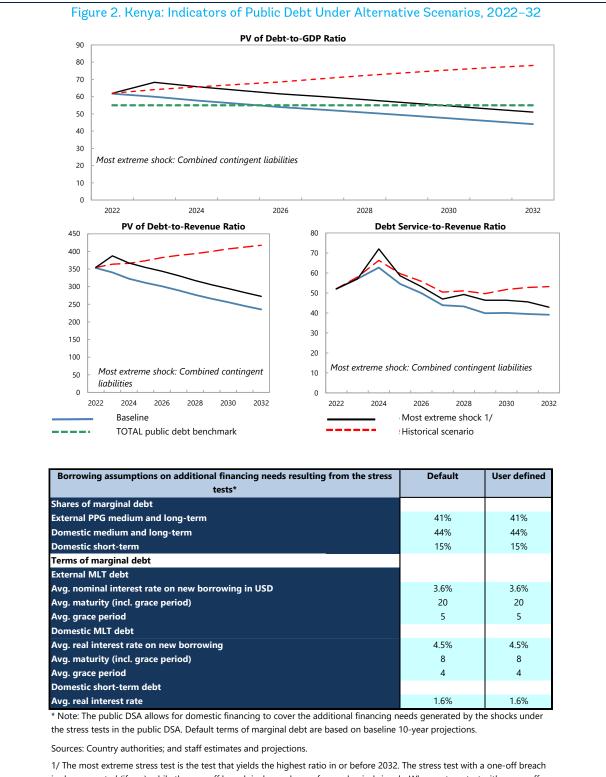
Borrowing assumptions on additional financing needs re	sulting from the	e stress tests*
	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	3.6%	3.6%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	20	20
Avg. grace period	5	5

stress test does not apply.

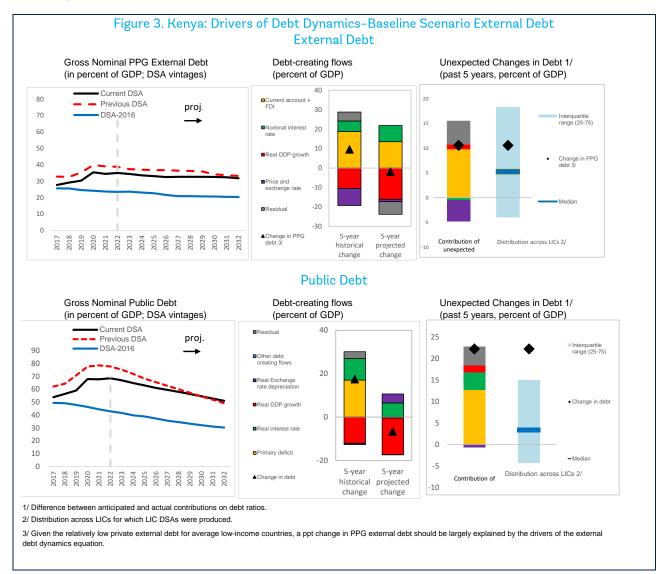
Note: "Yes" indicates any change to the size or interactions of * Note: All the additional financing needs generated by the shocks under the stress tests are the default settings for the stress tests. "n.a." indicates that the assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

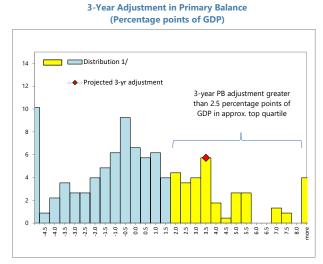
Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2032. 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.



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.





1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

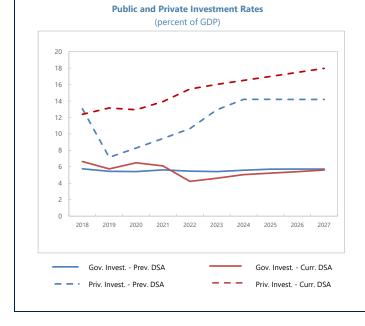
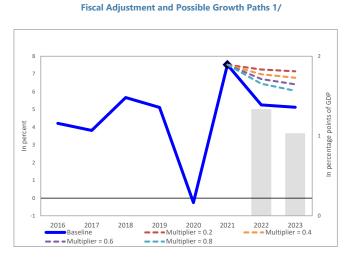
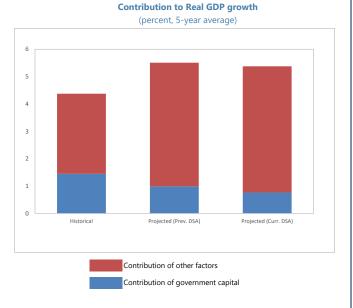


Figure 4. Kenya: Realism Tools



1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).



- Bare Interiganted

	Figure 5. Kenya: Ma	rket-Financing Risk Indicators	
	GFN 1/	EMBI 2/	
Benchmarks	14	570	
Values	11	641	
Breach of benchmark	No	Yes	
Potential heightened			
liquidity needs	Moderate		

1/ Maximum gross financing needs (GFN) over 3-year baseline projection horizon.

2/ EMBI spreads correspond to the latest available data.

